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

November 29, 1993

Mr. Peter J. Buechi, PE
Regional Engineer
New York State Department of Environmental Conservation
270 Michigan Avenue
Buffalo, N. Y. 14203-2999

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

Dear Mr. Buechi:

I am enclosing a copy of the twenty-second quarter's groundwater sampling analysis from the closed Republic Solid Waste Management Facility. Bedrock well, BW-4-86, 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:

| CONTAMINATE | CONC. 22nd Qtr. ppb | Mean Conc. ppb | Range ppb |
|---|---|---|---|
| Vinyl Chloride | 58 | 99 | 29-300 |
| Trans-1,2-Dichloroethene | 210 | 414 | 7-500 |
| Chloroform | 13 | 9 | 5-13 |
| Trichloroethene | 410 | 327 | 30-740 |
| Tetrachloroethene | 440 | 295 | 72-440 |
| Hexachlorobutadiene | 73 | 57 | 10-150 |

UCAR Carbon Co., Inc. continues to maintain the position that this contamination at well, BW-4-86 is not related to the closed Republic Solid Waste Management Facility given the fact that downgradient bedrock well, BW-6-86, continues to show no contamination.

If you have any questions, please contact me at 615-380-4215.

Very truly yours,

R. A. Bolton, Manager
HS & EP

RAB:cjm

cc: Mr. Jim Devold, 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

UCAR CARBON COMPANY, INCORPORATED

# REPUBLIC WASTE MANAGEMENT FACILITY

# POST CLOSURE MONITORING PROGRAM

# QUARTERLY REPORT

Prepared By:

ADVANCED ENVIRONMENTAL SERVICES INC.

*"A Company Dedicated to Honesty, Quality and Service"*

October 14, 1993
REF: CTC33PT/100B

## QA/QC VERIFICATION FOR PROJECT ID 33PT

The following report, as well as the supporting data, have been carefully reviewed for accuracy, adherance 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.

(FOR)

Linda A. Ratka
Inorganic Senior Technician

Joseph P. Masaracchia
Laboratory Manager

Dennis J. Hoyt
AES Field Engineer

Paul T. McMahon
Quality Control Officer

Catherine Mocniak
Manager, Industrial Hygiene

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All 'Total' results on soil matrices are calculated on a dry weight basis, unless otherwise noted.
Analyses noted as 'Performed in the laboratory' require immediate testing and should be performed in the field.

The following are standard abbreviations:

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

*Advanced Environmental Services, Inc.*
2186 Liberty Drive
Niagara Falls, New York 14304
(716) 283-3120

## QUARTERLY GROUNDWATER MONITORING - WELL INFORMATION
**September 21, 1993 thru September 22, 1993**

### UCAR CARBON COMPANY, INC.
Hyde Park Boulevard
Niagara Falls, New York

**AES Code: CTC** **Project I.D. # 33PT**

| 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 | 9/22/93 | 610.72 | 4 | 20.01 | 590.71 | 34.50 | 9.46 | 33.0 | C |
| W-2 | 9/22/93 | 608.43 | 4 | 17.53 | 590.90 | 35.00 | 11.40 | 37.0 | C |
| BW-3 | 9/21/93 | 604.72 | 4 | 16.31 | 588.41 | 22.40 | 3.98 | 12.0 | C |
| BW-4 | 9/21/93 | 607.08 | 4 | 15.91 | 591.17 | 25.00 | 5.93 | 18.0 | C |
| BW-5 | 9/21/93 | 603.33 | 4 | 15.05 | 588.28 | 24.90 | 6.43 | 20.0 | C |
| BW-6 | 9/21/93 | 607.04 | 4 | 17.16 | 589.88 | 32.90 | 10.28 | 21.0 | R |
| MW-1 | 9/21/93 | 609.43 | 2 | 16.43 | 593.00 | 21.10 | 0.76 | 1.0 (Dry) | S |
| MW-2 | 9/21/93 | 607.54 | 2 | 24.20 | 583.34 | 24.60 | 0.07 | 0.11 (Dry) | VS |
| MW-3 | 9/21/93 | 601.61 | 2 | 14.06 | 587.55 | 15.25 | 0.19 | 0.8 | S |
| OW-1 SOUTH | 9/22/93 | 608.81 | 2 | 8.70 | 600.11 | 8.70 | 0.00 | NR | N/A |
| OW-2 NORTH | 9/22/93 | 607.06 | 2 | 8.51 | 598.55 | 9.74 | 0.20 | NR | N/A |

OW-1 South was dry.

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.

Dennis J. Hoyt — Field Technician
10-7-93 — Date

*Advanced Environmental Services, Inc.*
2186 Liberty Drive
Niagara Falls, New York 14304
(716) 283-3120

## QUARTERLY GROUNDWATER MONITORING - FIELD PARAMETER INFORMATION
**September 21, 1993 thru Speptember 22, 1993**

**UCAR CARBON COMPANY, INC.**
Hyde Park Boulevard
Niagara Falls, New York

**AES Code: CTC** **Project I.D. #33PT**

| Monitoring Well I.D. | Sampling Date | Sampling Time | Water Level (ft.) | Turbidity (NTU) | Filter Time | Field Comments/Observations |
|---|---|---|---|---|---|---|
| BW-1 | 9/22/93 | 12:30 PM | 20.12 | 3.5 | 12:30 PM | Clear with strong sulfur odor. |
| BW-2 | 9/22/93 | 3:00 PM | 17.63 | 11.5 | 3:00 PM | Clear with a strong sweet odor. |
| BW-3 | 9/21/93 | 2:45 PM | 16.31 | 49.4 | 2:45 PM | Slightly turbid brown with a sulfur odor. |
| BW-4 | 9/21/93 | 3:30 PM | 16.25 | 68.8 | 3:30 PM | Turbid brown with sheen and black solids. |
| BW-5 | 9/21/93 | 2:11 PM | 15.08 | 156.6 | 2:15 PM | Clear with some solids and a sulfur odor. |
| BW-6 | 9/21/93 | 2:05 PM | 17.72 | 565.0 | 2:05 PM | Turbid brown with fine solids, no odor. |
| MW-1 | 9/22/93 | 11:20 AM | 15.31 | 10.5 | 11:25 AM | Slightly cloudy with a few solids. |
| MW-2** | 9/21/93 | 3:10 PM | 24.50 | *** | *** | Black with stringy solids and strong "leachate-smelling" odor. |
| MW-3 | 9/22/93 | 11:50 AM | 14.61 | 1390 | 12:10 PM | Very dark brownish tan. |
| OW-1 South | 9/22/93 | 12:20 PM | 6.30 | NA | NA | Required to take water elevation only. |
| OW-2 North | 9/22/93 | 12:25 PM | 6.64 | NA | NA | Required to take water elevation only. |
| Blind Dup | 9/21/93 | 3:30 PM | 16.25 | 71.3 | 3:30 PM | Turbid brown with sheen and black solids. |
| Trip Blank | 9/21/93 | 10:20 AM | NA | 0.81 | NA | Deionized Water |

** Insufficient volume and recharge rate to collect for any parameters.
The Blind Duplicate site is BW-4.

Dennis J. Hoyt 10-7-93
Field Technician Date

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: MW-1
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 09/22/93
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 33PT-1
PROJECT ID: 33PT

| Analytical Parameters | Analytical Results | Units | Practical Quantifiable Limit | Method |
|---|---|---|---|---|
| Turbidity * | 10.5 | NTU | 0.1 | EPA 180.1 |
| Ammonia | 7.5 | mg/L | 0.05 | EPA 350.1 |
| Nitrite | BQL | mg/L | 0.05 | EPA 353.2 |
| Total Kjeldahl Nitrogen | 8.5 | mg/L | 0.1 | EPA 351.2 |
| Total Iron | 0.95 | mg/L | 0.05 | EPA 200.7 |
| Soluble Iron | BQL | mg/L | 0.05 | EPA 200.7 |
| Total Potassium | 38 | mg/L | 1.0 | EPA 200.7 |
| Soluble Potassium | 42 | mg/L | 1.0 | EPA 200.7 |
| Total Zinc | 0.15 | mg/L | 0.02 | EPA 200.7 |
| Soluble Zinc | 0.19 | mg/L | 0.02 | EPA 200.7 |

* Analysis performed in the field.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: MW-3
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 09/22/93
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 33PT-2
PROJECT ID: 33PT

| Analytical Parameters | Analytical Results | Units | Practical Quantifiable Limit | Method |
|---|---|---|---|---|
| Turbidity * | 1390 | NTU | 0.1 | EPA 180.1 |
| Ammonia | 0.11 | mg/L | 0.05 | EPA 350.1 |
| Nitrite | BQL | mg/L | 0.05 | EPA 353.2 |
| Total Kjeldahl Nitrogen | BQL | mg/L | 0.1 | EPA 351.2 |
| Total Iron | 110 | mg/L | 0.05 | EPA 200.7 |
| Soluble Iron | 0.32 | mg/L | 0.05 | EPA 200.7 |
| Total Potassium | 8.9 | mg/L | 1.0 | EPA 200.7 |
| Soluble Potassium | 1.4 | mg/L | 1.0 | EPA 200.7 |
| Total Zinc | 0.64 | mg/L | 0.02 | EPA 200.7 |
| Soluble Zinc | 0.05 | mg/L | 0.02 | EPA 200.7 |

