



32NO3 GW39

MM  
CW

UCAR CARBON COMPANY INC. P.O. BOX 887, NIAGARA FALLS, NEW YORK 14302

RECEIVED

10/15/1994

32NO3

NYSDEC-REG.9

FOIL

☒REL ☐UNREL

November 14, 1994

Mr. Peter J. Buechi, PE  
Regional Engineer  
NYS Department of Environmental Conservation  
270 Michigan Avenue  
Buffalo, New York 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-sixth quarter's groundwater sampling analysis from the closed Republic 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:

| <u>Contaminate</u>       | <u>Conc. 26th</u><br><u>Qtr. ppb.</u> | <u>Mean Conc.</u><br><u>ppb.</u> | <u>Range</u><br><u>ppb</u> |
|--------------------------|---------------------------------------|----------------------------------|----------------------------|
| Trans-1,2-Dichloroethene | 210                                   | 375                              | 6-1000                     |
| Trichloroethene          | 400                                   | 311                              | 30-740                     |
| Tetrachloroethene        | 300                                   | 267                              | 72-440                     |
| Hexachlorobutadiene      | 49                                    | 52                               | 10-160                     |

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

During this quarter, bedrock well, BW-6-86, registered two (2) positive organic parameters, 1,2,4, Trichlorobenze (12 P.P.B.) and Pyrene (13 P.P.B.). These parameters have not been

Letter to Peter J. Buechi  
November 14, 1994  
Page 2

detected in the past twenty-five (25) quarters nor have they been detected anytime in the upper gradient bedrock well BW-4-86. We will continue to observe future analysis for possible trends.

If you have any questions, please contact me at 278-3275.

Very truly yours,

A handwritten signature in cursive script, appearing to read "A.C. Ogg", followed by a horizontal line.

A.C. Ogg  
Site Manager

A.C. Ogg  
nm  
enc.

cc: Mr. Jim Devald, Dir. of Environmental Health  
Niagara County Health Department  
P.O. Box 428  
Niagara Falls, N.Y. 14302-0428

Mr. Dave O'Toole  
New York Department of Environmental Conservation  
50 Wolf Road  
Albany, N.Y. 12233-4013

**UCAR CARBON COMPANY, INCORPORATED**

**REPUBLIC WASTE MANAGEMENT FACILITY**

**POST CLOSURE MONITORING PROGRAM**

**QUARTERLY REPORT**

**THIRD QUARTER 1994**

Prepared By:



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

September 30, 1994  
REF: CTC4354/100B

QA/QC VERIFICATION FOR PROJECT ID 4354

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.

Sandra Ratka

Inorganic Chemistry

Susan Serocch

Organic Chemistry

Jeff Albel

Field Services

W. Joseph McDougall

Quality Control

Kristen Olson

Kristen Olson  
Project Manager

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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 - FIELD PARAMETER INFORMATION**

**September 14, 1994 thru September 16, 1994**

**UCAR CARBON COMPANY, INC.**

Hyde Park Boulevard  
Niagara Falls, New York

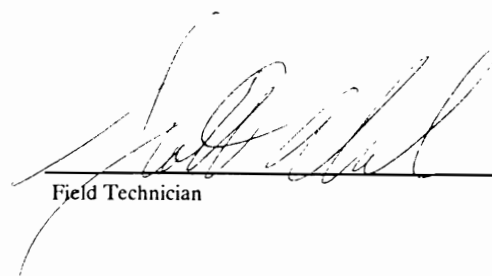
AES Code: CTC

Project I.D. #4354

| Monitoring Well I.D. | Sampling Date | Sampling Time | Water Level (ft.) | Turbidity (NTU) | Filter Time | Field Comments/Observations                           |
|----------------------|---------------|---------------|-------------------|-----------------|-------------|-------------------------------------------------------|
| BW-1                 | 9/14/94       | 2:20 PM       | 18.74             | 194.0           | 3:55 PM     | Cloudy tan with a slight odor                         |
| BW-2                 | 9/16/94       | 11:15 AM      | 16.57             | 81.4            | 11:30 AM    | Slightly turbid with a slight SO2 odor.               |
| BW-3                 | 9/15/94       | 2:55 PM       | 15.52             | 2.6             | 3:50 PM     | Clear with a slight SO2 odor.                         |
| BW-4                 | 9/16/94       | 3:00 PM       | 15.41             | 76.2            | 4:20 PM     | Turbid black with a visible sheen and petroleum odor. |
| BW-5                 | 9/14/94       | 3:10 PM       | 13.79             | 29.5            | 3:10 PM     | Clear with black solids.                              |
| BW-6                 | 9/16/94       | 2:50 PM       | 17.98             | 760.0           | 4:15 PM     | Very turbid                                           |
| MW-1                 | 9/15/94       | 1:25 PM       | 13.41             | 9.9             | 3:45 PM     | Clear with black solids.                              |
| MW-2                 | 9/16/94       | 10:55 AM      | 24.23             | 176.3           | **          | Turbid black, strong odor                             |
| MW-3                 | 9/16/94       | 3:25 PM       | 14.02             | 265.0           | 4:25 PM     | Cloudy turbid tan                                     |
| OW-1 South           | 9/15/94       | 2:00 PM       | 8.25              | NA              | NA          | Required to take water elevation only.                |
| OW-2 North           | 9/16/94       | 3:35 PM       | 8.20              | NA              | NA          | Required to take water elevation only.                |
| Blind Dup            | 9/16/94       | 3:00 PM       | 15.41             | 81.5            | 4:20 PM     | Turbid black with a visible sheen and petroleum odor  |
| Trip Blank           | 9/14/94       | 9:30 AM       | NA                | 0.5             | NA          | Deionized Water                                       |

\*\* Insufficient volume and recharge rate to collect the metals parameters.

The Blind Duplicate site is BW-4.