* Analysis performed in the field.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-1
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 09/22/93
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 33PT-3
PROJECT ID: 33PT

| Analytical Parameters | Analytical Results | Units | Practical Quantifiable Limit | Method |
|---|---|---|---|---|
| Turbidity * | 3.5 | NTU | 0.1 | EPA 180.1 |
| Ammonia | 0.52 | mg/L | 0.05 | EPA 350.1 |
| Nitrite | BQL | mg/L | 0.05 | EPA 353.2 |
| Total Kjeldahl Nitrogen | 0.7 | mg/L | 0.1 | EPA 351.2 |
| Total Iron | 1.3 | mg/L | 0.05 | EPA 200.7 |
| Soluble Iron | 1.3 | mg/L | 0.05 | EPA 200.7 |
| Total Potassium | 4.6 | mg/L | 1.0 | EPA 200.7 |
| Soluble Potassium | 5.1 | mg/L | 1.0 | EPA 200.7 |
| Total Zinc | 0.29 | mg/L | 0.02 | EPA 200.7 |
| Soluble Zinc | 0.16 | mg/L | 0.02 | EPA 200.7 |

* Analysis performed in the field.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-2
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 09/22/93
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 33PT-4
PROJECT ID: 33PT

| Analytical Parameters | Analytical Results | Units | Practical Quantifiable Limit | Method |
|---|---|---|---|---|
| Turbidity * | 49.4 | NTU | 0.1 | EPA 180.1 |
| Ammonia | 1.40 | mg/L | 0.05 | EPA 350.1 |
| Nitrite | BQL | mg/L | 0.05 | EPA 353.2 |
| Total Kjeldahl Nitrogen | 1.4 | mg/L | 0.1 | EPA 351.2 |
| Total Iron | 2.2 | mg/L | 0.05 | EPA 200.7 |
| Soluble Iron | 1.9 | mg/L | 0.05 | EPA 200.7 |
| Total Potassium | 38 | mg/L | 1.0 | EPA 200.7 |
| Soluble Potassium | 7.5 | mg/L | 1.0 | EPA 200.7 |
| Total Zinc | 0.18 | mg/L | 0.02 | EPA 200.7 |
| Soluble Zinc | BQL | mg/L | 0.02 | EPA 200.7 |

* Analysis performed in the field.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-3
OLLECTION METHOD: GRAB
COLLECTION DATE(S): 09/21/93
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 33PT-5
PROJECT ID: 33PT

| Analytical Parameters | Analytical Results | Units | Practical Quantifiable Limit | Method |
|---|---|---|---|---|
| Turbidity * | 49.4 | NTU | 0.1 | EPA 180.1 |
| Ammonia | 0.64 | mg/L | 0.05 | EPA 350.1 |
| Nitrite | BQL | mg/L | 0.05 | EPA 353.2 |
| Total Kjeldahl Nitrogen | 0.7 | mg/L | 0.1 | EPA 351.2 |
| Total Iron | 5.6 | mg/L | 0.05 | EPA 200.7 |
| Soluble Iron | 0.98 | mg/L | 0.05 | EPA 200.7 |
| Total Potassium | 5.2 | mg/L | 1.0 | EPA 200.7 |
| Soluble Potassium | 4.1 | mg/L | 1.0 | EPA 200.7 |
| Total Zinc | 1.2 | mg/L | 0.02 | EPA 200.7 |
| Soluble Zinc | BQL | mg/L | 0.02 | EPA 200.7 |

* Analysis performed in the field.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-4
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 09/21/93
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 33PT-6

PROJECT ID: 33PT

| Analytical Parameters | Analytical Results | Units | Practical Quantifiable Limit | Method |
|---|---|---|---|---|
| Turbidity * | 68.8 | NTU | 0.1 | EPA 180.1 |
| Ammonia | 6.00 | mg/L | 0.05 | EPA 350.1 |
| Nitrite | BQL | mg/L | 0.05 | EPA 353.2 |
| Total Kjeldahl Nitrogen | 6.0 | mg/L | 0.1 | EPA 351.2 |
| Total Iron | 17 | mg/L | 0.05 | EPA 200.7 |
| Soluble Iron | 3.9 | mg/L | 0.05 | EPA 200.7 |
| Total Potassium | 27 | mg/L | 1.0 | EPA 200.7 |
| Soluble Potassium | 28 | mg/L | 1.0 | EPA 200.7 |
| Total Zinc | 3.2 | mg/L | 0.02 | EPA 200.7 |
| Soluble Zinc | BQL | mg/L | 0.02 | EPA 200.7 |
| Chloromethane | BQL | µg/L | 10 | SW 846 8240 |
| Bromomethane | BQL | µg/L | 10 | SW 846 8240 |
| Vinyl chloride | 58 | µg/L | 10 | SW 846 8240 |
| Chloroethane | BQL | µg/L | 10 | SW 846 8240 |
| Methylene chloride | BQL | µg/L | 10 | SW 846 8240 |
| Acetone | BQL | µg/L | 10 | SW 846 8240 |
| Carbon disulfide | BQL | µg/L | 10 | SW 846 8240 |
| 1,1-Dichloroethene | BQL | µg/L | 10 | SW 846 8240 |
| 1,1-Dichloroethane | BQL | µg/L | 10 | SW 846 8240 |
| trans-1,2-Dichloroethene | 210 | µg/L | 10 | SW 846 8240 |
| Chloroform | 13 | µg/L | 10 | SW 846 8240 |
| 1,2-Dichloroethane | BQL | µg/L | 10 | SW 846 8240 |
| 2-Butanone | BQL | µg/L | 10 | SW 846 8240 |
| 1,1,1-Trichloroethane | BQL | µg/L | 10 | SW 846 8240 |
| Carbon tetrachloride | BQL | µg/L | 10 | SW 846 8240 |
| Vinyl acetate | BQL | µg/L | 10 | SW 846 8240 |
| Bromodichloromethane | BQL | µg/L | 10 | SW 846 8240 |
| 1,2-Dichloropropane | BQL | µg/L | 10 | SW 846 8240 |

* Analysis performed in the field.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-4
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 09/21/93
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 33PT-6

PROJECT ID: 33PT

| Analytical Parameters | Analytical Results | Units | Practical Quantifiable Limit | Method |
|---|---|---|---|---|
| cis-1,3-Dichloropropene | BQL | µg/L | 10 | SW 846 8240 |
| Trichloroethene | 410 | µg/L | 10 | SW 846 8240 |
| Benzene | BQL | µg/L | 10 | SW 846 8240 |
| trans-1,3-Dichloropropene | BQL | µg/L | 10 | SW 846 8240 |
| Chlorodibromomethane | BQL | µg/L | 10 | SW 846 8240 |
| 1,1,2-Trichloroethane | BQL | µg/L | 10 | SW 846 8240 |
| Bromoform | BQL | µg/L | 10 | SW 846 8240 |
| 4-Methyl-2-pentanone | BQL | µg/L | 10 | SW 846 8240 |
| 2-Hexanone | BQL | µg/L | 10 | SW 846 8240 |
| Tetrachloroethene | 440 | µg/L | 10 | SW 846 8240 |
| 1,1,2,2-Tetrachloroethane | BQL | µg/L | 10 | SW 846 8240 |
| Toluene | BQL | µg/L | 10 | SW 846 8240 |
| Chlorobenzene | BQL | µg/L | 10 | SW 846 8240 |
| Ethylbenzene | BQL | µg/L | 10 | SW 846 8240 |
| Styrene | BQL | µg/L | 10 | SW 846 8240 |
| m-Xylene | BQL | µg/L | 10 | SW 846 8240 |
| o/p-Xylene | BQL | µg/L | 10 | SW 846 8240 |
| bis(2-chloroethyl)ether | BQL | µg/L | 10 | SW 846 8270 |
| 1,3-Dichlorobenzene | BQL | µg/L | 10 | SW 846 8270 |
| 1,4-Dichlorobenzene | BQL | µg/L | 10 | SW 846 8270 |
| Benzyl alcohol | BQL | µg/L | 10 | SW 846 8270 |
| 1,2-Dichlorobenzene | BQL | µg/L | 10 | SW 846 8270 |
| bis(2-chloroisopropyl)ether | BQL | µg/L | 10 | SW 846 8270 |
| N-Nitrosodinpropylamine | BQL | µg/L | 10 | SW 846 8270 |
| Hexachloroethane | BQL | µg/L | 10 | SW 846 8270 |
| Nitrobenzene | BQL | µg/L | 10 | SW 846 8270 |
| Isophorone | BQL | µg/L | 10 | SW 846 8270 |
| bis(2-chloroethoxy)methane | BQL | µg/L | 10 | SW 846 8270 |
| 1,2,4-Trichlorobenzene | BQL | µg/L | 10 | SW 846 8270 |

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-4
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 09/21/93
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 33PT-6