  
Field Technician

9/23/94  
Date

*Advanced Environmental Services, Inc.*

2186 Liberty Drive  
Niagara Falls, New York 14304  
(716) 283-3120

**QUARTERLY GROUNDWATER MONITORING - FIELD PARAMETER INFORMATION**

**September 14, 1994 thru September 16, 1994**

**UCAR CARBON COMPANY, INC.**

Hyde Park Boulevard  
Niagara Falls, New York

**AES Code: CTC**

**Project I.D. #4354**

| Monitoring Well I.D. | Sampling Date | Sampling Time | Water Level (ft.) | Turbidity (NTU) | Filter Time | Field Comments/Observations                           |
|----------------------|---------------|---------------|-------------------|-----------------|-------------|-------------------------------------------------------|
| BW-1                 | 9/14/94       | 2:20 PM       | 18.74             | 194.0           | 3:55 PM     | Cloudy tan with a slight odor                         |
| BW-2                 | 9/16/94       | 11:15 AM      | 16.57             | 81.4            | 11:30 AM    | Slightly turbid with a slight SO <sub>2</sub> odor.   |
| BW-3                 | 9/15/94       | 2:55 PM       | 15.52             | 2.6             | 3:50 PM     | Clear with a slight SO <sub>2</sub> odor.             |
| BW-4                 | 9/16/94       | 3:00 PM       | 15.41             | 76.2            | 4:20 PM     | Turbid black with a visible sheen and petroleum odor. |
| BW-5                 | 9/14/94       | 3:10 PM       | 13.79             | 29.5            | 3:10 PM     | Clear with black solids.                              |
| BW-6                 | 9/16/94       | 2:50 PM       | 17.98             | 760.0           | 4:15 PM     | Very turbid                                           |
| MW-1                 | 9/15/94       | 1:25 PM       | 13.41             | 9.9             | 3:45 PM     | Clear with black solids.                              |
| MW-2                 | 9/16/94       | 10:55 AM      | 24.23             | 176.3           | **          | Turbid black, strong odor                             |
| MW-3                 | 9/16/94       | 3:25 PM       | 14.02             | 265.0           | 4:25 PM     | Cloudy turbid tan                                     |
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\*\* Insufficient volume and recharge rate to collect the metals parameters.

The Blind Duplicate site is BW-4.

  
Field Technician

9/23/94  
Date

CLIENT: Ucar Carbon Company, Incorporated  
SAMPLE ID: MW-1  
COLLECTION METHOD: GRAB  
COLLECTION DATE(S): 09/15/94 - 09/16/94  
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC  
AES SAMPLE ID: 4354-1

PROJECT ID: 4354

| Analytical<br>Parameters | Analytical<br>Results | Units | Practical<br>Quantifiable<br>Limit | Method    |
|--------------------------|-----------------------|-------|------------------------------------|-----------|
| Turbidity *              | 9.9                   | NTU   | 0.1                                | EPA 180.1 |
| Ammonia                  | 4.5                   | mg/L  | 0.05                               | EPA 350.1 |
| Nitrite                  | BQL                   | mg/L  | 0.05                               | EPA 353.2 |
| Total Kjeldahl Nitrogen  | 6.4                   | mg/L  | 0.1                                | EPA 351.2 |
| Total Iron               | 1.5                   | mg/L  | 0.05                               | EPA 200.7 |
| Soluble Iron             | BQL                   | mg/L  | 0.05                               | EPA 200.7 |
| Total Potassium          | 36                    | mg/L  | 1.0                                | EPA 200.7 |
| Soluble Potassium        | 36                    | mg/L  | 1.0                                | EPA 200.7 |
| Total Zinc               | 0.02                  | 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: MW-3  
COLLECTION METHOD: GRAB  
COLLECTION DATE(S): 09/15/94 - 09/16/94  
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC  
AES SAMPLE ID: 4354-2

PROJECT ID: 4354

| Analytical<br>Parameters | Analytical<br>Results | Units | Practical<br>Quantifiable<br>Limit | Method    |
|--------------------------|-----------------------|-------|------------------------------------|-----------|
| Turbidity *              | 265                   | NTU   | 0.1                                | EPA 180.1 |
| Ammonia                  | 0.10                  | mg/L  | 0.05                               | EPA 350.1 |
| Nitrite                  | BQL                   | mg/L  | 0.05                               | EPA 353.2 |
| Total Kjeldahl Nitrogen  | 1.0                   | mg/L  | 0.1                                | EPA 351.2 |
| Total Iron               | 23                    | mg/L  | 0.05                               | EPA 200.7 |
| Soluble Iron             | 0.09                  | mg/L  | 0.05                               | EPA 200.7 |
| Total Potassium          | 4.8                   | mg/L  | 1.0                                | EPA 200.7 |
| Soluble Potassium        | 1.7                   | mg/L  | 1.0                                | EPA 200.7 |
| Total Zinc               | 0.14                  | 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-1  
COLLECTION METHOD: GRAB  
COLLECTION DATE(S): 09/14/94 - 2:20 pm  
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC  
AES SAMPLE ID: 4354-3

PROJECT ID: 4354

| Analytical Parameters   | Analytical Results | Units | Practical Quantifiable Limit | Method    |
|-------------------------|--------------------|-------|------------------------------|-----------|
| Turbidity *             | 194                | NTU   | 0.1                          | EPA 180.1 |
| Ammonia                 | 0.18               | mg/L  | 0.05                         | EPA 350.1 |
| Nitrite                 | BQL                | mg/L  | 0.05                         | EPA 353.2 |
| Total Kjeldahl Nitrogen | 0.5                | mg/L  | 0.1                          | EPA 351.2 |
| Total Iron              | 5.6                | mg/L  | 0.05                         | EPA 200.7 |
| Soluble Iron            | 1.1                | mg/L  | 0.05                         | EPA 200.7 |
| Total Potassium         | 4.0                | mg/L  | 1.0                          | EPA 200.7 |
| Soluble Potassium       | 3.5                | mg/L  | 1.0                          | EPA 200.7 |
| Total Zinc              | 23                 | mg/L  | 0.02                         | EPA 200.7 |
| Soluble Zinc            | 0.08               | 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): 09/15/94 - 09/16/94  
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC  
AES SAMPLE ID: 4354-4

PROJECT ID: 4354

| Analytical<br>Parameters | Analytical<br>Results | Units | Practical<br>Quantifiable<br>Limit | Method    |
|--------------------------|-----------------------|-------|------------------------------------|-----------|
| Turbidity *              | 81.4                  | NTU   | 0.1                                | EPA 180.1 |
| Ammonia                  | 1.2                   | 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               | 3.8                   | mg/L  | 0.05                               | EPA 200.7 |
| Soluble Iron             | 2.3                   | mg/L  | 0.05                               | EPA 200.7 |
| Total Potassium          | 6.3                   | mg/L  | 1.0                                | EPA 200.7 |
| Soluble Potassium        | 6.4                   | mg/L  | 1.0                                | EPA 200.7 |
| Total Zinc               | 3.0                   | 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  
COLLECTION METHOD: GRAB  
COLLECTION DATE(S): 09/15/94 - 09/16/94  
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC  
AES SAMPLE ID: 4354-5

PROJECT ID: 4354

| Analytical Parameters   | Analytical Results | Units | Practical Quantifiable Limit | Method    |
|-------------------------|--------------------|-------|------------------------------|-----------|
| Turbidity *             | 2.6                | NTU   | 0.1                          | EPA 180.1 |
| Ammonia                 | 1.3                | mg/L  | 0.05                         | EPA 350.1 |
| Nitrite                 | BQL                | mg/L  | 0.05                         | EPA 353.2 |
| Total Kjeldahl Nitrogen | 1.2                | mg/L  | 0.1                          | EPA 351.2 |
| Total Iron              | 1.0                | mg/L  | 0.05                         | EPA 200.7 |
| Soluble Iron            | 1.1                | mg/L  | 0.05                         | EPA 200.7 |
| Total Potassium         | 4.7                | mg/L  | 1.0                          | EPA 200.7 |
| Soluble Potassium       | 4.7                | mg/L  | 1.0                          | EPA 200.7 |
| Total Zinc              | BQL                | 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): 09/15/94 - 09/16/94  
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC  
 AES SAMPLE ID: 4354-6

PROJECT ID: 4354

| Analytical Parameters    | Analytical Results | Units | Practical Quantifiable Limit | Method      |
|--------------------------|--------------------|-------|------------------------------|-------------|
| Turbidity *              | 76.2               | NTU   | 0.1                          | EPA 180.1   |
| Ammonia                  | 6.0                | mg/L  | 0.05                         | EPA 350.1   |
| Nitrite                  | BQL                | mg/L  | 0.05                         | EPA 353.2   |
| Total Kjeldahl Nitrogen  | 7.6                | mg/L  | 0.1                          | EPA 351.2   |
| Total Iron               | 20                 | mg/L  | 0.05                         | EPA 200.7   |
| Soluble Iron             | 3.2                | mg/L  | 0.05                         | EPA 200.7   |
| Total Potassium          | 23                 | mg/L  | 1.0                          | EPA 200.7   |
| Soluble Potassium        | 24                 | mg/L  | 1.0                          | EPA 200.7   |
| Total Zinc               | 12                 | mg/L  | 0.02                         | EPA 200.7   |
| Soluble Zinc             | BQL                | mg/L  | 0.02                         | EPA 200.7   |
| Chloromethane            | BQL                | µg/L  | 50 **                        | SW 846 8240 |
| Bromomethane             | BQL                | µg/L  | 50                           | SW 846 8240 |
| Vinyl chloride           | BQL                | µg/L  | 50                           | SW 846 8240 |
| Chloroethane             | BQL                | µg/L  | 50                           | SW 846 8240 |
| Methylene chloride       | BQL                | µg/L  | 50                           | SW 846 8240 |
| Acetone                  | BQL                | µg/L  | 50                           | SW 846 8240 |
| Carbon disulfide         | BQL                | µg/L  | 50                           | SW 846 8240 |
| 1,1-Dichloroethene       | BQL                | µg/L  | 50                           | SW 846 8240 |
| 1,1-Dichloroethane       | BQL                | µg/L  | 50                           | SW 846 8240 |
| trans-1,2-Dichloroethene | 210                | µg/L  | 50                           | SW 846 8240 |
| Chloroform               | BQL                | µg/L  | 50                           | SW 846 8240 |
| 1,2-Dichloroethane       | BQL                | µg/L  | 50                           | SW 846 8240 |
| 2-Butanone               | BQL                | µg/L  | 50                           | SW 846 8240 |
| 1,1,1-Trichloroethane    | BQL                | µg/L  | 50                           | SW 846 8240 |
| Carbon tetrachloride     | BQL                | µg/L  | 50                           | SW 846 8240 |
| Vinyl acetate            | BQL                | µg/L  | 50                           | SW 846 8240 |
| Bromodichloromethane     | BQL                | µg/L  | 50                           | SW 846 8240 |
| 1,2-Dichloropropane      | BQL                | µg/L  | 50                           | SW 846 8240 |

\* Analysis performed in the field.

\*\* High limit due to sample matrix; dilution was required.

CLIENT: Ucar Carbon Company, Incorporated  
 SAMPLE ID: BW-4  
 COLLECTION METHOD: GRAB  
 COLLECTION DATE(S): 09/15/94 - 09/16/94  
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC  
 AES SAMPLE ID: 4354-6

PROJECT ID: 4354

| Analytical Parameters       | Analytical Results | Units | Practical Quantifiable Limit | Method      |
|-----------------------------|--------------------|-------|------------------------------|-------------|
| cis-1,3-Dichloropropene     | BQL                | µg/L  | 50                           | SW 846 8240 |
| Trichloroethene             | 400                | µg/L  | 50                           | SW 846 8240 |
| Benzene                     | BQL                | µg/L  | 50                           | SW 846 8240 |
| trans-1,3-Dichloropropene   | BQL                | µg/L  | 50                           | SW 846 8240 |
| Chlorodibromomethane        | BQL                | µg/L  | 50                           | SW 846 8240 |
| 1,1,2-Trichloroethane       | BQL                | µg/L  | 50                           | SW 846 8240 |
| Bromoform                   | BQL                | µg/L  | 50                           | SW 846 8240 |
| 4-Methyl-2-pentanone        | BQL                | µg/L  | 50                           | SW 846 8240 |
| 2-Hexanone                  | BQL                | µg/L  | 50                           | SW 846 8240 |
| Tetrachloroethene           | 300                | µg/L  | 50                           | SW 846 8240 |
| 1,1,2,2-Tetrachloroethane   | BQL                | µg/L  | 50                           | SW 846 8240 |
| Toluene                     | BQL                | µg/L  | 50                           | SW 846 8240 |
| Chlorobenzene               | BQL                | µg/L  | 50                           | SW 846 8240 |
| Ethylbenzene                | BQL                | µg/L  | 50                           | SW 846 8240 |
| Styrene                     | BQL                | µg/L  | 50                           | SW 846 8240 |
| m-Xylene                    | BQL                | µg/L  | 50                           | SW 846 8240 |
| o/p-Xylene                  | BQL                | µg/L  | 50                           | 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-Nitrosodi-n-propylamine   | 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): 09/15/94 - 09/16/94  
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC  
 AES SAMPLE ID: 4354-6