PROJECT ID: 33PT

| Analytical Parameters | Analytical Results | Units | Practical Quantifiable Limit | Method |
|---|---|---|---|---|
| Naphthalene | BQL | µg/L | 10 | SW 846 8270 |
| 4-Chloroaniline | BQL | µg/L | 10 | SW 846 8270 |
| Hexachlorobutadiene | 73 | µg/L | 10 | SW 846 8270 |
| 2-Methylnaphthalene | BQL | µg/L | 10 | SW 846 8270 |
| Hexachlorocyclopentadiene | BQL | µg/L | 10 | SW 846 8270 |
| 2-Chloronaphthalene | BQL | µg/L | 10 | SW 846 8270 |
| 2-Nitroaniline | BQL | µg/L | 10 | SW 846 8270 |
| Dimethylphthalate | BQL | µg/L | 10 | SW 846 8270 |
| 2,6-Dinitrotoluene | BQL | µg/L | 10 | SW 846 8270 |
| Acenaphthylene | BQL | µg/L | 10 | SW 846 8270 |
| 3-Nitroaniline | BQL | µg/L | 10 | SW 846 8270 |
| Acenaphthene | BQL | µg/L | 10 | SW 846 8270 |
| 2,4-Dinitrotoluene | BQL | µg/L | 10 | SW 846 8270 |
| Dibenzofuran | BQL | µg/L | 10 | SW 846 8270 |
| Diethylphthalate | BQL | µg/L | 10 | SW 846 8270 |
| 4-Chlorophenylphenyl ether | BQL | µg/L | 10 | SW 846 8270 |
| Fluorene | BQL | µg/L | 10 | SW 846 8270 |
| 4-Nitroaniline | BQL | µg/L | 10 | SW 846 8270 |
| N-Nitrosodiphenylamine | BQL | µg/L | 10 | SW 846 8270 |
| 4-Bromophenylphenyl ether | BQL | µg/L | 10 | SW 846 8270 |
| Hexachlorobenzene | BQL | µg/L | 10 | SW 846 8270 |
| Phenanthrene | BQL | µg/L | 10 | SW 846 8270 |
| Anthracene | BQL | µg/L | 10 | SW 846 8270 |
| di-n-Butylphthalate | BQL | µg/L | 10 | SW 846 8270 |
| Fluoranthene | BQL | µg/L | 10 | SW 846 8270 |
| Pyrene | BQL | µg/L | 10 | SW 846 8270 |
| Butylbenzylphthalate | BQL | µg/L | 10 | SW 846 8270 |
| 3,3-Dichlorobenzidine | BQL | µg/L | 10 | SW 846 8270 |
| bis(2ethylhexyl)phthalate | BQL | µg/L | 10 | SW 846 8270 |

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-4
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 09/21/93
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 33PT-6

PROJECT ID: 33PT

| Analytical Parameters | Analytical Results | Units | Practical Quantifiable Limit | Method |
|---|---|---|---|---|
| Benzo(a)anthracene | BQL | µg/L | 10 | SW 846 8270 |
| Chrysene | BQL | µg/L | 10 | SW 846 8270 |
| di-n-Octylphthalate | BQL | µg/L | 10 | SW 846 8270 |
| Benzo(b)fluoranthene | BQL | µg/L | 10 | SW 846 8270 |
| Benzo(k)fluoranthene | BQL | µg/L | 10 | SW 846 8270 |
| Benzo(a)pyrene | BQL | µg/L | 10 | SW 846 8270 |
| Indeno(1,2,3-cd)pyrene | BQL | µg/L | 10 | SW 846 8270 |
| Dibenzo(a,h)anthracene | BQL | µg/L | 10 | SW 846 8270 |
| Benzo(g,h,i)perylene | BQL | µg/L | 10 | SW 846 8270 |
| Phenol | BQL | µg/L | 10 | SW 846 8270 |
| 2-Chlorophenol | BQL | µg/L | 10 | SW 846 8270 |
| 2-Methylphenol | BQL | µg/L | 10 | SW 846 8270 |
| 4-Methylphenol | BQL | µg/L | 10 | SW 846 8270 |
| 2-Nitrophenol | BQL | µg/L | 10 | SW 846 8270 |
| 2,4-Dimethylphenol | BQL | µg/L | 10 | SW 846 8270 |
| Benzoic acid | BQL | µg/L | 10 | SW 846 8270 |
| 2,4-Dichlorophenol | BQL | µg/L | 10 | SW 846 8270 |
| 4-Chloro-3-methylphenol | BQL | µg/L | 10 | SW 846 8270 |
| 2,4,6-Trichlorophenol | BQL | µg/L | 10 | SW 846 8270 |
| 2,4,5-Trichlorophenol | BQL | µg/L | 10 | SW 846 8270 |
| 2,4-Dinitrophenol | BQL | µg/L | 10 | SW 846 8270 |
| 4-Nitrophenol | BQL | µg/L | 10 | SW 846 8270 |
| 4,6-Dinitro-2-methylphenol | BQL | µg/L | 10 | SW 846 8270 |
| Pentachlorophenol | BQL | µg/L | 10 | SW 846 8270 |

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-5
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 09/21/93
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 33PT-7
PROJECT ID: 33PT

| Analytical Parameters | Analytical Results | Units | Practical Quantifiable Limit | Method |
|---|---|---|---|---|
| Turbidity * | 156.6 | NTU | 0.1 | EPA 180.1 |
| Ammonia | 0.26 | mg/L | 0.05 | EPA 350.1 |
| Nitrite | BQL | mg/L | 0.05 | EPA 353.2 |
| Total Kjeldahl Nitrogen | 0.2 | mg/L | 0.1 | EPA 351.2 |
| Total Iron | 4.4 | mg/L | 0.05 | EPA 200.7 |
| Soluble Iron | 0.66 | mg/L | 0.05 | EPA 200.7 |
| Total Potassium | 3.4 | mg/L | 1.0 | EPA 200.7 |
| Soluble Potassium | 3.1 | mg/L | 1.0 | EPA 200.7 |
| Total Zinc | 0.90 | mg/L | 0.02 | EPA 200.7 |
| Soluble Zinc | 0.04 | mg/L | 0.02 | EPA 200.7 |

* Analysis performed in the field.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-6
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 09/21/93
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 33PT-8

PROJECT ID: 33PT

| Analytical Parameters | Analytical Results | Units | Practical Quantifiable Limit | Method |
|---|---|---|---|---|
| Turbidity * | 565.0 | NTU | 0.1 | EPA 180.1 |
| Ammonia | 0.16 | mg/L | 0.05 | EPA 350.1 |
| Nitrite | BQL | mg/L | 0.05 | EPA 353.2 |
| Total Kjeldahl Nitrogen | BQL | mg/L | 0.1 | EPA 351.2 |
| Total Iron | 56 | mg/L | 0.05 | EPA 200.7 |
| Soluble Iron | 3.4 | mg/L | 0.05 | EPA 200.7 |
| Total Potassium | 4.8 | mg/L | 1.0 | EPA 200.7 |
| Soluble Potassium | 1.2 | mg/L | 1.0 | EPA 200.7 |
| Total Zinc | 0.07 | mg/L | 0.02 | EPA 200.7 |
| Soluble Zinc | 0.03 | mg/L | 0.02 | EPA 200.7 |
| Chloromethane | BQL | µg/L | 10 | SW 846 8240 |
| Bromomethane | BQL | µg/L | 10 | SW 846 8240 |
| Vinyl chloride | BQL | µg/L | 10 | SW 846 8240 |
| Chloroethane | BQL | µg/L | 10 | SW 846 8240 |
| Methylene chloride | BQL | µg/L | 10 | SW 846 8240 |
| Acetone | BQL | µg/L | 10 | SW 846 8240 |
| Carbon disulfide | BQL | µg/L | 10 | SW 846 8240 |
| 1,1-Dichloroethene | BQL | µg/L | 10 | SW 846 8240 |
| 1,1-Dichloroethane | BQL | µg/L | 10 | SW 846 8240 |
| trans-1,2-Dichloroethene | BQL | µg/L | 10 | SW 846 8240 |
| Chloroform | BQL | µg/L | 10 | SW 846 8240 |
| 1,2-Dichloroethane | BQL | µg/L | 10 | SW 846 8240 |
| 2-Butanone | BQL | µg/L | 10 | SW 846 8240 |
| 1,1,1-Trichloroethane | BQL | µg/L | 10 | SW 846 8240 |
| Carbon tetrachloride | BQL | µg/L | 10 | SW 846 8240 |
| Vinyl acetate | BQL | µg/L | 10 | SW 846 8240 |
| Bromodichloromethane | BQL | µg/L | 10 | SW 846 8240 |
| 1,2-Dichloropropane | BQL | µg/L | 10 | SW 846 8240 |

* Analysis performed in the field.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-6
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 09/21/93
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 33PT-8