PROJECT ID: 4354

| 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         | 49                 | 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 |
| Dimethyl phthalate          | 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 |
| Diethyl phthalate           | BQL                | µg/L  | 10                           | SW 846 8270 |
| 4-Chlorophenyl phenyl 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-Bromophenyl phenyl 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 |
| Butyl benzyl phthalate      | 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): 09/15/94 - 09/16/94  
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC  
 AES SAMPLE ID: 4354-6

PROJECT ID: 4354

| 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): 09/14/94 - 3:10 pm  
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC  
AES SAMPLE ID: 4354-7

PROJECT ID: 4354

| Analytical<br>Parameters | Analytical<br>Results | Units | Practical<br>Quantifiable<br>Limit | Method    |
|--------------------------|-----------------------|-------|------------------------------------|-----------|
| Turbidity *              | 29.5                  | NTU   | 0.1                                | EPA 180.1 |
| Ammonia                  | 0.18                  | 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               | 10                    | mg/L  | 0.05                               | EPA 200.7 |
| Soluble Iron             | 1.1                   | mg/L  | 0.05                               | EPA 200.7 |
| Total Potassium          | 3.0                   | mg/L  | 1.0                                | EPA 200.7 |
| Soluble Potassium        | 3.0                   | mg/L  | 1.0                                | EPA 200.7 |
| Total Zinc               | 0.18                  | mg/L  | 0.02                               | EPA 200.7 |
| Soluble Zinc             | 0.09                  | 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): 09/15/94 - 09/16/94  
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC  
 AES SAMPLE ID: 4354-8

PROJECT ID: 4354

| Analytical Parameters    | Analytical Results | Units | Practical Quantifiable Limit | Method      |
|--------------------------|--------------------|-------|------------------------------|-------------|
| Turbidity *              | 760                | 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  | 0.80               | mg/L  | 0.1                          | EPA 351.2   |
| Total Iron               | 51                 | mg/L  | 0.05                         | EPA 200.7   |
| Soluble Iron             | 1.7                | mg/L  | 0.05                         | EPA 200.7   |
| Total Potassium          | 12                 | mg/L  | 1.0                          | EPA 200.7   |
| Soluble Potassium        | BQL                | mg/L  | 1.0                          | EPA 200.7   |
| Total Zinc               | 0.16               | 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           | 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): 09/15/94 - 09/16/94  
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC  
 AES SAMPLE ID: 4354-8

PROJECT ID: 4354

| 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-Nitrosodi-n-propylamine   | 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      | 12                 | µg/L  | 10                           | SW 846 8270 |

CLIENT: Ucar Carbon Company, Incorporated  
 SAMPLE ID: BW-6  
 COLLECTION METHOD: GRAB  
 COLLECTION DATE(S): 09/15/94 - 09/16/94  
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC  
 AES SAMPLE ID: 4354-8

PROJECT ID: 4354

| 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 |
| Dimethyl phthalate          | 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 |
| Diethyl phthalate           | BQL                | µg/L  | 10                           | SW 846 8270 |
| 4-Chlorophenyl phenyl 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-Bromophenyl phenyl 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                      | 13                 | µg/L  | 10                           | SW 846 8270 |
| Butyl benzyl phthalate      | 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): 09/15/94 - 09/16/94  
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC  
 AES SAMPLE ID: 4354-8

PROJECT ID: 4354

| 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): 09/15/94 - 09/16/94  
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC  
 AES SAMPLE ID: 4354-9

PROJECT ID: 4354

| Analytical Parameters    | Analytical Results | Units | Practical Quantifiable Limit | Method      |
|--------------------------|--------------------|-------|------------------------------|-------------|
| Turbidity *              | 81.5               | NTU   | 0.1                          | EPA 180.1   |
| Ammonia                  | 5.0                | mg/L  | 0.05                         | EPA 350.1   |
| Nitrite                  | BQL                | mg/L  | 0.05                         | EPA 353.2   |
| Total Kjeldahl Nitrogen  | 5.2                | mg/L  | 0.1                          | EPA 351.2   |
| Total Iron               | 20                 | mg/L  | 0.05                         | EPA 200.7   |
| Soluble Iron             | 3.2                | mg/L  | 0.05                         | EPA 200.7   |
| Total Potassium          | 23                 | mg/L  | 1.0                          | EPA 200.7   |
| Soluble Potassium        | 25                 | mg/L  | 1.0                          | EPA 200.7   |
| Total Zinc               | 10                 | mg/L  | 0.02                         | EPA 200.7   |
| Soluble Zinc             | BQL                | mg/L  | 0.02                         | EPA 200.7   |
| Chloromethane            | BQL                | µg/L  | 50 **                        | SW 846 8240 |
| Bromomethane             | BQL                | µg/L  | 50                           | SW 846 8240 |
| Vinyl chloride           | BQL                | µg/L  | 50                           | SW 846 8240 |
| Chloroethane             | BQL                | µg/L  | 50                           | SW 846 8240 |
| Methylene chloride       | BQL                | µg/L  | 50                           | SW 846 8240 |
| Acetone                  | BQL                | µg/L  | 50                           | SW 846 8240 |
| Carbon disulfide         | BQL                | µg/L  | 50                           | SW 846 8240 |
| 1,1-Dichloroethene       | BQL                | µg/L  | 50                           | SW 846 8240 |
| 1,1-Dichloroethane       | BQL                | µg/L  | 50                           | SW 846 8240 |
| trans-1,2-Dichloroethene | 220                | µg/L  | 50                           | SW 846 8240 |
| Chloroform               | BQL                | µg/L  | 50                           | SW 846 8240 |
| 1,2-Dichloroethane       | BQL                | µg/L  | 50                           | SW 846 8240 |
| 2-Butanone               | BQL                | µg/L  | 50                           | SW 846 8240 |
| 1,1,1-Trichloroethane    | BQL                | µg/L  | 50                           | SW 846 8240 |
| Carbon tetrachloride     | BQL                | µg/L  | 50                           | SW 846 8240 |
| Vinyl acetate            | BQL                | µg/L  | 50                           | SW 846 8240 |
| Bromodichloromethane     | BQL                | µg/L  | 50                           | SW 846 8240 |
| 1,2-Dichloropropane      | BQL                | µg/L  | 50                           | SW 846 8240 |

\* Analysis performed in the field.