PROJECT ID: 33PT

| Analytical Parameters | Analytical Results | Units | Practical Quantifiable Limit | Method |
|---|---|---|---|---|
| cis-1,3-Dichloropropene | BQL | µg/L | 10 | SW 846 8240 |
| Trichloroethene | BQL | µg/L | 10 | SW 846 8240 |
| Benzene | BQL | µg/L | 10 | SW 846 8240 |
| trans-1,3-Dichloropropene | BQL | µg/L | 10 | SW 846 8240 |
| Chlorodibromomethane | BQL | µg/L | 10 | SW 846 8240 |
| 1,1,2-Trichloroethane | BQL | µg/L | 10 | SW 846 8240 |
| Bromoform | BQL | µg/L | 10 | SW 846 8240 |
| 4-Methyl-2-pentanone | BQL | µg/L | 10 | SW 846 8240 |
| 2-Hexanone | BQL | µg/L | 10 | SW 846 8240 |
| Tetrachloroethene | BQL | µg/L | 10 | SW 846 8240 |
| 1,1,2,2-Tetrachloroethane | BQL | µg/L | 10 | SW 846 8240 |
| Toluene | BQL | µg/L | 10 | SW 846 8240 |
| Chlorobenzene | BQL | µg/L | 10 | SW 846 8240 |
| Ethylbenzene | BQL | µg/L | 10 | SW 846 8240 |
| Styrene | BQL | µg/L | 10 | SW 846 8240 |
| m-Xylene | BQL | µg/L | 10 | SW 846 8240 |
| o/p-Xylene | BQL | µg/L | 10 | SW 846 8240 |
| bis(2-chloroethyl)ether | BQL | µg/L | 10 | SW 846 8270 |
| 1,3-Dichlorobenzene | BQL | µg/L | 10 | SW 846 8270 |
| 1,4-Dichlorobenzene | BQL | µg/L | 10 | SW 846 8270 |
| Benzyl alcohol | BQL | µg/L | 10 | SW 846 8270 |
| 1,2-Dichlorobenzene | BQL | µg/L | 10 | SW 846 8270 |
| bis(2-chloroisopropyl)ether | BQL | µg/L | 10 | SW 846 8270 |
| N-Nitrosodinpropylamine | BQL | µg/L | 10 | SW 846 8270 |
| Hexachloroethane | BQL | µg/L | 10 | SW 846 8270 |
| Nitrobenzene | BQL | µg/L | 10 | SW 846 8270 |
| Isophorone | BQL | µg/L | 10 | SW 846 8270 |
| bis(2-chloroethoxy)methane | BQL | µg/L | 10 | SW 846 8270 |
| 1,2,4-Trichlorobenzene | BQL | µg/L | 10 | SW 846 8270 |

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-6
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 09/21/93
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 33PT-8

PROJECT ID: 33PT

| Analytical Parameters | Analytical Results | Units | Practical Quantifiable Limit | Method |
|---|---|---|---|---|
| Naphthalene | BQL | µg/L | 10 | SW 846 8270 |
| 4-Chloroaniline | BQL | µg/L | 10 | SW 846 8270 |
| Hexachlorobutadiene | BQL | µg/L | 10 | SW 846 8270 |
| 2-Methylnaphthalene | BQL | µg/L | 10 | SW 846 8270 |
| Hexachlorocyclopentadiene | BQL | µg/L | 10 | SW 846 8270 |
| 2-Chloronaphthalene | BQL | µg/L | 10 | SW 846 8270 |
| 2-Nitroaniline | BQL | µg/L | 10 | SW 846 8270 |
| Dimethylphthalate | BQL | µg/L | 10 | SW 846 8270 |
| 2,6-Dinitrotoluene | BQL | µg/L | 10 | SW 846 8270 |
| Acenaphthylene | BQL | µg/L | 10 | SW 846 8270 |
| 3-Nitroaniline | BQL | µg/L | 10 | SW 846 8270 |
| Acenaphthene | BQL | µg/L | 10 | SW 846 8270 |
| 2,4-Dinitrotoluene | BQL | µg/L | 10 | SW 846 8270 |
| Dibenzofuran | BQL | µg/L | 10 | SW 846 8270 |
| Diethylphthalate | BQL | µg/L | 10 | SW 846 8270 |
| 4-Chlorophenylphenyl ether | BQL | µg/L | 10 | SW 846 8270 |
| Fluorene | BQL | µg/L | 10 | SW 846 8270 |
| 4-Nitroaniline | BQL | µg/L | 10 | SW 846 8270 |
| N-Nitrosodiphenylamine | BQL | µg/L | 10 | SW 846 8270 |
| 4-Bromophenylphenyl ether | BQL | µg/L | 10 | SW 846 8270 |
| Hexachlorobenzene | BQL | µg/L | 10 | SW 846 8270 |
| Phenanthrene | BQL | µg/L | 10 | SW 846 8270 |
| Anthracene | BQL | µg/L | 10 | SW 846 8270 |
| di-n-Butylphthalate | BQL | µg/L | 10 | SW 846 8270 |
| Fluoranthene | BQL | µg/L | 10 | SW 846 8270 |
| Pyrene | BQL | µg/L | 10 | SW 846 8270 |
| Butylbenzylphthalate | BQL | µg/L | 10 | SW 846 8270 |
| 3,3-Dichlorobenzidine | BQL | µg/L | 10 | SW 846 8270 |
| bis(2ethylhexyl)phthalate | BQL | µg/L | 10 | SW 846 8270 |

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-6
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 09/21/93
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 33PT-8

PROJECT ID: 33PT

| Analytical Parameters | Analytical Results | Units | Practical Quantifiable Limit | Method |
|---|---|---|---|---|
| Benzo(a)anthracene | BQL | µg/L | 10 | SW 846 8270 |
| Chrysene | BQL | µg/L | 10 | SW 846 8270 |
| di-n-Octylphthalate | BQL | µg/L | 10 | SW 846 8270 |
| Benzo(b)fluoranthene | BQL | µg/L | 10 | SW 846 8270 |
| Benzo(k)fluoranthene | BQL | µg/L | 10 | SW 846 8270 |
| Benzo(a)pyrene | BQL | µg/L | 10 | SW 846 8270 |
| Indeno(1,2,3-cd)pyrene | BQL | µg/L | 10 | SW 846 8270 |
| Dibenzo(a,h)anthracene | BQL | µg/L | 10 | SW 846 8270 |
| Benzo(g,h,i)perylene | BQL | µg/L | 10 | SW 846 8270 |
| Phenol | BQL | µg/L | 10 | SW 846 8270 |
| 2-Chlorophenol | BQL | µg/L | 10 | SW 846 8270 |
| 2-Methylphenol | BQL | µg/L | 10 | SW 846 8270 |
| 4-Methylphenol | BQL | µg/L | 10 | SW 846 8270 |
| 2-Nitrophenol | BQL | µg/L | 10 | SW 846 8270 |
| 2,4-Dimethylphenol | BQL | µg/L | 10 | SW 846 8270 |
| Benzoic acid | BQL | µg/L | 10 | SW 846 8270 |
| 2,4-Dichlorophenol | BQL | µg/L | 10 | SW 846 8270 |
| 4-Chloro-3-methylphenol | BQL | µg/L | 10 | SW 846 8270 |
| 2,4,6-Trichlorophenol | BQL | µg/L | 10 | SW 846 8270 |
| 2,4,5-Trichlorophenol | BQL | µg/L | 10 | SW 846 8270 |
| 2,4-Dinitrophenol | BQL | µg/L | 10 | SW 846 8270 |
| 4-Nitrophenol | BQL | µg/L | 10 | SW 846 8270 |
| 4,6-Dinitro-2-methylphenol | BQL | µg/L | 10 | SW 846 8270 |
| Pentachlorophenol | BQL | µg/L | 10 | SW 846 8270 |

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BLIND DUPLICATE
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 09/21/93
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 33PT-9

PROJECT ID: 33PT

| Analytical Parameters | Analytical Results | Units | Practical Quantifiable Limit | Method |
|---|---|---|---|---|
| Turbidity * | 71.3 | NTU | 0.1 | EPA 180.1 |
| Ammonia | 6.00 | mg/L | 0.05 | EPA 350.1 |
| Nitrite | BQL | mg/L | 0.05 | EPA 353.2 |
| Total Kjeldahl Nitrogen | 7.0 | mg/L | 0.1 | EPA 351.2 |
| Total Iron | 18 | mg/L | 0.05 | EPA 200.7 |
| Soluble Iron | 3.9 | mg/L | 0.05 | EPA 200.7 |
| Total Potassium | 28 | mg/L | 1.0 | EPA 200.7 |
| Soluble Potassium | 28 | mg/L | 1.0 | EPA 200.7 |
| Total Zinc | 3.6 | mg/L | 0.02 | EPA 200.7 |
| Soluble Zinc | 0.02 | mg/L | 0.02 | EPA 200.7 |
| Chloromethane | BQL | µg/L | 10 | SW 846 8240 |
| Bromomethane | BQL | µg/L | 10 | SW 846 8240 |
| Vinyl chloride | 74 | µg/L | 10 | SW 846 8240 |
| Chloroethane | BQL | µg/L | 10 | SW 846 8240 |
| Methylene chloride | BQL | µg/L | 10 | SW 846 8240 |
| Acetone | BQL | µg/L | 10 | SW 846 8240 |
| Carbon disulfide | BQL | µg/L | 10 | SW 846 8240 |
| 1,1-Dichloroethene | BQL | µg/L | 10 | SW 846 8240 |
| 1,1-Dichloroethane | BQL | µg/L | 10 | SW 846 8240 |
| trans-1,2-Dichloroethene | 230 | µg/L | 10 | SW 846 8240 |
| Chloroform | 13 | µg/L | 10 | SW 846 8240 |
| 1,2-Dichloroethane | BQL | µg/L | 10 | SW 846 8240 |
| 2-Butanone | BQL | µg/L | 10 | SW 846 8240 |
| 1,1,1-Trichloroethane | BQL | µg/L | 10 | SW 846 8240 |
| Carbon tetrachloride | BQL | µg/L | 10 | SW 846 8240 |
| Vinyl acetate | BQL | µg/L | 10 | SW 846 8240 |
| Bromodichloromethane | BQL | µg/L | 10 | SW 846 8240 |
| 1,2-Dichloropropane | BQL | µg/L | 10 | SW 846 8240 |

* Analysis performed in the field.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BLIND DUPLICATE
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 09/21/93
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 33PT-9

PROJECT ID: 33PT

| Analytical Parameters | Analytical Results | Units | Practical Quantifiable Limit | Method |
|---|---|---|---|---|
| cis-1,3-Dichloropropene | BQL | µg/L | 10 | SW 846 8240 |
| Trichloroethene | 440 | µg/L | 10 | SW 846 8240 |
| Benzene | BQL | µg/L | 10 | SW 846 8240 |
| trans-1,3-Dichloropropene | BQL | µg/L | 10 | SW 846 8240 |
| Chlorodibromomethane | BQL | µg/L | 10 | SW 846 8240 |
| 1,1,2-Trichloroethane | BQL | µg/L | 10 | SW 846 8240 |
| Bromoform | BQL | µg/L | 10 | SW 846 8240 |
| 4-Methyl-2-pentanone | BQL | µg/L | 10 | SW 846 8240 |
| 2-Hexanone | BQL | µg/L | 10 | SW 846 8240 |
| Tetrachloroethene | 460 | µg/L | 10 | SW 846 8240 |
| 1,1,2,2-Tetrachloroethane | BQL | µg/L | 10 | SW 846 8240 |
| Toluene | BQL | µg/L | 10 | SW 846 8240 |
| Chlorobenzene | BQL | µg/L | 10 | SW 846 8240 |
| Ethylbenzene | BQL | µg/L | 10 | SW 846 8240 |
| Styrene | BQL | µg/L | 10 | SW 846 8240 |
| m-Xylene | BQL | µg/L | 10 | SW 846 8240 |
| o/p-Xylene | BQL | µg/L | 10 | SW 846 8240 |
| bis(2-chloroethyl)ether | BQL | µg/L | 10 | SW 846 8270 |
| 1,3-Dichlorobenzene | BQL | µg/L | 10 | SW 846 8270 |
| 1,4-Dichlorobenzene | BQL | µg/L | 10 | SW 846 8270 |
| Benzyl alcohol | BQL | µg/L | 10 | SW 846 8270 |
| 1,2-Dichlorobenzene | BQL | µg/L | 10 | SW 846 8270 |
| bis(2-chloroisopropyl)ether | BQL | µg/L | 10 | SW 846 8270 |
| N-Nitrosodinpropylamine | BQL | µg/L | 10 | SW 846 8270 |
| Hexachloroethane | BQL | µg/L | 10 | SW 846 8270 |
| Nitrobenzene | BQL | µg/L | 10 | SW 846 8270 |
| Isophorone | BQL | µg/L | 10 | SW 846 8270 |
| bis(2-chloroethoxy)methane | BQL | µg/L | 10 | SW 846 8270 |
| 1,2,4-Trichlorobenzene | BQL | µg/L | 10 | SW 846 8270 |

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BLIND DUPLICATE
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 09/21/93
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 33PT-9

PROJECT ID: 33PT

| Analytical Parameters | Analytical Results | Units | Practical Quantifiable Limit | Method |
|---|---|---|---|---|
| Naphthalene | BQL | µg/L | 10 | SW 846 8270 |
| 4-Chloroaniline | BQL | µg/L | 10 | SW 846 8270 |
| Hexachlorobutadiene | 64 | µg/L | 10 | SW 846 8270 |
| 2-Methylnaphthalene | BQL | µg/L | 10 | SW 846 8270 |
| Hexachlorocyclopentadiene | BQL | µg/L | 10 | SW 846 8270 |
| 2-Chloronaphthalene | BQL | µg/L | 10 | SW 846 8270 |
| 2-Nitroaniline | BQL | µg/L | 10 | SW 846 8270 |
| Dimethylphthalate | BQL | µg/L | 10 | SW 846 8270 |
| 2,6-Dinitrotoluene | BQL | µg/L | 10 | SW 846 8270 |
| Acenaphthylene | BQL | µg/L | 10 | SW 846 8270 |
| 3-Nitroaniline | BQL | µg/L | 10 | SW 846 8270 |
| Acenaphthene | BQL | µg/L | 10 | SW 846 8270 |
| 2,4-Dinitrotoluene | BQL | µg/L | 10 | SW 846 8270 |
| Dibenzofuran | BQL | µg/L | 10 | SW 846 8270 |
| Diethylphthalate | BQL | µg/L | 10 | SW 846 8270 |
| 4-Chlorophenylphenyl ether | BQL | µg/L | 10 | SW 846 8270 |
| Fluorene | BQL | µg/L | 10 | SW 846 8270 |
| 4-Nitroaniline | BQL | µg/L | 10 | SW 846 8270 |
| N-Nitrosodiphenylamine | BQL | µg/L | 10 | SW 846 8270 |
| 4-Bromophenylphenyl ether | BQL | µg/L | 10 | SW 846 8270 |
| Hexachlorobenzene | BQL | µg/L | 10 | SW 846 8270 |
| Phenanthrene | BQL | µg/L | 10 | SW 846 8270 |
| Anthracene | BQL | µg/L | 10 | SW 846 8270 |
| di-n-Butylphthalate | BQL | µg/L | 10 | SW 846 8270 |
| Fluoranthene | BQL | µg/L | 10 | SW 846 8270 |
| Pyrene | BQL | µg/L | 10 | SW 846 8270 |
| Butylbenzylphthalate | BQL | µg/L | 10 | SW 846 8270 |
| 3,3-Dichlorobenzidine | BQL | µg/L | 10 | SW 846 8270 |
| bis(2ethylhexyl)phthalate | BQL | µg/L | 10 | SW 846 8270 |

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BLIND DUPLICATE
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 09/21/93
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 33PT-9

PROJECT ID: 33PT

| Analytical Parameters | Analytical Results | Units | Practical Quantifiable Limit | Method |
|---|---|---|---|---|
| Benzo(a)anthracene | BQL | µg/L | 10 | SW 846 8270 |
| Chrysene | BQL | µg/L | 10 | SW 846 8270 |
| di-n-Octylphthalate | BQL | µg/L | 10 | SW 846 8270 |
| Benzo(b)fluoranthene | BQL | µg/L | 10 | SW 846 8270 |
| Benzo(k)fluoranthene | BQL | µg/L | 10 | SW 846 8270 |
| Benzo(a)pyrene | BQL | µg/L | 10 | SW 846 8270 |
| Indeno(1,2,3-cd)pyrene | BQL | µg/L | 10 | SW 846 8270 |
| Dibenzo(a,h)anthracene | BQL | µg/L | 10 | SW 846 8270 |
| Benzo(g,h,i)perylene | BQL | µg/L | 10 | SW 846 8270 |
| Phenol | BQL | µg/L | 10 | SW 846 8270 |
| 2-Chlorophenol | BQL | µg/L | 10 | SW 846 8270 |
| 2-Methylphenol | BQL | µg/L | 10 | SW 846 8270 |
| 4-Methylphenol | BQL | µg/L | 10 | SW 846 8270 |
| 2-Nitrophenol | BQL | µg/L | 10 | SW 846 8270 |
| 2,4-Dimethylphenol | BQL | µg/L | 10 | SW 846 8270 |
| Benzoic acid | BQL | µg/L | 10 | SW 846 8270 |
| 2,4-Dichlorophenol | BQL | µg/L | 10 | SW 846 8270 |
| 4-Chloro-3-methylphenol | BQL | µg/L | 10 | SW 846 8270 |
| 2,4,6-Trichlorophenol | BQL | µg/L | 10 | SW 846 8270 |
| 2,4,5-Trichlorophenol | BQL | µg/L | 10 | SW 846 8270 |
| 2,4-Dinitrophenol | BQL | µg/L | 10 | SW 846 8270 |
| 4-Nitrophenol | BQL | µg/L | 10 | SW 846 8270 |
| 4,6-Dinitro-2-methylphenol | BQL | µg/L | 10 | SW 846 8270 |
| Pentachlorophenol | BQL | µg/L | 10 | SW 846 8270 |

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: TRIP BLANK
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 09/21/93
SAMPLE TYPE: DI WATER

AES CLIENT ID: CTC
AES SAMPLE ID: 33PT-10

PROJECT ID: 33PT

| Analytical Parameters | Analytical Results | Units | Practical Quantifiable Limit | Method |
|---|---|---|---|---|
| Turbidity * | 0.81 | NTU | 0.1 | EPA 180.1 |
| Ammonia | BQL | mg/L | 0.05 | EPA 350.1 |
| Nitrite | BQL | mg/L | 0.05 | EPA 353.2 |
| Total Kjeldahl Nitrogen | BQL | mg/L | 0.1 | EPA 351.2 |
| Total Iron | BQL | mg/L | 0.05 | EPA 200.7 |
| Total Potassium | BQL | mg/L | 1.0 | EPA 200.7 |
| Total Zinc | BQL | mg/L | 0.02 | EPA 200.7 |
| Chloromethane | BQL | µg/L | 10 | SW 846 8240 |
| Bromomethane | BQL | µg/L | 10 | SW 846 8240 |
| Vinyl chloride | BQL | µg/L | 10 | SW 846 8240 |
| Chloroethane | BQL | µg/L | 10 | SW 846 8240 |
| Methylene chloride | BQL | µg/L | 10 | SW 846 8240 |
| Acetone | BQL | µg/L | 10 | SW 846 8240 |
| Carbon disulfide | BQL | µg/L | 10 | SW 846 8240 |
| 1,1-Dichloroethene | BQL | µg/L | 10 | SW 846 8240 |
| 1,1-Dichloroethane | BQL | µg/L | 10 | SW 846 8240 |
| trans-1,2-Dichloroethene | BQL | µg/L | 10 | SW 846 8240 |
| Chloroform | BQL | µg/L | 10 | SW 846 8240 |
| 1,2-Dichloroethane | BQL | µg/L | 10 | SW 846 8240 |
| 2-Butanone | BQL | µg/L | 10 | SW 846 8240 |
| 1,1,1-Trichloroethane | BQL | µg/L | 10 | SW 846 8240 |
| Carbon tetrachloride | BQL | µg/L | 10 | SW 846 8240 |
| Vinyl acetate | BQL | µg/L | 10 | SW 846 8240 |
| Bromodichloromethane | BQL | µg/L | 10 | SW 846 8240 |
| 1,2-Dichloropropane | BQL | µg/L | 10 | SW 846 8240 |
| cis-1,3-Dichloropropene | BQL | µg/L | 10 | SW 846 8240 |
| Trichloroethene | BQL | µg/L | 10 | SW 846 8240 |
| Benzene | BQL | µg/L | 10 | SW 846 8240 |