\*\* High limit due to sample matrix; dilution was required.

CLIENT: Ucar Carbon Company, Incorporated  
 SAMPLE ID: BLIND DUPLICATE  
 COLLECTION METHOD: GRAB  
 COLLECTION DATE(S): 09/15/94 - 09/16/94  
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC  
 AES SAMPLE ID: 4354-9

PROJECT ID: 4354

| Analytical Parameters       | Analytical Results | Units | Practical Quantifiable Limit | Method      |
|-----------------------------|--------------------|-------|------------------------------|-------------|
| cis-1,3-Dichloropropene     | BQL                | µg/L  | 50                           | SW 846 8240 |
| Trichloroethene             | 400                | µg/L  | 50                           | SW 846 8240 |
| Benzene                     | BQL                | µg/L  | 50                           | SW 846 8240 |
| trans-1,3-Dichloropropene   | BQL                | µg/L  | 50                           | SW 846 8240 |
| Chlorodibromomethane        | BQL                | µg/L  | 50                           | SW 846 8240 |
| 1,1,2-Trichloroethane       | BQL                | µg/L  | 50                           | SW 846 8240 |
| Bromoform                   | BQL                | µg/L  | 50                           | SW 846 8240 |
| 4-Methyl-2-pentanone        | BQL                | µg/L  | 50                           | SW 846 8240 |
| 2-Hexanone                  | BQL                | µg/L  | 50                           | SW 846 8240 |
| Tetrachloroethene           | 300                | µg/L  | 50                           | SW 846 8240 |
| 1,1,2,2-Tetrachloroethane   | BQL                | µg/L  | 50                           | SW 846 8240 |
| Toluene                     | BQL                | µg/L  | 50                           | SW 846 8240 |
| Chlorobenzene               | BQL                | µg/L  | 50                           | SW 846 8240 |
| Ethylbenzene                | BQL                | µg/L  | 50                           | SW 846 8240 |
| Styrene                     | BQL                | µg/L  | 50                           | SW 846 8240 |
| m-Xylene                    | BQL                | µg/L  | 50                           | SW 846 8240 |
| o/p-Xylene                  | BQL                | µg/L  | 50                           | 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-Nitrosodi-n-propylamine   | 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): 09/15/94 - 09/16/94  
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC  
 AES SAMPLE ID: 4354-9

PROJECT ID: 4354

| 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         | 41                 | 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 |
| Dimethyl phthalate          | 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 |
| Diethyl phthalate           | BQL                | µg/L  | 10                           | SW 846 8270 |
| 4-Chlorophenyl phenyl 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-Bromophenyl phenyl 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 |
| Butyl benzyl phthalate      | 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): 09/15/94 - 09/16/94  
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC  
 AES SAMPLE ID: 4354-9

PROJECT ID: 4354

| 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): 09/14/94 - 9:30 am  
 SAMPLE TYPE: BAKER WATER

AES CLIENT ID: CTC  
 AES SAMPLE ID: 4354-10

PROJECT ID: 4354

| Analytical Parameters    | Analytical Results | Units | Practical Quantifiable Limit | Method      |
|--------------------------|--------------------|-------|------------------------------|-------------|
| Turbidity *              | 0.5                | 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): 09/14/94 - 9:30 am  
 SAMPLE TYPE: BAKER WATER

AES CLIENT ID: CTC  
 AES SAMPLE ID: 4354-10

PROJECT ID: 4354

| 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-Nitrosodi-n-propylamine   | 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): 09/14/94 - 9:30 am  
 SAMPLE TYPE: BAKER WATER

AES CLIENT ID: CTC  
 AES SAMPLE ID: 4354-10

PROJECT ID: 4354

| 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 |
| Dimethyl phthalate          | 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 |
| Diethyl phthalate           | BQL                | µg/L  | 10                           | SW 846 8270 |
| 4-Chlorophenyl phenyl 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-Bromophenyl phenyl 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 |
| Butyl benzyl phthalate      | 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): 09/14/94 - 9:30 am  
 SAMPLE TYPE: BAKER WATER

AES CLIENT ID: CTC  
 AES SAMPLE ID: 4354-10

PROJECT ID: 4354

| 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  
SAMPLE ID: MW-2  
COLLECTION METHOD: GRAB  
COLLECTION DATE(S): 09/16/94 - 10:55 AM  
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC  
AES SAMPLE ID: 4354-11

PROJECT ID: 4354

| Analytical<br>Parameters | Analytical<br>Results | Units | Practical<br>Quantifiable<br>Limit | Method    |
|--------------------------|-----------------------|-------|------------------------------------|-----------|
| Turbidity *              | 176.3                 | NTU   | 0.1                                | EPA 180.1 |
| Ammonia                  | 6.5                   | mg/L  | 0.05                               | EPA 350.1 |
| Nitrite                  | BQL                   | mg/L  | 0.05                               | EPA 353.2 |
| Total Kjeldahl Nitrogen  | 16                    | mg/L  | 0.1                                | EPA 351.2 |

\* Analysis performed in the field.