* Analysis performed in the field.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: TRIP BLANK
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 09/21/93
SAMPLE TYPE: DI WATER

AES CLIENT ID: CTC
AES SAMPLE ID: 33PT-10

PROJECT ID: 33PT

| Analytical Parameters | Analytical Results | Units | Practical Quantifiable Limit | Method |
|---|---|---|---|---|
| trans-1,3-Dichloropropene | BQL | µg/L | 10 | SW 846 8240 |
| Chlorodibromomethane | BQL | µg/L | 10 | SW 846 8240 |
| 1,1,2-Trichloroethane | BQL | µg/L | 10 | SW 846 8240 |
| Bromoform | BQL | µg/L | 10 | SW 846 8240 |
| 4-Methyl-2-pentanone | BQL | µg/L | 10 | SW 846 8240 |
| 2-Hexanone | BQL | µg/L | 10 | SW 846 8240 |
| Tetrachloroethene | BQL | µg/L | 10 | SW 846 8240 |
| 1,1,2,2-Tetrachloroethane | BQL | µg/L | 10 | SW 846 8240 |
| Toluene | BQL | µg/L | 10 | SW 846 8240 |
| Chlorobenzene | BQL | µg/L | 10 | SW 846 8240 |
| Ethylbenzene | BQL | µg/L | 10 | SW 846 8240 |
| Styrene | BQL | µg/L | 10 | SW 846 8240 |
| m-Xylene | BQL | µg/L | 10 | SW 846 8240 |
| o/p-Xylene | BQL | µg/L | 10 | SW 846 8240 |
| bis(2-chloroethyl)ether | BQL | µg/L | 10 | SW 846 8270 |
| 1,3-Dichlorobenzene | BQL | µg/L | 10 | SW 846 8270 |
| 1,4-Dichlorobenzene | BQL | µg/L | 10 | SW 846 8270 |
| Benzyl alcohol | BQL | µg/L | 10 | SW 846 8270 |
| 1,2-Dichlorobenzene | BQL | µg/L | 10 | SW 846 8270 |
| bis(2-chloroisopropyl)ether | BQL | µg/L | 10 | SW 846 8270 |
| N-Nitrosodinpropylamine | BQL | µg/L | 10 | SW 846 8270 |
| Hexachloroethane | BQL | µg/L | 10 | SW 846 8270 |
| Nitrobenzene | BQL | µg/L | 10 | SW 846 8270 |
| Isophorone | BQL | µg/L | 10 | SW 846 8270 |
| bis(2-chloroethoxy)methane | BQL | µg/L | 10 | SW 846 8270 |
| 1,2,4-Trichlorobenzene | BQL | µg/L | 10 | SW 846 8270 |
| Naphthalene | BQL | µg/L | 10 | SW 846 8270 |
| 4-Chloroaniline | BQL | µg/L | 10 | SW 846 8270 |
| Hexachlorobutadiene | BQL | µg/L | 10 | SW 846 8270 |

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: TRIP BLANK
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 09/21/93
SAMPLE TYPE: DI WATER

AES CLIENT ID: CTC
AES SAMPLE ID: 33PT-10

PROJECT ID: 33PT

| Analytical Parameters | Analytical Results | Units | Practical Quantifiable Limit | Method |
|---|---|---|---|---|
| 2-Methylnaphthalene | BQL | µg/L | 10 | SW 846 8270 |
| Hexachlorocyclopentadiene | BQL | µg/L | 10 | SW 846 8270 |
| 2-Chloronaphthalene | BQL | µg/L | 10 | SW 846 8270 |
| 2-Nitroaniline | BQL | µg/L | 10 | SW 846 8270 |
| Dimethylphthalate | BQL | µg/L | 10 | SW 846 8270 |
| 2,6-Dinitrotoluene | BQL | µg/L | 10 | SW 846 8270 |
| Acenaphthylene | BQL | µg/L | 10 | SW 846 8270 |
| 3-Nitroaniline | BQL | µg/L | 10 | SW 846 8270 |
| Acenaphthene | BQL | µg/L | 10 | SW 846 8270 |
| 2,4-Dinitrotoluene | BQL | µg/L | 10 | SW 846 8270 |
| Dibenzofuran | BQL | µg/L | 10 | SW 846 8270 |
| Diethylphthalate | BQL | µg/L | 10 | SW 846 8270 |
| 4-Chlorophenylphenyl ether | BQL | µg/L | 10 | SW 846 8270 |
| Fluorene | BQL | µg/L | 10 | SW 846 8270 |
| 4-Nitroaniline | BQL | µg/L | 10 | SW 846 8270 |
| N-Nitrosodiphenylamine | BQL | µg/L | 10 | SW 846 8270 |
| 4-Bromophenylphenyl ether | BQL | µg/L | 10 | SW 846 8270 |
| Hexachlorobenzene | BQL | µg/L | 10 | SW 846 8270 |
| Phenanthrene | BQL | µg/L | 10 | SW 846 8270 |
| Anthracene | BQL | µg/L | 10 | SW 846 8270 |
| di-n-Butylphthalate | BQL | µg/L | 10 | SW 846 8270 |
| Fluoranthene | BQL | µg/L | 10 | SW 846 8270 |
| Pyrene | BQL | µg/L | 10 | SW 846 8270 |
| Butylbenzylphthalate | BQL | µg/L | 10 | SW 846 8270 |
| 3,3-Dichlorobenzidine | BQL | µg/L | 10 | SW 846 8270 |
| bis(2ethylhexyl)phthalate | BQL | µg/L | 10 | SW 846 8270 |
| Benzo(a)anthracene | BQL | µg/L | 10 | SW 846 8270 |
| Chrysene | BQL | µg/L | 10 | SW 846 8270 |
| di-n-Octylphthalate | BQL | µg/L | 10 | SW 846 8270 |

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: TRIP BLANK
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 09/21/93
SAMPLE TYPE: DI WATER

AES CLIENT ID: CTC
AES SAMPLE ID: 33PT-10
PROJECT ID: 33PT

| Analytical Parameters | Analytical Results | Units | Practical Quantifiable Limit | Method |
|---|---|---|---|---|
| Benzo(b)fluoranthene | BQL | µg/L | 10 | SW 846 8270 |
| Benzo(k)fluoranthene | BQL | µg/L | 10 | SW 846 8270 |
| Benzo(a)pyrene | BQL | µg/L | 10 | SW 846 8270 |
| Indeno(1,2,3-cd)pyrene | BQL | µg/L | 10 | SW 846 8270 |
| Dibenzo(a,h)anthracene | BQL | µg/L | 10 | SW 846 8270 |
| Benzo(g,h,i)perylene | BQL | µg/L | 10 | SW 846 8270 |
| Phenol | BQL | µg/L | 10 | SW 846 8270 |
| 2-Chlorophenol | BQL | µg/L | 10 | SW 846 8270 |
| 2-Methylphenol | BQL | µg/L | 10 | SW 846 8270 |
| 4-Methylphenol | BQL | µg/L | 10 | SW 846 8270 |
| 2-Nitrophenol | BQL | µg/L | 10 | SW 846 8270 |
| 2,4-Dimethylphenol | BQL | µg/L | 10 | SW 846 8270 |
| Benzoic acid | BQL | µg/L | 10 | SW 846 8270 |
| 2,4-Dichlorophenol | BQL | µg/L | 10 | SW 846 8270 |
| 4-Chloro-3-methylphenol | BQL | µg/L | 10 | SW 846 8270 |
| 2,4,6-Trichlorophenol | BQL | µg/L | 10 | SW 846 8270 |
| 2,4,5-Trichlorophenol | BQL | µg/L | 10 | SW 846 8270 |
| 2,4-Dinitrophenol | BQL | µg/L | 10 | SW 846 8270 |
| 4-Nitrophenol | BQL | µg/L | 10 | SW 846 8270 |
| 4,6-Dinitro-2-methylphenol | BQL | µg/L | 10 | SW 846 8270 |
| Pentachlorophenol | BQL | µg/L | 10 | SW 846 8270 |