CLIENT: Ucar Carbon Company, Incorporated

AES CLIENT ID: CTC  
PROJECT ID: 4354

ACCURACY

| Analytical Parameter(s)   | Method      | Sample ID | Type         | Percent Recovery |
|---------------------------|-------------|-----------|--------------|------------------|
| Ammonia                   | EPA 350.1   | 4354-8    | Matrix Spike | 120              |
| Nitrite                   | EPA 353.2   | 4354-8    | Matrix Spike | 96               |
| Total Kjeldahl Nitrogen   | EPA 351.2   | 4354-8    | Matrix Spike | 30               |
| Total Iron                | EPA 200.7   | 4354-8    | Matrix Spike | 134              |
| Soluble Iron              | EPA 200.7   | 4354-8    | Matrix Spike | 86               |
| Total Potassium           | EPA 200.7   | 4354-8    | Matrix Spike | 101              |
| Soluble Potassium         | EPA 200.7   | 4354-8    | Matrix Spike | 105              |
| Total Zinc                | EPA 200.7   | 4354-8    | Matrix Spike | 92               |
| Soluble Zinc              | EPA 200.7   | 4354-8    | Matrix Spike | 98               |
| 1,1-Dichloroethene        | SW 846 8240 | 4354-8    | Matrix Spike | 98               |
| Trichloroethene           | SW 846 8240 | 4354-8    | Matrix Spike | 98               |
| Benzene                   | SW 846 8240 | 4354-8    | Matrix Spike | 84               |
| Toluene                   | SW 846 8240 | 4354-8    | Matrix Spike | 90               |
| Chlorobenzene             | SW 846 8240 | 4354-8    | Matrix Spike | 98               |
| 1,4-Dichlorobenzene       | SW 846 8270 | 4354-8    | Matrix Spike | 68               |
| n-Nitrosodi-n-propylamine | SW 846 8270 | 4354-8    | Matrix Spike | 89               |
| 1,2,4-Trichlorobenzene    | SW 846 8270 | 4354-8    | Matrix Spike | 76               |
| Acenaphthene              | SW 846 8270 | 4354-8    | Matrix Spike | 77               |
| 2,4-Dinitrotoluene        | SW 846 8270 | 4354-8    | Matrix Spike | 81               |
| Pyrene                    | SW 846 8270 | 4354-8    | Matrix Spike | 66               |
| Phenol                    | SW 846 8270 | 4354-8    | Matrix Spike | 46               |
| 2-Chlorophenol            | SW 846 8270 | 4354-8    | Matrix Spike | 73               |
| 4-Chloro-3-methylphenol   | SW 846 8270 | 4354-8    | Matrix Spike | 75               |
| 4-Nitrophenol             | SW 846 8270 | 4354-8    | Matrix Spike | 58               |
| Pentachlorophenol         | SW 846 8270 | 4354-8    | Matrix Spike | 44               |

ADVANCED ENVIRONMENTAL SERVICES, INC.  
QUALITY CONTROL REPORT

PAGE 25

CLIENT: Ucar Carbon Company, Incorporated

AES CLIENT ID: CTC  
PROJECT ID: 4354

PRECISION

| Analytical Parameter(s)  | Method      | Sample ID | Type      | Relative % Difference |
|--------------------------|-------------|-----------|-----------|-----------------------|
| Ammonia                  | EPA 350.1   | 4354-8    | Duplicate | NA                    |
| Nitrite                  | EPA 353.2   | 4354-8    | Duplicate | NA                    |
| Total Kjeldahl Nitrogen  | EPA 351.2   | 4354-8    | Duplicate | 0                     |
| Total Iron               | EPA 200.7   | 4354-8    | Duplicate | 0                     |
| Soluble Iron             | EPA 200.7   | 4354-8    | Duplicate | 3.1                   |
| Total Potassium          | EPA 200.7   | 4354-8    | Duplicate | 4.8                   |
| Soluble Potassium        | EPA 200.7   | 4354-8    | Duplicate | NA                    |
| Total Zinc               | EPA 200.7   | 4354-8    | Duplicate | 0.24                  |
| Soluble Zinc             | EPA 200.7   | 4354-8    | Duplicate | NA                    |
| Chloromethane            | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| Bromomethane             | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| Vinyl chloride           | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| Chloroethane             | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| Methylene chloride       | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| Acetone                  | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| Carbon disulfide         | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| 1,1-Dichloroethene       | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| 1,1-Dichloroethane       | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| trans-1,2-Dichloroethene | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| Chloroform               | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| 1,2-Dichloroethane       | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| 2-Butanone               | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| 1,1,1-Trichloroethane    | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| Carbon tetrachloride     | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| Vinyl acetate            | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| Bromodichloromethane     | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| 1,2-Dichloropropane      | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| cis-1,3-Dichloropropene  | SW 846 8240 | 4354-8    | 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: 4354

PRECISION

| Analytical Parameter(s)     | Method      | Sample ID | Type      | Relative % Difference |
|-----------------------------|-------------|-----------|-----------|-----------------------|
| Trichloroethene             | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| Benzene                     | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| trans-1,3-Dichloropropene   | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| Chlorodibromomethane        | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| 1,1,2-Trichloroethane       | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| Bromoform                   | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| 4-Methyl-2-pentanone        | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| 2-Hexanone                  | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| Tetrachloroethene           | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| 1,1,2,2-Tetrachloroethane   | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| Toluene                     | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| Chlorobenzene               | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| Ethylbenzene                | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| Styrene                     | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| m-Xylene                    | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| o/p-Xylene                  | SW 846 8240 | 4354-8    | Duplicate | NA                    |
| bis(2-chloroethyl)ether     | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| 1,3-Dichlorobenzene         | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| 1,4-Dichlorobenzene         | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Benzyl alcohol              | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| 1,2-Dichlorobenzene         | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| bis(2-chloroisopropyl)ether | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| n-Nitrosodi-n-propylamine   | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Hexachloroethane            | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Nitrobenzene                | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Isophorone                  | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| bis(2-chloroethoxy)methane  | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| 1,2,4-Trichlorobenzene      | SW 846 8270 | 4354-8    | 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: 4354

PRECISION

| Analytical Parameter(s)     | Method      | Sample ID | Type      | Relative % Difference |
|-----------------------------|-------------|-----------|-----------|-----------------------|
| Naphthalene                 | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| 4-Chloroaniline             | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Hexachlorobutadiene         | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| 2-Methylnaphthalene         | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Hexachlorocyclopentadiene   | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| 2-Chloronaphthalene         | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| 2-Nitroaniline              | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Dimethyl phthalate          | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| 2,6-Dinitrotoluene          | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Acenaphthylene              | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| 3-Nitroaniline              | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Acenaphthene                | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| 2,4-Dinitrotoluene          | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Dibenzofuran                | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Diethyl phthalate           | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| 4-Chlorophenyl phenyl ether | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Fluorene                    | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| 4-Nitroaniline              | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| n-Nitrosodiphenylamine      | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| 4-Bromophenyl phenyl ether  | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Hexachlorobenzene           | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Phenanthrene                | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Anthracene                  | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| di-n-Butylphthalate         | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Fluoranthene                | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Pyrene                      | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Butyl benzyl phthalate      | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| 3,3'-Dichlorobenzidine      | SW 846 8270 | 4354-8    | 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: 4354