CLIENT: Ucar Carbon Company, Incorporated

AES CLIENT ID: CTC
PROJECT ID: 33PT

ACCURACY

| Analytical Parameter(s) | Method | Sample ID | Type | Percent Recovery |
|---|---|---|---|---|
| Ammonia | EPA 350.1 | 33PT-8 | Matrix Spike | 110 |
| Nitrite | EPA 353.2 | 33PT-8 | Matrix Spike | 104 |
| Total Kjeldahl Nitrogen | EPA 351.2 | 33PT-8 | Matrix Spike | 86 |
| Total Iron | EPA 200.7 | 33PT-8 | Matrix Spike | 101 |
| Soluble Iron | EPA 200.7 | 33PT-8 | Matrix Spike | 92 |
| Total Potassium | EPA 200.7 | 33PT-8 | Matrix Spike | 103 |
| Soluble Potassium | EPA 200.7 | 33PT-8 | Matrix Spike | 102 |
| Total Zinc | EPA 200.7 | 33PT-8 | Matrix Spike | 92 |
| Soluble Zinc | EPA 200.7 | 33PT-8 | Matrix Spike | 84 |
| 1,1-Dichloroethene | SW 846 8240 | 33PT-8 | Matrix Spike | 95 |
| Trichloroethene | SW 846 8240 | 33PT-8 | Matrix Spike | 93 |
| Benzene | SW 846 8240 | 33PT-8 | Matrix Spike | 103 |
| Toluene | SW 846 8240 | 33PT-8 | Matrix Spike | 100 |
| Chlorobenzene | SW 846 8240 | 33PT-8 | Matrix Spike | 105 |
| 1,4-Dichlorobenzene | SW 846 8270 | 33PT-8 | Matrix Spike | 88 |
| N-Nitrosodinpropylamine | SW 846 8270 | 33PT-8 | Matrix Spike | 112 |
| 1,2,4-Trichlorobenzene | SW 846 8270 | 33PT-8 | Matrix Spike | 87 |
| Acenaphthene | SW 846 8270 | 33PT-8 | Matrix Spike | 84 |
| 2,4-Dinitrotoluene | SW 846 8270 | 33PT-8 | Matrix Spike | 93 |
| Pyrene | SW 846 8270 | 33PT-8 | Matrix Spike | 85 |
| Phenol | SW 846 8270 | 33PT-8 | Matrix Spike | 49 |
| 2-Chlorophenol | SW 846 8270 | 33PT-8 | Matrix Spike | 85 |
| 4-Chloro-3-methylphenol | SW 846 8270 | 33PT-8 | Matrix Spike | 89 |
| 4-Nitrophenol | SW 846 8270 | 33PT-8 | Matrix Spike | 59 |
| Pentachlorophenol | SW 846 8270 | 33PT-8 | Matrix Spike | 46 |

CLIENT: Ucar Carbon Company, Incorporated

AES CLIENT ID: CTC
PROJECT ID: 33PT

PRECISION

| Analytical Parameter(s) | Method | Sample ID | Type | Relative % Difference |
|---|---|---|---|---|
| Ammonia | EPA 350.1 | 33PT-8 | Duplicate | 0 |
| Nitrite | EPA 353.2 | 33PT-8 | Duplicate | NA |
| Total Kjeldahl Nitrogen | EPA 351.2 | 33PT-8 | Duplicate | NA |
| Total Iron | EPA 200.7 | 33PT-8 | Duplicate | 0 |
| Soluble Iron | EPA 200.7 | 33PT-8 | Duplicate | 3.1 |
| Total Potassium | EPA 200.7 | 33PT-8 | Duplicate | 4.2 |
| Soluble Potassium | EPA 200.7 | 33PT-8 | Duplicate | NA |
| Total Zinc | EPA 200.7 | 33PT-8 | Duplicate | 0 |
| Soluble Zinc | EPA 200.7 | 33PT-8 | Duplicate | NA |
| Chloromethane | SW 846 8240 | 33PT-8 | Duplicate | NA |
| Bromomethane | SW 846 8240 | 33PT-8 | Duplicate | NA |
| Vinyl chloride | SW 846 8240 | 33PT-8 | Duplicate | NA |
| Chloroethane | SW 846 8240 | 33PT-8 | Duplicate | NA |
| Methylene chloride | SW 846 8240 | 33PT-8 | Duplicate | NA |
| Acetone | SW 846 8240 | 33PT-8 | Duplicate | NA |
| Carbon disulfide | SW 846 8240 | 33PT-8 | Duplicate | NA |
| 1,1-Dichloroethene | SW 846 8240 | 33PT-8 | Duplicate | NA |
| 1,1-Dichloroethane | SW 846 8240 | 33PT-8 | Duplicate | NA |
| trans-1,2-Dichloroethene | SW 846 8240 | 33PT-8 | Duplicate | NA |
| Chloroform | SW 846 8240 | 33PT-8 | Duplicate | NA |
| 1,2-Dichloroethane | SW 846 8240 | 33PT-8 | Duplicate | NA |
| 2-Butanone | SW 846 8240 | 33PT-8 | Duplicate | NA |
| 1,1,1-Trichloroethane | SW 846 8240 | 33PT-8 | Duplicate | NA |
| Carbon tetrachloride | SW 846 8240 | 33PT-8 | Duplicate | NA |
| Vinyl acetate | SW 846 8240 | 33PT-8 | Duplicate | NA |
| Bromodichloromethane | SW 846 8240 | 33PT-8 | Duplicate | NA |
| 1,2-Dichloropropane | SW 846 8240 | 33PT-8 | Duplicate | NA |
| cis-1,3-Dichloropropene | SW 846 8240 | 33PT-8 | Duplicate | NA |

NA = NOT AVAILABLE - ORIGINAL AND/OR DUPLICATE RESULTS ARE BELOW REPORTED LIMITS

CLIENT: Ucar Carbon Company, Incorporated

AES CLIENT ID: CTC
PROJECT ID: 33PT

PRECISION

| Analytical Parameter(s) | Method | Sample ID | Type | Relative % Difference |
|---|---|---|---|---|
| Trichloroethene | SW 846 8240 | 33PT-8 | Duplicate | NA |
| Benzene | SW 846 8240 | 33PT-8 | Duplicate | NA |
| trans-1,3-Dichloropropene | SW 846 8240 | 33PT-8 | Duplicate | NA |
| Chlorodibromomethane | SW 846 8240 | 33PT-8 | Duplicate | NA |
| 1,1,2-Trichloroethane | SW 846 8240 | 33PT-8 | Duplicate | NA |
| Bromoform | SW 846 8240 | 33PT-8 | Duplicate | NA |
| 4-Methyl-2-pentanone | SW 846 8240 | 33PT-8 | Duplicate | NA |
| 2-Hexanone | SW 846 8240 | 33PT-8 | Duplicate | NA |
| Tetrachloroethene | SW 846 8240 | 33PT-8 | Duplicate | NA |
| 1,1,2,2-Tetrachloroethane | SW 846 8240 | 33PT-8 | Duplicate | NA |
| Toluene | SW 846 8240 | 33PT-8 | Duplicate | NA |
| Chlorobenzene | SW 846 8240 | 33PT-8 | Duplicate | NA |
| Ethylbenzene | SW 846 8240 | 33PT-8 | Duplicate | NA |
| Styrene | SW 846 8240 | 33PT-8 | Duplicate | NA |
| m-Xylene | SW 846 8240 | 33PT-8 | Duplicate | NA |
| o/p-Xylene | SW 846 8240 | 33PT-8 | Duplicate | NA |
| bis(2-chloroethyl)ether | SW 846 8270 | 33PT-8 | Duplicate | NA |
| 1,3-Dichlorobenzene | SW 846 8270 | 33PT-8 | Duplicate | NA |
| 1,4-Dichlorobenzene | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Benzyl alcohol | SW 846 8270 | 33PT-8 | Duplicate | NA |
| 1,2-Dichlorobenzene | SW 846 8270 | 33PT-8 | Duplicate | NA |
| bis(2-chloroisopropyl)ether | SW 846 8270 | 33PT-8 | Duplicate | NA |
| N-Nitrosodinpropylamine | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Hexachloroethane | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Nitrobenzene | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Isophorone | SW 846 8270 | 33PT-8 | Duplicate | NA |
| bis(2-chloroethoxy)methane | SW 846 8270 | 33PT-8 | Duplicate | NA |
| 1,2,4-Trichlorobenzene | SW 846 8270 | 33PT-8 | Duplicate | NA |

NA = NOT AVAILABLE - ORIGINAL AND/OR DUPLICATE RESULTS ARE BELOW REPORTED LIMITS

CLIENT: Ucar Carbon Company, Incorporated

AES CLIENT ID: CTC
PROJECT ID: 33PT

PRECISION

| Analytical Parameter(s) | Method | Sample ID | Type | Relative % Difference |
|---|---|---|---|---|
| Naphthalene | SW 846 8270 | 33PT-8 | Duplicate | NA |
| 4-Chloroaniline | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Hexachlorobutadiene | SW 846 8270 | 33PT-8 | Duplicate | NA |
| 2-Methylnaphthalene | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Hexachlorocyclopentadiene | SW 846 8270 | 33PT-8 | Duplicate | NA |
| 2-Chloronaphthalene | SW 846 8270 | 33PT-8 | Duplicate | NA |
| 2-Nitroaniline | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Dimethylphthalate | SW 846 8270 | 33PT-8 | Duplicate | NA |
| 2,6-Dinitrotoluene | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Acenaphthylene | SW 846 8270 | 33PT-8 | Duplicate | NA |
| 3-Nitroaniline | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Acenaphthene | SW 846 8270 | 33PT-8 | Duplicate | NA |
| 2,4-Dinitrotoluene | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Dibenzofuran | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Diethylphthalate | SW 846 8270 | 33PT-8 | Duplicate | NA |
| 4-Chlorophenylphenyl ether | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Fluorene | SW 846 8270 | 33PT-8 | Duplicate | NA |
| 4-Nitroaniline | SW 846 8270 | 33PT-8 | Duplicate | NA |
| N-Nitrosodiphenylamine | SW 846 8270 | 33PT-8 | Duplicate | NA |
| 4-Bromophenylphenyl ether | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Hexachlorobenzene | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Phenanthrene | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Anthracene | SW 846 8270 | 33PT-8 | Duplicate | NA |
| di-n-Butylphthalate | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Fluoranthene | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Pyrene | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Butylbenzylphthalate | SW 846 8270 | 33PT-8 | Duplicate | NA |
| 3,3-Dichlorobenzidine | SW 846 8270 | 33PT-8 | Duplicate | NA |

NA = NOT AVAILABLE - ORIGINAL AND/OR DUPLICATE RESULTS ARE BELOW REPORTED LIMITS

CLIENT: Ucar Carbon Company, Incorporated

AES CLIENT ID: CTC
PROJECT ID: 33PT

PRECISION

| Analytical Parameter(s) | Method | Sample ID | Type | Relative % Difference |
|---|---|---|---|---|
| bis(2ethylhexyl)phthalate | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Benzo(a)anthracene | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Chrysene | SW 846 8270 | 33PT-8 | Duplicate | NA |
| di-n-Octylphthalate | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Benzo(b)fluoranthene | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Benzo(k)fluoranthene | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Benzo(a)pyrene | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Indeno(1,2,3-cd)pyrene | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Dibenzo(a,h)anthracene | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Benzo(g,h,i)perylene | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Phenol | SW 846 8270 | 33PT-8 | Duplicate | NA |
| 2-Chlorophenol | SW 846 8270 | 33PT-8 | Duplicate | NA |
| 2-Methylphenol | SW 846 8270 | 33PT-8 | Duplicate | NA |
| 4-Methylphenol | SW 846 8270 | 33PT-8 | Duplicate | NA |
| 2-Nitrophenol | SW 846 8270 | 33PT-8 | Duplicate | NA |
| 2,4-Dimethylphenol | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Benzoic acid | SW 846 8270 | 33PT-8 | Duplicate | NA |
| 2,4-Dichlorophenol | SW 846 8270 | 33PT-8 | Duplicate | NA |
| 4-Chloro-3-methylphenol | SW 846 8270 | 33PT-8 | Duplicate | NA |
| 2,4,6-Trichlorophenol | SW 846 8270 | 33PT-8 | Duplicate | NA |
| 2,4,5-Trichlorophenol | SW 846 8270 | 33PT-8 | Duplicate | NA |
| 2,4-Dinitrophenol | SW 846 8270 | 33PT-8 | Duplicate | NA |
| 4-Nitrophenol | SW 846 8270 | 33PT-8 | Duplicate | NA |
| 4,6-Dinitro-2-methylphenol | SW 846 8270 | 33PT-8 | Duplicate | NA |
| Pentachlorophenol | SW 846 8270 | 33PT-8 | Duplicate | NA |

NA = NOT AVAILABLE - ORIGINAL AND/OR DUPLICATE RESULTS ARE BELOW REPORTED LIMITS

Advanced Environmental Services

Sample Traceability Report

Inorganics Analysis

AES Job Code CTC

AES Job No. 33PT

| | | Sample Prep | | | Analysis | | |
|---|---|---|---|---|---|---|---|
| AES Sample No. | Sample Date | Method Number | Date | Analyst | Method Number | Date | Analyst |
| CTC33PT 1-10TM | 9-22-93 | 9.3 | 9-24-93 | JK | 200.7 | 10/04/93 | DJC |
| CTC33PT 1-9SOL | 9-22-93 | 9.3 | 9-24-93 | JK | 200.7 (confirm) | 10/13/93 | DJC |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Note: Areas marked using a dash indicate that no sample preparation was required under the applied methodology.

Advanced Environmental Services

Sample Traceability Report

Organics Analysis

AES Job Code CTC

AES Job No. 33PT

| | | Sample Prep | | | Analysis | | |
|---|---|---|---|---|---|---|---|
| AES Sample No. | Sample Date | Method Number | Date | Analyst | Method Number | Date | Analyst |
| 33PT-6 | 9/21/93 | 3510 8270 | 9/24/93 | PQ | 8270 | 9/29/93 | JF |
| 33PT-8 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| 33PT-9 | ↓ | ↓ | ↓ | ↓ | ↓ | 9/30/93 | ↓ |
| 33PT-10 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| 33PT-6 | 9/21/93 | — | — | — | 8240 | 9/27/93 | ICA/SS |
| 33PT-8 | 9/21/93 | — | — | — | ↓ | 9/27/93 | ↓ |
| 33PT-9 | 9/21/93 | — | — | — | ↓ | 9/28/93 | ↓ |
| 33PT-10 | 9/21/93 | — | — | — | ↓ | 9/27-9/28/93 | ↓ |
| | | | | | | | |

Note: Areas marked using a dash indicate that no sample preparation was required under the applied methodology.

Advanced Environmental Services

Sample Traceability Report

Inorganics Analysis

AES Job Code CTC

AES Job No. 33PT

| | | Sample Prep | | | Analysis | | |
|---|---|---|---|---|---|---|---|
| AES Sample No. | Sample Date | Method Number | Date | Analyst | Method Number | Date | Analyst |
| 33PT-1-10 | 9/21-22/93 | 351.2 | 9-30-93 | CW | 351.2 | 10/1/93 | TS |
| 33PT-1-10 | 9/21-22/93 | — | — | — | 350.1 | 10/8/93 | TS |
| 33PT(1-10) | 9/21-22/93 | — | — | — | 353.2 | 10/11/93 | TS |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Note: Areas marked using a dash indicate that no sample preparation was required under the applied methodology.

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

# CHAIN OF CUSTODY RECORD

PROJECT NAME: UCAR CARBON GRAPHITE

JOB CODE: CTC 33PT

SAMPLER'S SIGNATURE: Dennis J. Hoyt

IDENTIFICATION OF BLIND FIELD DUPLICATE SITE: BW-4

| DATE | TIME | SAMPLE IDENTIFICATION | GRAB | COMP | SAMPLE TYPE | CONTAINER CLASSIFICATION: UNPRESERVED | HNO3 | H2SO4 | HCL | NAOH | VIAL (PRES.) | VIAL (UNPRES.) | TOTAL | PARAMETERS/REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9/21/93 | 14:11 | BW-5 | X | | Groundwater | | 2 | 1 | | | | | 3 | TKN, AMMO, N/ITE, TOT & SOL METALS |
| 9/21/93 | 14:45 | BW-3 | X | | Groundwater | | 2 | 1 | | | | | 3 | " " |
| 9/21/93 | 15:30 | BW-4 | X | | Groundwater | 1 | 2 | 1 | | | | 2 | 6 | TKN, AMMO, N/ITE, TOT & SOL METALS, TCL Vol, |
| 9/21/93 | 15:30 | Blind Duplicate | X | | Groundwater | 1 | 2 | 1 | | | | 2 | 6 | TCL Semi-Volatiles. (BOTH SITES) |
| 9/21/93 | 14:05 | BW-6 (QC SITE) | X | | Groundwater | 4 | 4 | 2 | | | 3 | | 13 | TKN, AMMO, N/ITE, TOT & SOL METALS TCL Volatiles, TCL Semi Volatiles. |
| 9/21/93 | 10:20 | TRIP BLANK | X | | D.I. Water | 1 | 1 | 1 | | | 2 | | 5 | TKN, AMMO, N/ITE, TOT metals TCL Vol, TCL Semi Vol. |

TOTAL NUMBER OF CONTAINERS 36

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

| | DATE | TIME | RECEIVED BY: |
|---|---|---|---|
| 1. RELINQUISHED BY: Dennis J. Hoyt | 9/21/93 | 16:53 | Joe Curtis |
| 2. RELINQUISHED BY: | DATE | TIME | RECEIVED BY: |
| 3. RELINQUISHED BY: | DATE | TIME | RECEIVED BY: |

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

# CHAIN OF CUSTODY RECORD

33PT

PROJECT NAME: UCAR CARBON

SAMPLER'S SIGNATURE:

JOB CODE: CTC

IDENTIFICATION OF BLIND FIELD DUPLICATE SITE: —

| DATE | TIME | SAMPLE IDENTIFICATION | GRAB | COMP | SAMPLE TYPE | CONTAINER CLASSIFICATION: UNPRESERVED | $HNO_3$ | $H_2SO_4$ | HCL | NAOH | VIAL (PRES.) | VIAL (UNPRES.) | TOTAL | PARAMETERS/REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9-22-93 | 10:20 | MW-1 | X | | GROUNDWATER | | 2 | 1 | | | | | 3 | TOTAL TARGET METALS, |
| | 11:50 | MW-3 | X | | | | 2 | 1 | | | | | 3 | TKN, AMMONIA, NITRITE |
| | 12:30 | BW-1 | X | | | | 2 | 1 | | | | | 3 | |
| | 15:00 | BW-2 | X | | | | 2 | 1 | | | | | 3 | |

TOTAL NUMBER OF CONTAINERS 12

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: | DATE | TIME | RECEIVED BY: |
|---|---|---|---|
| | 9-22-93 | 15:40 | Wendy Hurst |
| 2. RELINQUISHED BY: | DATE | TIME | RECEIVED BY: |
| | | | |
| 3. RELINQUISHED BY: | DATE | TIME | RECEIVED BY: |
| | | | |