PRECISION

| Analytical Parameter(s)    | Method      | Sample ID | Type      | Relative % Difference |
|----------------------------|-------------|-----------|-----------|-----------------------|
| bis(2ethylhexyl)phthalate  | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Benzo(a)anthracene         | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Chrysene                   | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| di-n-Octylphthalate        | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Benzo(b)fluoranthene       | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Benzo(k)fluoranthene       | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Benzo(a)pyrene             | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Indeno(1,2,3-cd)pyrene     | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Dibenzo(a,h)anthracene     | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Benzo(g,h,i)perylene       | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Phenol                     | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| 2-Chlorophenol             | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| 2-Methylphenol             | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| 4-Methylphenol             | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| 2-Nitrophenol              | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| 2,4-Dimethylphenol         | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Benzoic acid               | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| 2,4-Dichlorophenol         | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| 4-Chloro-3-methylphenol    | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| 2,4,6-Trichlorophenol      | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| 2,4,5-Trichlorophenol      | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| 2,4-Dinitrophenol          | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| 4-Nitrophenol              | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| 4,6-Dinitro-2-methylphenol | SW 846 8270 | 4354-8    | Duplicate | NA                    |
| Pentachlorophenol          | SW 846 8270 | 4354-8    | Duplicate | NA                    |

Advanced Environmental Services

Sample Traceability Report

AES Job Code C7C

AES Job No. 4354

|                |             |         |       | SAMPLE PREP   |         |         | ANALYSIS      |         |         |
|----------------|-------------|---------|-------|---------------|---------|---------|---------------|---------|---------|
| AES Sample No. | Sample Date | Group # | Run # | Method Number | Date    | Analyst | Method Number | Date    | Analyst |
| 4354-7 310     | 9-14-94     | 2027    | 54    | 351.2         | 9-15-94 | CL      | 351.2         | 9/20/94 | TS      |
| 4354-1244      | 9-15-94     | 2021    | 55    | 351.2         | 9-21-94 | CL      | 351.2         | 9/23/94 | TS      |
| 4354(1-11)     | 9/14/94     | 2120    | 33    | —             | —       | —       | 353.2         | 9/26/94 | TS      |
| 4354(2,5,9)    | 9-15-94     | 2057    | 55    | 351.2         | 9-28-94 | TS      | 351.2         | 9/28/94 | TS      |
| 4354-(1-11)    | 9/14/94     | 2005    | 52    | —             | —       | —       | 350.1         | 9/19/94 | CL      |
| 4354-5         | 9/11/94     | 2005    | 52    | —             | —       | —       | 350.1         | 9/29/94 | TS      |
|                |             |         |       |               |         |         |               |         |         |
|                |             |         |       |               |         |         |               |         |         |
|                |             |         |       |               |         |         |               |         |         |
|                |             |         |       |               |         |         |               |         |         |
|                |             |         |       |               |         |         |               |         |         |
|                |             |         |       |               |         |         |               |         |         |
|                |             |         |       |               |         |         |               |         |         |
|                |             |         |       |               |         |         |               |         |         |

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

Advanced Environmental Services

AES Job Code CTC

Sample Traceability Report

AES Job No. 4354

|                |             |         |       | SAMPLE PREP   |         |         | ANALYSIS      |         |         |
|----------------|-------------|---------|-------|---------------|---------|---------|---------------|---------|---------|
| AES Sample No. | Sample Date | Group # | Run # | Method Number | Date    | Analyst | Method Number | Date    | Analyst |
| 4354-06        | 9-16-94     | 4300    | 95    | 8270          | 9-26-94 | SE      | 8270          | 9/26/94 | SCS     |
| 4354-08        |             |         |       |               |         |         |               |         |         |
| 4354-08 DUP    |             |         |       |               |         |         |               |         |         |
| 4354-08 MS     |             |         |       |               |         |         |               |         |         |
| 4354-09        |             |         |       |               |         |         |               |         |         |
|                |             |         |       |               |         |         |               |         |         |
|                |             |         |       |               |         |         |               |         |         |
|                |             |         |       |               |         |         |               |         |         |
|                |             |         |       |               |         |         |               |         |         |
|                |             |         |       |               |         |         |               |         |         |
|                |             |         |       |               |         |         |               |         |         |
|                |             |         |       |               |         |         |               |         |         |
|                |             |         |       |               |         |         |               |         |         |
|                |             |         |       |               |         |         |               |         |         |
|                |             |         |       |               |         |         |               |         |         |

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

## Sample Traceability Report

ALS Job No. 4354

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

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

Advanced Environmental Services

AES Job Code CTC

Sample Traceability Report

AES Job No 4354

|                |                    |         |       | SAMPLE PREP   |      |         | ANALYSIS      |         |         |
|----------------|--------------------|---------|-------|---------------|------|---------|---------------|---------|---------|
| AES Sample No. | Sample Date        | Group # | Run # | Method Number | Date | Analyst | Method Number | Date    | Analyst |
| 4354-6         | 9-15-94<br>9-16-94 | 4000    | 82    | —             | —    | —       | 8240          | 9-21-94 | MM      |
| 4354-8         | I                  | I       | I     | —             | —    | —       | I             | I       | I       |
| 4354-9         | I                  | I       | I     | —             | —    | —       | I             | I       | I       |
| 4354-10        | 9-14-94            | I       | I     | —             | —    | —       | I             | I       | I       |
|                |                    |         |       |               |      |         |               |         |         |
|                |                    |         |       |               |      |         |               |         |         |
|                |                    |         |       |               |      |         |               |         |         |
|                |                    |         |       |               |      |         |               |         |         |
|                |                    |         |       |               |      |         |               |         |         |
|                |                    |         |       |               |      |         |               |         |         |
|                |                    |         |       |               |      |         |               |         |         |
|                |                    |         |       |               |      |         |               |         |         |
|                |                    |         |       |               |      |         |               |         |         |
|                |                    |         |       |               |      |         |               |         |         |
|                |                    |         |       |               |      |         |               |         |         |
|                |                    |         |       |               |      |         |               |         |         |
|                |                    |         |       |               |      |         |               |         |         |
|                |                    |         |       |               |      |         |               |         |         |
|                |                    |         |       |               |      |         |               |         |         |
|                |                    |         |       |               |      |         |               |         |         |

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

# CHAIN OF CUSTODY RECORD

PROJECT NAME: VEAR CREEK

SAMPLER'S SIGNATURE: [Signature]

| CONTAINER CLASSIFICATION |                  |                                |     |      |              |                |       |
|--------------------------|------------------|--------------------------------|-----|------|--------------|----------------|-------|
| UNPRESERVED              | HNO <sub>3</sub> | H <sub>2</sub> SO <sub>4</sub> | HCL | NAOH | VIAL (PRES.) | VIAL (UNPRES.) | TOTAL |

JOB CODE: CTC

IDENTIFICATION OF BLIND FIELD DUPLICATE SITE: \_\_\_\_\_

| DATE    | TIME    | SAMPLE IDENTIFICATION | GRAB | COMP | SAMPLE TYPE | UNPRESERVED | HNO <sub>3</sub> | H <sub>2</sub> SO <sub>4</sub> | HCL | NAOH | VIAL (PRES.) | VIAL (UNPRES.) | TOTAL | PARAMETERS/REMARKS             |
|---------|---------|-----------------------|------|------|-------------|-------------|------------------|--------------------------------|-----|------|--------------|----------------|-------|--------------------------------|
| 9/15/99 | 1:20 PM | MA-1                  | ✓    |      | WATER       | 2           | 1                |                                |     |      |              |                | 3     | TOT + SOLIDS, PH, THAMON, NITR |
| 9/15/99 | 2:55 PM | SW 2                  | ✓    |      | "           | 2           | 1                |                                |     |      |              |                | 3     | " " " " " "                    |
|         |         |                       |      |      |             |             |                  |                                |     |      |              |                |       |                                |
|         |         |                       |      |      |             |             |                  |                                |     |      |              |                |       |                                |
|         |         |                       |      |      |             |             |                  |                                |     |      |              |                |       |                                |
|         |         |                       |      |      |             |             |                  |                                |     |      |              |                |       |                                |
|         |         |                       |      |      |             |             |                  |                                |     |      |              |                |       |                                |
|         |         |                       |      |      |             |             |                  |                                |     |      |              |                |       |                                |
|         |         |                       |      |      |             |             |                  |                                |     |      |              |                |       |                                |
|         |         |                       |      |      |             |             |                  |                                |     |      |              |                |       |                                |
|         |         |                       |      |      |             |             |                  |                                |     |      |              |                |       |                                |
|         |         |                       |      |      |             |             |                  |                                |     |      |              |                |       |                                |
|         |         |                       |      |      |             |             |                  |                                |     |      |              |                |       |                                |
|         |         |                       |      |      |             |             |                  |                                |     |      |              |                |       |                                |
|         |         |                       |      |      |             |             |                  |                                |     |      |              |                |       |                                |
|         |         |                       |      |      |             |             |                  |                                |     |      |              |                |       |                                |
|         |         |                       |      |      |             |             |                  |                                |     |      |              |                |       |                                |
|         |         |                       |      |      |             |             |                  |                                |     |      |              |                |       |                                |
|         |         |                       |      |      |             |             |                  |                                |     |      |              |                |       |                                |
|         |         |                       |      |      |             |             |                  |                                |     |      |              |                |       |                                |
|         |         |                       |      |      |             |             |                  |                                |     |      |              |                |       |                                |

TOTAL NUMBER OF CONTAINERS 6

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>[Signature]</u> | DATE <u>9/15/99</u> | TIME <u>4:10 PM</u> | RECEIVED BY: <u>[Signature]</u> |
| 2. RELINQUISHED BY: _____              | DATE _____          | TIME _____          | RECEIVED BY: _____              |
| 3. RELINQUISHED BY: _____              | DATE _____          | TIME _____          | RECEIVED BY: _____              |

## Sample Traceability Report

AES Job No. 4354

[illegible]

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





SAMPLER'S SIGNATURE: 

### CONTAINER CLASSIFICATION

JOB CODE: CTC

IDENTIFICATION OF  
BLIND FIELD DUPLICATE SITE:

| DATE | TIME | SAMPLE IDENTIFICATION |
|------|------|-----------------------|
|------|------|-----------------------|

GRAB COMP

**SAMPLE TYPE**

| UNPRESERVED | HNO <sub>3</sub> | H <sub>2</sub> SO <sub>4</sub> | HCL | NAOH | VIAL (PRES.) | VIAL (UNPRES.) | TOTAL |
|-------------|------------------|--------------------------------|-----|------|--------------|----------------|-------|
|             |                  |                                |     |      |              |                |       |

### PARAMETERS/REMARKS

[illegible]

TOTAL NUMBER OF CONTAINERS

14

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:<br><i>[Signature]</i> | DATE<br><i>9/14/94</i> | TIME<br><i>4:00 PM</i> | RECEIVED BY:<br><i>[Signature]</i> |
| 2. RELINQUISHED BY:<br><i>[Signature]</i> | DATE                   | TIME                   | RECEIVED BY:                       |
| 3. RELINQUISHED BY:                       | DATE                   | TIME                   | RECEIVED BY:                       |



UCAR CARBON

EAR CARBON

## CONTAINER CLASSIFICATION

JOB CODE: CLC

IDENTIFICATION OF  
BLIND FIELD DUPLICATE SITE:

### PARAMETERS/REMARKS

|                            |    |
|----------------------------|----|
| TOTAL NUMBER OF CONTAINERS | 32 |
|----------------------------|----|

**1. RELINQUISHED BY:**

DATE \_\_\_\_\_

TIME

RECEIVED BY:

**2. RELINQUISHED BY:**

DATE \_\_\_\_\_

TIME

RECEIVED BY:

**3. RELINQUISHED BY:**

DATE \_\_\_\_\_

TIME

RECEIVED BY: