



UCAR CARBON COMPANY INC.

P.O. Box 887, Niagara Falls, NY 14302-0887

September 9, 1996

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FOIL  
 REL  UNREL

Mr. Mark Hans, PE  
Regional Solid Materials Engineer  
NYS Department of Environmental Conservation  
270 Michigan Avenue  
Buffalo, New York 14203-2999

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

Dear Mr. Hans,

I am enclosing a copy of the thirty fourth (34) quarter's groundwater sampling analysis from the closed Republic Waste Management Facility. Bedrock well, BW-4, continues to demonstrate some slight volatile organic contamination in the less than one part per million range.

The attached table summarizes the positive organic parameters from BW-4 for the thirty fourth (34) quarter.

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

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

Very truly yours,

A.C. Ogg  
Site Manager

A.C. Ogg  
nm  
encls.

**QUARTERLY REPORT OF GROUNDWATER ANALYSIS  
REPUBLIC SOLID WASTE MANAGEMENT FACILITY POST-CLOSURE MONITORING PROGRAM**

**34TH QUARTER**

**POSITIVE ORGANIC PARAMETERS FROM BW-4**

<b>CONTAMINATE</b>	<b>34th Quarter ppb</b>	<b>Mean Conc. ppb</b>	<b>Range ppb</b>
Trans-1,2-Dichlorethene (Total)	340	370	200 - 570
Trichloroethene	460	295	30 - 740
Tetrachloroethene	270	241	72 - 440
Hexachlorobutadiene	68	50	10 - 160
Vinyl Chloride	60	96	29 - 300
Hexachlorethane	10	11	10 - 12

CC: Mr. Jim Devald, Dir. of Environmental Health  
Niagara County Health Department  
P.O. Box 428  
Niagara Falls, New York 14302-0428

UCAR CARBON COMPANY, INCORPORATED

**REPUBLIC WASTE MANAGEMENT FACILITY  
POST CLOSURE MONITORING PROGRAM  
THIRD QUARTER, 1996**

Prepared By:

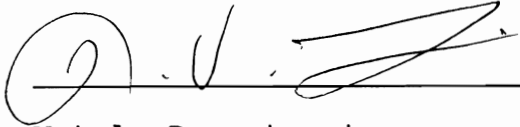


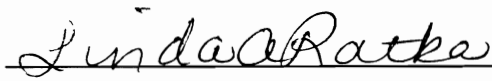
*"A Company Dedicated to Honesty, Quality and Service"*

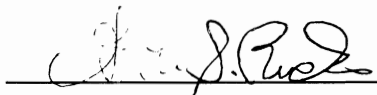
August 29, 1996  
REF: CTC62CY/100B

QA/QC VERIFICATION FOR PROJECT ID 62CY

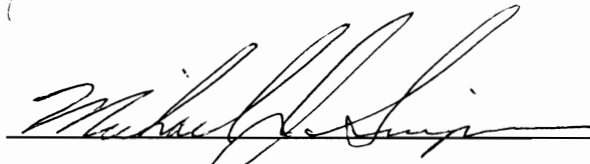
The following report, as well as the supporting data, have been carefully reviewed for accuracy, adherence to the cited methods, and completeness. All data contained in this report was generated in accordance with the AES Laboratory Quality Assurance/Quality Control Program.

  
Metals Department

  
Inorganic Chemistry

  
Organic Chemistry

  
Field Services

  
Quality Control

  
Project Manager

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
- D - Indicates a dilution was required

Advanced Environmental Services, Inc.

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

QUARTERLY GROUNDWATER MONITORING - WELL INFORMATION

August 12, 1996 thru August 14, 1996

UCAR CARBON COMPANY, INC.

Hyde Park Boulevard  
Niagara Falls, New York

AES Code: CTC

Project I.D. # 62CY

Monitoring Well I.D.	Evacuation Date	Top of Inner Casing Elevation (ft.)	Monitoring Well Diameter	Water Level (ft.)	Water Elevation (ft.)	Bottom of Well (ft.)	Volume of Standing Water (gallons)	Volume of Evacuated Water (gallons)	Recharge Rate
BW-1	8/12/96	610.72	4	18.22	592.50	28.85	6.94	22.0	C
BW-2	8/13/96	608.43	4	15.28	593.15	26.60	7.39	25.0	C
BW-3	8/14/96	604.72	4	14.75	589.97	22.91	5.33	22.0	C
BW-4	8/13/96	607.08	4	14.41	592.67	22.69	5.41	17.0	C
BW-5	8/12/96	603.33	4	12.80	590.53	28.80	10.44	32.0	C
BW-6	8/14/96	607.04	4	13.51	593.53	25.15	7.60	24.0	C
MW-1	8/13/96	609.43	2	12.80	596.63	23.40	1.73	1.75 (Dry)	S
MW-2	8/13/96	607.54	3	23.52	584.02	24.61	0.40	0.5 (Dry)	VS
MW-3	8/13/96	601.61	2	11.87	589.74	16.11	0.69	2.75 (Dry)	R
OW-1 SOUTH	8/14/96	608.81	2	8.04	608.81	36.05	4.57	NR	N/A
OW-2 NORTH	8/14/96	607.06	2	8.01	607.06	35.90	4.55	NR	N/A

Abbreviations:

VS = Very Slow ----- Recharge Rate longer than 24 hr period.

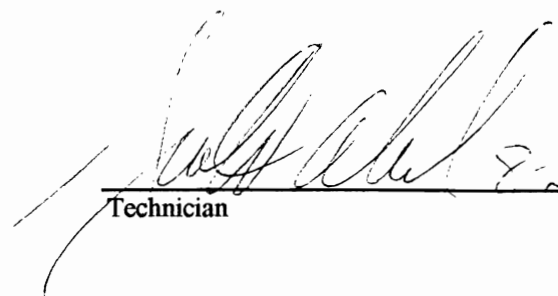
S = Slow ----- Recharge Rate within 24 hr period.

R = Rapid ----- Recharge Rate within 1 hr period.

C = Continuous ---- Recharge Rate immediate.

NR = Not Required

N/A = Not Applicable

  
\_\_\_\_\_  
Technician

8-29-96  
\_\_\_\_\_  
Date

*Advanced Environmental Services, Inc.*

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

**QUARTERLY GROUNDWATER MONITORING - FIELD PARAMETER INFORMATION**  
August 12, 1996 thru August 14, 1996

**UCAR CARBON COMPANY, INC.**

Hyde Park Boulevard  
Niagara Falls, New York

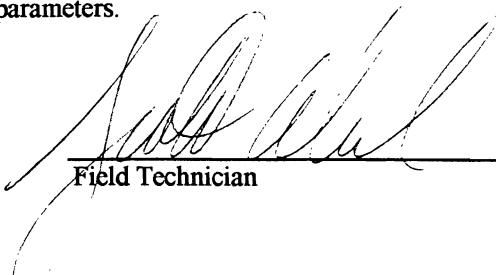
AES Code: CTC

Project I.D. # 62CY

Monitoring Well I.D.	Sampling Date	Sampling Time	Water Level (ft.)	Turbidity (NTU)	Filter Time	Field Comments/Observations
BW-1	8/12/96	11:10 AM	18.39	10	3:48 PM	Clear
BW-2	8/13/96	11:05 AM	15.47	30	3:00 PM	Clear with strong odor.
BW-3	8/14/96	10:30 AM	14.77	9	12:00 PM	Clear.
BW-4	8/13/96	2:00 PM	14.90	6	3:10 PM	Clear with odor.
BW-5	8/12/96	3:05 PM	12.85	4	3:50 PM	Clear with odor.
BW-6	8/14/96	11:20 AM	18.51	17	12:05 PM	Clear
MW-1	8/14/96	1:00 PM	13.16	14	2:00 PM	Clear
MW-2	8/14/96	10:15 AM	24.11	NA	NA	NA
MW-3	8/14/96	1:15 PM	14.17	171	2:10 PM	Cloudy to tan
OW-1 South	8/14/96	1:20 PM	8.04	NA	NA	Required to take water elevation only.
OW-2 North	8/14/96	1:30 PM	8.01	NA	NA	Required to take water elevation only.
Blind Dup	8/14/96	11:20 PM	N/A	16	12:05 PM	Clear
Trip Blank	8/12/96	9:30 AM	NA	1	NA	Deionized Water

\* Insufficient volume in monitoring well for the required parameters.

; Blind Duplicate site was BW-6.

  
Field Technician

8-29-96  
Date

CLIENT: Ucar Carbon Company, Incorporated SAMPLE ID: MW-1 COLLECTION METHOD: GRAB COLLECTION DATE(S): 08/14/96 SAMPLE TYPE: GROUNDWATER	AES CLIENT ID: CTC AES SAMPLE ID: 62CY-1  PROJECT ID: 62CY
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Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	14	NTU	0.1	EPA 180.1
Ammonia	4.9 D	mg/L	0.05	EPA 350.1
Nitrite	ND	mg/L	0.04	HACH 8507
Total Kjeldahl Nitrogen	24 D	mg/L	0.4	EPA 351.2
Total Iron	0.99	mg/L	0.05	EPA 200.7
Soluble Iron	ND	mg/L	0.05	EPA 200.7
Total Potassium	37	mg/L	1.0	EPA 200.7
Soluble Potassium	38	mg/L	1.0	EPA 200.7
Total Zinc	0.04	mg/L	0.02	EPA 200.7
Soluble Zinc	ND	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): 08/14/96 SAMPLE TYPE: GROUNDWATER	AES CLIENT ID: CTC AES SAMPLE ID: 62CY-2  PROJECT ID: 62CY
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Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	171	NTU	0.1	EPA 180.1
Ammonia	ND	mg/L	0.05	EPA 350.1
Nitrite	ND	mg/L	0.04	HACH 8507
Total Kjeldahl Nitrogen	0.54	mg/L	0.4	EPA 351.2
Total Iron	12	mg/L	0.05	EPA 200.7
Soluble Iron	0.06	mg/L	0.05	EPA 200.7
Total Potassium	6.5	mg/L	1.0	EPA 200.7
Soluble Potassium	5.9	mg/L	1.0	EPA 200.7
Total Zinc	0.07	mg/L	0.02	EPA 200.7
Soluble Zinc	ND	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): 08/12/96 SAMPLE TYPE: GROUNDWATER	AES CLIENT ID: CTC AES SAMPLE ID: 62CY-3  PROJECT ID: 62CY
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Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	10	NTU	0.1	EPA 180.1
Ammonia	0.91 D	mg/L	0.05	EPA 350.1
Nitrite	ND	mg/L	0.04	HACH 8507
Total Kjeldahl Nitrogen	1.3	mg/L	0.4	EPA 351.2
Total Iron	1.6	mg/L	0.05	EPA 200.7
Soluble Iron	1.0	mg/L	0.05	EPA 200.7
Total Potassium	7.7	mg/L	1.0	EPA 200.7
Soluble Potassium	8.4	mg/L	1.0	EPA 200.7
Total Zinc	0.34	mg/L	0.02	EPA 200.7
Soluble Zinc	0.11	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): 08/13/96 SAMPLE TYPE: GROUNDWATER	AES CLIENT ID: CTC AES SAMPLE ID: 62CY-4  PROJECT ID: 62CY
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Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	30	NTU	0.1	EPA 180.1
Ammonia	0.66	mg/L	0.05	EPA 350.1
Nitrite	ND	mg/L	0.04	HACH 8507
Total Kjeldahl Nitrogen	1.0	mg/L	0.4	EPA 351.2
Total Iron	3.8	mg/L	0.05	EPA 200.7
Soluble Iron	2.9	mg/L	0.05	EPA 200.7
Total Potassium	6.3	mg/L	1.0	EPA 200.7
Soluble Potassium	7.3	mg/L	1.0	EPA 200.7
Total Zinc	0.29	mg/L	0.02	EPA 200.7
Soluble Zinc	0.26	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): 08/14/96  
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC  
 AES SAMPLE ID: 62CY-5

PROJECT ID: 62CY

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	9	NTU	0.1	EPA 180.1
Ammonia	0.57 D	mg/L	0.05	EPA 350.1
Nitrite	ND	mg/L	0.04	HACH 8507
Total Kjeldahl Nitrogen	0.90	mg/L	0.4	EPA 351.2
Total Iron	1.1	mg/L	0.05	EPA 200.7
Soluble Iron	0.58	mg/L	0.05	EPA 200.7
Total Potassium	4.6	mg/L	1.0	EPA 200.7
Soluble Potassium	5.2	mg/L	1.0	EPA 200.7
Total Zinc	ND	mg/L	0.02	EPA 200.7
Soluble Zinc	ND	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): 08/13/96 SAMPLE TYPE: GROUNDWATER	AES CLIENT ID: CTC AES SAMPLE ID: 62CY-6  PROJECT ID: 62CY
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Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	6	NTU	0.1	EPA 180.1
Ammonia	2.4 D	mg/L	0.05	EPA 350.1
Nitrite	ND	mg/L	0.04	HACH 8507
Total Kjeldahl Nitrogen	2.4	mg/L	0.4	EPA 351.2
Total Iron	4.4	mg/L	0.05	EPA 200.7
Soluble Iron	3.7	mg/L	0.05	EPA 200.7
Total Potassium	28	mg/L	1.0	EPA 200.7
Soluble Potassium	26	mg/L	1.0	EPA 200.7
Total Zinc	0.10	mg/L	0.02	EPA 200.7
Soluble Zinc	ND	mg/L	0.02	EPA 200.7
Chloromethane	ND	µg/L	50	SW 846 8240
Bromomethane	ND	µg/L	50	SW 846 8240
Vinyl chloride	60 D	µg/L	50	SW 846 8240
Chloroethane	ND	µg/L	50	SW 846 8240
Methylene chloride	ND	µg/L	50	SW 846 8240
Acetone	ND	µg/L	50	SW 846 8240
Carbon disulfide	ND	µg/L	50	SW 846 8240
1,1-Dichloroethene	ND	µg/L	50	SW 846 8240
1,1-Dichloroethane	ND	µg/L	50	SW 846 8240
1,2-Dichloroethylene (total)	340 D	µg/L	50	SW 846 8240
Chloroform	ND	µg/L	50	SW 846 8240
1,2-Dichloroethane	ND	µg/L	50	SW 846 8240
2-Butanone	ND	µg/L	50	SW 846 8240
1,1,1-Trichloroethane	ND	µg/L	50	SW 846 8240
Carbon tetrachloride	ND	µg/L	50	SW 846 8240
Bromodichloromethane	ND	µg/L	50	SW 846 8240
1,2-Dichloropropane	ND	µg/L	50	SW 846 8240
cis-1,3-Dichloropropene	ND	µg/L	50	SW 846 8240

\* Analysis performed in the field.

CLIENT: Ucar Carbon Company, Incorporated  
 SAMPLE ID: BW-4  
 COLLECTION METHOD: GRAB  
 COLLECTION DATE(S): 08/13/96  
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC  
 AES SAMPLE ID: 62CY-6

PROJECT ID: 62CY

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Trichloroethene	460 D	µg/L	50	SW 846 8240
Chlorodibromomethane	ND	µg/L	50	SW 846 8240
1,1,2-Trichloroethane	ND	µg/L	50	SW 846 8240
Benzene	ND	µg/L	50	SW 846 8240
trans-1,3-Dichloropropene	ND	µg/L	50	SW 846 8240
Bromoform	ND	µg/L	50	SW 846 8240
4-Methyl-2-pentanone	ND	µg/L	50	SW 846 8240
2-Hexanone	ND	µg/L	50	SW 846 8240
Tetrachloroethene	270 D	µg/L	50	SW 846 8240
Toluene	ND	µg/L	50	SW 846 8240
1,1,2,2-Tetrachloroethane	ND	µg/L	50	SW 846 8240
Chlorobenzene	ND	µg/L	50	SW 846 8240
Ethylbenzene	ND	µg/L	50	SW 846 8240
Styrene	ND	µg/L	50	SW 846 8240
m-Xylene	ND	µg/L	50	SW 846 8240
o/p-Xylene	ND	µg/L	50	SW 846 8240
Phenol	ND	µg/L	5.0	SW 846 8270
bis(2-chloroethyl)ether	ND	µg/L	5.0	SW 846 8270
2-Chlorophenol	ND	µg/L	5.0	SW 846 8270
1,3-Dichlorobenzene	ND	µg/L	5.0	SW 846 8270
1,4-Dichlorobenzene	ND	µg/L	5.0	SW 846 8270
1,2-Dichlorobenzene	ND	µg/L	5.0	SW 846 8270
2-Methylphenol	ND	µg/L	5.0	SW 846 8270
bis(2-chloroisopropyl)ether	ND	µg/L	5.0	SW 846 8270
4-Methylphenol	ND	µg/L	5.0	SW 846 8270
n-Nitrosodi-n-propylamine	ND	µg/L	5.0	SW 846 8270
Hexachloroethane	10	µg/L	5.0	SW 846 8270
Nitrobenzene	ND	µg/L	5.0	SW 846 8270
Isophorone	ND	µg/L	5.0	SW 846 8270

CLIENT: Ucar Carbon Company, Incorporated  
 SAMPLE ID: BW-4  
 COLLECTION METHOD: GRAB  
 COLLECTION DATE(S): 08/13/96  
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC  
 AES SAMPLE ID: 62CY-6

PROJECT ID: 62CY

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
2-Nitrophenol	ND	µg/L	5.0	SW 846 8270
2,4-Dimethylphenol	ND	µg/L	5.0	SW 846 8270
bis(2-chloroethoxy)methane	ND	µg/L	5.0	SW 846 8270
2,4-Dichlorophenol	ND	µg/L	5.0	SW 846 8270
1,2,4-Trichlorobenzene	ND	µg/L	5.0	SW 846 8270
Naphthalene	ND	µg/L	5.0	SW 846 8270
4-Chloroaniline	ND	µg/L	10	SW 846 8270
Hexachlorobutadiene	68	µg/L	5.0	SW 846 8270
4-Chloro-3-methylphenol	ND	µg/L	5.0	SW 846 8270
2-Methylnaphthalene	ND	µg/L	5.0	SW 846 8270
Hexachlorocyclopentadiene	ND	µg/L	5.0	SW 846 8270
2,4,6-Trichlorophenol	ND	µg/L	5.0	SW 846 8270
2,4,5-Trichlorophenol	ND	µg/L	5.0	SW 846 8270
2-Chloronaphthalene	ND	µg/L	5.0	SW 846 8270
2-Nitroaniline	ND	µg/L	5.0	SW 846 8270
Dimethyl phthalate	ND	µg/L	10	SW 846 8270
Acenaphthylene	ND	µg/L	5.0	SW 846 8270
2,6-Dinitrotoluene	ND	µg/L	5.0	SW 846 8270
3-Nitroaniline	ND	µg/L	10	SW 846 8270
Acenaphthene	ND	µg/L	5.0	SW 846 8270
2,4-Dinitrophenol	ND	µg/L	10	SW 846 8270
4-Nitrophenol	ND	µg/L	5.0	SW 846 8270
Dibenzofuran	ND	µg/L	5.0	SW 846 8270
2,4-Dinitrotoluene	ND	µg/L	5.0	SW 846 8270
Diethyl phthalate	ND	µg/L	10	SW 846 8270
4-Chlorophenyl phenyl ether	ND	µg/L	5.0	SW 846 8270
Fluorene	ND	µg/L	5.0	SW 846 8270
4-Nitroaniline	ND	µg/L	5.0	SW 846 8270
4,6-Dinitro-2-methylphenol	ND	µg/L	10	SW 846 8270

CLIENT: Ucar Carbon Company, Incorporated SAMPLE ID: BW-4 COLLECTION METHOD: GRAB COLLECTION DATE(S): 08/13/96 SAMPLE TYPE: GROUNDWATER	AES CLIENT ID: CTC AES SAMPLE ID: 62CY-6  PROJECT ID: 62CY
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Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
n-Nitrosodiphenylamine	ND	µg/L	5.0	SW 846 8270
4-Bromophenyl phenyl ether	ND	µg/L	5.0	SW 846 8270
Hexachlorobenzene	ND	µg/L	5.0	SW 846 8270
Pentachlorophenol	ND	µg/L	5.0	SW 846 8270
Phenanthrene	ND	µg/L	5.0	SW 846 8270
Anthracene	ND	µg/L	5.0	SW 846 8270
Carbazole	ND	µg/L	50	SW 846 8270
di-n-Butylphthalate	ND	µg/L	10	SW 846 8270
Fluoranthene	ND	µg/L	5.0	SW 846 8270
Pyrene	ND	µg/L	5.0	SW 846 8270
Butyl benzyl phthalate	ND	µg/L	10	SW 846 8270
3,3'-Dichlorobenzidine	ND	µg/L	10	SW 846 8270
Benzo(a)anthracene	ND	µg/L	5.0	SW 846 8270
Chrysene	ND	µg/L	5.0	SW 846 8270
bis(2ethylhexyl)phthalate	ND	µg/L	10	SW 846 8270
di-n-Octylphthalate	ND	µg/L	5.0	SW 846 8270
Benzo(b)fluoranthene	ND	µg/L	5.0	SW 846 8270
Benzo(k)fluoranthene	ND	µg/L	10	SW 846 8270
Benzo(a)pyrene	ND	µg/L	5.0	SW 846 8270
Indeno(1,2,3-cd)pyrene	ND	µg/L	10	SW 846 8270
Dibenzo(a,h)anthracene	ND	µg/L	10	SW 846 8270
Benzo(g,h,i)perylene	ND	µg/L	10	SW 846 8270

CLIENT: Ucar Carbon Company, Incorporated  
 SAMPLE ID: BW-5  
 COLLECTION METHOD: GRAB  
 COLLECTION DATE(S): 08/12/96  
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC  
 AES SAMPLE ID: 62CY-7

PROJECT ID: 62CY

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	4	NTU	0.1	EPA 180.1
Ammonia	0.09	mg/L	0.05	EPA 350.1
Nitrite	ND	mg/L	0.04	HACH 8507
Total Kjeldahl Nitrogen	0.54	mg/L	0.4	EPA 351.2
Total Iron	1.4	mg/L	0.05	EPA 200.7
Soluble Iron	2.2	mg/L	0.05	EPA 200.7
Total Potassium	5.1	mg/L	1.0	EPA 200.7
Soluble Potassium	4.1	mg/L	1.0	EPA 200.7
Total Zinc	0.16	mg/L	0.02	EPA 200.7
Soluble Zinc	0.11	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): 08/14/96  
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC  
 AES SAMPLE ID: 62CY-8

PROJECT ID: 62CY

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	17	NTU	0.1	EPA 180.1
Ammonia	ND	mg/L	0.05	EPA 350.1
Nitrite	ND	mg/L	0.04	HACH 8507
Total Kjeldahl Nitrogen	0.51	mg/L	0.4	EPA 351.2
Total Iron	3.0	mg/L	0.05	EPA 200.7
Soluble Iron	1.6	mg/L	0.05	EPA 200.7
Total Potassium	1.7	mg/L	1.0	EPA 200.7
Soluble Potassium	1.7	mg/L	1.0	EPA 200.7
Total Zinc	0.04	mg/L	0.02	EPA 200.7
Soluble Zinc	ND	mg/L	0.02	EPA 200.7
Chloromethane	ND	µg/L	10	SW 846 8240
Bromomethane	ND	µg/L	10	SW 846 8240
Vinyl chloride	ND	µg/L	10	SW 846 8240
Chloroethane	ND	µg/L	10	SW 846 8240
Methylene chloride	ND	µg/L	10	SW 846 8240
Acetone	ND	µg/L	10	SW 846 8240
Carbon disulfide	ND	µg/L	10	SW 846 8240
1,1-Dichloroethene	ND	µg/L	10	SW 846 8240
1,1-Dichloroethane	ND	µg/L	10	SW 846 8240
1,2-Dichloroethylene (total)	ND	µg/L	10	SW 846 8240
Chloroform	ND	µg/L	10	SW 846 8240
1,2-Dichloroethane	ND	µg/L	10	SW 846 8240
2-Butanone	ND	µg/L	10	SW 846 8240
1,1,1-Trichloroethane	ND	µg/L	10	SW 846 8240
Carbon tetrachloride	ND	µg/L	10	SW 846 8240
Bromodichloromethane	ND	µg/L	10	SW 846 8240
1,2-Dichloropropane	ND	µg/L	10	SW 846 8240
cis-1,3-Dichloropropene	ND	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): 08/14/96 SAMPLE TYPE: GROUNDWATER	AES CLIENT ID: CTC AES SAMPLE ID: 62CY-8  PROJECT ID: 62CY
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Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Trichloroethene	ND	µg/L	10	SW 846 8240
Chlorodibromomethane	ND	µg/L	10	SW 846 8240
1,1,2-Trichloroethane	ND	µg/L	10	SW 846 8240
Benzene	ND	µg/L	10	SW 846 8240
trans-1,3-Dichloropropene	ND	µg/L	10	SW 846 8240
Bromoform	ND	µg/L	10	SW 846 8240
4-Methyl-2-pentanone	ND	µg/L	10	SW 846 8240
2-Hexanone	ND	µg/L	10	SW 846 8240
Tetrachloroethene	ND	µg/L	10	SW 846 8240
Toluene	ND	µg/L	10	SW 846 8240
1,1,2,2-Tetrachloroethane	ND	µg/L	10	SW 846 8240
Chlorobenzene	ND	µg/L	10	SW 846 8240
Ethylbenzene	ND	µg/L	10	SW 846 8240
Styrene	ND	µg/L	10	SW 846 8240
m-Xylene	ND	µg/L	10	SW 846 8240
o/p-Xylene	ND	µg/L	10	SW 846 8240
Phenol	ND	µg/L	5.0	SW 846 8270
bis(2-chloroethyl)ether	ND	µg/L	5.0	SW 846 8270
2-Chlorophenol	ND	µg/L	5.0	SW 846 8270
1,3-Dichlorobenzene	ND	µg/L	5.0	SW 846 8270
1,4-Dichlorobenzene	ND	µg/L	5.0	SW 846 8270
1,2-Dichlorobenzene	ND	µg/L	5.0	SW 846 8270
2-Methylphenol	ND	µg/L	5.0	SW 846 8270
bis(2-chloroisopropyl)ether	ND	µg/L	5.0	SW 846 8270
4-Methylphenol	ND	µg/L	5.0	SW 846 8270
n-Nitrosodi-n-propylamine	ND	µg/L	5.0	SW 846 8270
Hexachloroethane	ND	µg/L	5.0	SW 846 8270
Nitrobenzene	ND	µg/L	5.0	SW 846 8270
Isophorone	ND	µg/L	5.0	SW 846 8270

CLIENT: Ucar Carbon Company, Incorporated SAMPLE ID: BW-6 COLLECTION METHOD: GRAB COLLECTION DATE(S): 08/14/96 SAMPLE TYPE: GROUNDWATER	AES CLIENT ID: CTC AES SAMPLE ID: 62CY-8  PROJECT ID: 62CY
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Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
2-Nitrophenol	ND	µg/L	5.0	SW 846 8270
2,4-Dimethylphenol	ND	µg/L	5.0	SW 846 8270
bis(2-chloroethoxy)methane	ND	µg/L	5.0	SW 846 8270
2,4-Dichlorophenol	ND	µg/L	5.0	SW 846 8270
1,2,4-Trichlorobenzene	ND	µg/L	5.0	SW 846 8270
Naphthalene	ND	µg/L	5.0	SW 846 8270
4-Chloroaniline	ND	µg/L	10	SW 846 8270
Hexachlorobutadiene	ND	µg/L	5.0	SW 846 8270
4-Chloro-3-methylphenol	ND	µg/L	5.0	SW 846 8270
2-Methylnaphthalene	ND	µg/L	5.0	SW 846 8270
Hexachlorocyclopentadiene	ND	µg/L	5.0	SW 846 8270
2,4,6-Trichlorophenol	ND	µg/L	5.0	SW 846 8270
2,4,5-Trichlorophenol	ND	µg/L	5.0	SW 846 8270
2-Chloronaphthalene	ND	µg/L	5.0	SW 846 8270
2-Nitroaniline	ND	µg/L	5.0	SW 846 8270
Dimethyl phthalate	ND	µg/L	10	SW 846 8270
Acenaphthylene	ND	µg/L	5.0	SW 846 8270
2,6-Dinitrotoluene	ND	µg/L	5.0	SW 846 8270
3-Nitroaniline	ND	µg/L	10	SW 846 8270
Acenaphthene	ND	µg/L	5.0	SW 846 8270
2,4-Dinitrophenol	ND	µg/L	10	SW 846 8270
4-Nitrophenol	ND	µg/L	5.0	SW 846 8270
Dibenzofuran	ND	µg/L	5.0	SW 846 8270
2,4-Dinitrotoluene	ND	µg/L	5.0	SW 846 8270
Diethyl phthalate	ND	µg/L	10	SW 846 8270
4-Chlorophenyl phenyl ether	ND	µg/L	5.0	SW 846 8270
Fluorene	ND	µg/L	5.0	SW 846 8270
4-Nitroaniline	ND	µg/L	5.0	SW 846 8270
4,6-Dinitro-2-methylphenol	ND	µg/L	10	SW 846 8270

CLIENT: Ucar Carbon Company, Incorporated SAMPLE ID: BW-6 COLLECTION METHOD: GRAB COLLECTION DATE(S): 08/14/96 SAMPLE TYPE: GROUNDWATER	AES CLIENT ID: CTC AES SAMPLE ID: 62CY-8  PROJECT ID: 62CY
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Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
n-Nitrosodiphenylamine	ND	µg/L	5.0	SW 846 8270
4-Bromophenyl phenyl ether	ND	µg/L	5.0	SW 846 8270
Hexachlorobenzene	ND	µg/L	5.0	SW 846 8270
Pentachlorophenol	ND	µg/L	5.0	SW 846 8270
Phenanthrene	ND	µg/L	5.0	SW 846 8270
Anthracene	ND	µg/L	5.0	SW 846 8270
Carbazole	ND	µg/L	50	SW 846 8270
di-n-Butylphthalate	ND	µg/L	10	SW 846 8270
Fluoranthene	ND	µg/L	5.0	SW 846 8270
Pyrene	ND	µg/L	5.0	SW 846 8270
Butyl benzyl phthalate	ND	µg/L	10	SW 846 8270
3,3'-Dichlorobenzidine	ND	µg/L	10	SW 846 8270
Benzo(a)anthracene	ND	µg/L	5.0	SW 846 8270
Chrysene	ND	µg/L	5.0	SW 846 8270
bis(2ethylhexyl)phthalate	ND	µg/L	10	SW 846 8270
di-n-Octylphthalate	ND	µg/L	5.0	SW 846 8270
Benzo(b)fluoranthene	ND	µg/L	5.0	SW 846 8270
Benzo(k)fluoranthene	ND	µg/L	10	SW 846 8270
Benzo(a)pyrene	ND	µg/L	5.0	SW 846 8270
Indeno(1,2,3-cd)pyrene	ND	µg/L	10	SW 846 8270
Dibenzo(a,h)anthracene	ND	µg/L	10	SW 846 8270
Benzo(g,h,i)perylene	ND	µg/L	10	SW 846 8270

CLIENT: Ucar Carbon Company, Incorporated  
 SAMPLE ID: BLIND DUPLICATE  
 COLLECTION METHOD: GRAB  
 COLLECTION DATE(S): 08/14/96  
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC  
 AES SAMPLE ID: 62CY-9

PROJECT ID: 62CY

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	16	NTU	0.1	EPA 180.1
Ammonia	ND	mg/L	0.05	EPA 350.1
Nitrite	ND	mg/L	0.04	HACH 8507
Total Kjeldahl Nitrogen	0.72	mg/L	0.4	EPA 351.2
Total Iron	3.0	mg/L	0.05	EPA 200.7
Soluble Iron	1.6	mg/L	0.05	EPA 200.7
Total Potassium	ND	mg/L	1.0	EPA 200.7
Soluble Potassium	ND	mg/L	1.0	EPA 200.7
Total Zinc	0.03	mg/L	0.02	EPA 200.7
Soluble Zinc	ND	mg/L	0.02	EPA 200.7
Chloromethane	ND	µg/L	10	SW 846 8240
Bromomethane	ND	µg/L	10	SW 846 8240
Vinyl chloride	ND	µg/L	10	SW 846 8240
Chloroethane	ND	µg/L	10	SW 846 8240
Methylene chloride	ND	µg/L	10	SW 846 8240
Acetone	ND	µg/L	10	SW 846 8240
Carbon disulfide	ND	µg/L	10	SW 846 8240
1,1-Dichloroethene	ND	µg/L	10	SW 846 8240
1,1-Dichloroethane	ND	µg/L	10	SW 846 8240
1,2-Dichloroethylene (total)	ND	µg/L	10	SW 846 8240
Chloroform	ND	µg/L	10	SW 846 8240
1,2-Dichloroethane	ND	µg/L	10	SW 846 8240
2-Butanone	ND	µg/L	10	SW 846 8240
1,1,1-Trichloroethane	ND	µg/L	10	SW 846 8240
Carbon tetrachloride	ND	µg/L	10	SW 846 8240
Bromodichloromethane	ND	µg/L	10	SW 846 8240
1,2-Dichloropropane	ND	µg/L	10	SW 846 8240
cis-1,3-Dichloropropene	ND	µg/L	10	SW 846 8240

\* Analysis performed in the field.

CLIENT: Ucar Carbon Company, Incorporated  
 SAMPLE ID: BLIND DUPLICATE  
 COLLECTION METHOD: GRAB  
 COLLECTION DATE(S): 08/14/96  
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC  
 AES SAMPLE ID: 62CY-9

PROJECT ID: 62CY

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Trichloroethene	ND	µg/L	10	SW 846 8240
Chlorodibromomethane	ND	µg/L	10	SW 846 8240
1,1,2-Trichloroethane	ND	µg/L	10	SW 846 8240
Benzene	ND	µg/L	10	SW 846 8240
trans-1,3-Dichloropropene	ND	µg/L	10	SW 846 8240
Bromoform	ND	µg/L	10	SW 846 8240
4-Methyl-2-pentanone	ND	µg/L	10	SW 846 8240
2-Hexanone	ND	µg/L	10	SW 846 8240
Tetrachloroethene	ND	µg/L	10	SW 846 8240
Toluene	ND	µg/L	10	SW 846 8240
1,1,2,2-Tetrachloroethane	ND	µg/L	10	SW 846 8240
Chlorobenzene	ND	µg/L	10	SW 846 8240
Ethylbenzene	ND	µg/L	10	SW 846 8240
Styrene	ND	µg/L	10	SW 846 8240
m-Xylene	ND	µg/L	10	SW 846 8240
o/p-Xylene	ND	µg/L	10	SW 846 8240
Phenol	ND	µg/L	5.0	SW 846 8270
bis(2-chloroethyl)ether	ND	µg/L	5.0	SW 846 8270
2-Chlorophenol	ND	µg/L	5.0	SW 846 8270
1,3-Dichlorobenzene	ND	µg/L	5.0	SW 846 8270
1,4-Dichlorobenzene	ND	µg/L	5.0	SW 846 8270
1,2-Dichlorobenzene	ND	µg/L	5.0	SW 846 8270
2-Methylphenol	ND	µg/L	5.0	SW 846 8270
bis(2-chloroisopropyl)ether	ND	µg/L	5.0	SW 846 8270
4-Methylphenol	ND	µg/L	5.0	SW 846 8270
n-Nitrosodi-n-propylamine	ND	µg/L	5.0	SW 846 8270
Hexachloroethane	ND	µg/L	5.0	SW 846 8270
Nitrobenzene	ND	µg/L	5.0	SW 846 8270
Isophorone	ND	µg/L	5.0	SW 846 8270

CLIENT: Ucar Carbon Company, Incorporated SAMPLE ID: BLIND DUPLICATE COLLECTION METHOD: GRAB COLLECTION DATE(S): 08/14/96 SAMPLE TYPE: GROUNDWATER	AES CLIENT ID: CTC AES SAMPLE ID: 62CY-9  PROJECT ID: 62CY
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Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
2-Nitrophenol	ND	µg/L	5.0	SW 846 8270
2,4-Dimethylphenol	ND	µg/L	5.0	SW 846 8270
bis(2-chloroethoxy)methane	ND	µg/L	5.0	SW 846 8270
2,4-Dichlorophenol	ND	µg/L	5.0	SW 846 8270
1,2,4-Trichlorobenzene	ND	µg/L	5.0	SW 846 8270
Naphthalene	ND	µg/L	5.0	SW 846 8270
4-Chloroaniline	ND	µg/L	10	SW 846 8270
Hexachlorobutadiene	ND	µg/L	5.0	SW 846 8270
4-Chloro-3-methylphenol	ND	µg/L	5.0	SW 846 8270
2-Methylnaphthalene	ND	µg/L	5.0	SW 846 8270
Hexachlorocyclopentadiene	ND	µg/L	5.0	SW 846 8270
2,4,6-Trichlorophenol	ND	µg/L	5.0	SW 846 8270
2,4,5-Trichlorophenol	ND	µg/L	5.0	SW 846 8270
2-Chloronaphthalene	ND	µg/L	5.0	SW 846 8270
2-Nitroaniline	ND	µg/L	5.0	SW 846 8270
Dimethyl phthalate	ND	µg/L	10	SW 846 8270
Acenaphthylene	ND	µg/L	5.0	SW 846 8270
2,6-Dinitrotoluene	ND	µg/L	5.0	SW 846 8270
3-Nitroaniline	ND	µg/L	10	SW 846 8270
Acenaphthene	ND	µg/L	5.0	SW 846 8270
2,4-Dinitrophenol	ND	µg/L	10	SW 846 8270
4-Nitrophenol	ND	µg/L	5.0	SW 846 8270
Dibenzofuran	ND	µg/L	5.0	SW 846 8270
2,4-Dinitrotoluene	ND	µg/L	5.0	SW 846 8270
Diethyl phthalate	ND	µg/L	10	SW 846 8270
4-Chlorophenyl phenyl ether	ND	µg/L	5.0	SW 846 8270
Fluorene	ND	µg/L	5.0	SW 846 8270
4-Nitroaniline	ND	µg/L	5.0	SW 846 8270
4,6-Dinitro-2-methylphenol	ND	µg/L	10	SW 846 8270

CLIENT: Ucar Carbon Company, Incorporated SAMPLE ID: BLIND DUPLICATE COLLECTION METHOD: GRAB COLLECTION DATE(S): 08/14/96 SAMPLE TYPE: GROUNDWATER	AES CLIENT ID: CTC AES SAMPLE ID: 62CY-9  PROJECT ID: 62CY
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Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
n-Nitrosodiphenylamine	ND	µg/L	5.0	SW 846 8270
4-Bromophenyl phenyl ether	ND	µg/L	5.0	SW 846 8270
Hexachlorobenzene	ND	µg/L	5.0	SW 846 8270
Pentachlorophenol	ND	µg/L	5.0	SW 846 8270
Phenanthrene	ND	µg/L	5.0	SW 846 8270
Anthracene	ND	µg/L	5.0	SW 846 8270
Carbazole	ND	µg/L	50	SW 846 8270
di-n-Butylphthalate	ND	µg/L	10	SW 846 8270
Fluoranthene	ND	µg/L	5.0	SW 846 8270
Pyrene	ND	µg/L	5.0	SW 846 8270
Butyl benzyl phthalate	ND	µg/L	10	SW 846 8270
3,3'-Dichlorobenzidine	ND	µg/L	10	SW 846 8270
Benzo(a)anthracene	ND	µg/L	5.0	SW 846 8270
Chrysene	ND	µg/L	5.0	SW 846 8270
bis(2ethylhexyl)phthalate	ND	µg/L	10	SW 846 8270
di-n-Octylphthalate	ND	µg/L	5.0	SW 846 8270
Benzo(b)fluoranthene	ND	µg/L	5.0	SW 846 8270
Benzo(k)fluoranthene	ND	µg/L	10	SW 846 8270
Benzo(a)pyrene	ND	µg/L	5.0	SW 846 8270
Indeno(1,2,3-cd)pyrene	ND	µg/L	10	SW 846 8270
Dibenzo(a,h)anthracene	ND	µg/L	10	SW 846 8270
Benzo(g,h,i)perylene	ND	µg/L	10	SW 846 8270



CLIENT: Ucar Carbon Company, Incorporated  
 SAMPLE ID: TRIP BLANK  
 COLLECTION METHOD: GRAB  
 COLLECTION DATE(S): 08/12/96 - 08/14/96  
 SAMPLE TYPE: BAKER WATER

AES CLIENT ID: CTC  
 AES SAMPLE ID: 62CY-10

PROJECT ID: 62CY

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	1	NTU	0.1	EPA 180.1
Ammonia	ND	mg/L	0.05	EPA 350.1
Nitrite	ND	mg/L	0.04	HACH 8507
Total Kjeldahl Nitrogen	ND	mg/L	0.4	EPA 351.2
Total Iron	ND	mg/L	0.05	EPA 200.7
Total Potassium	ND	mg/L	1.0	EPA 200.7
Total Zinc	ND	mg/L	0.02	EPA 200.7
Chloromethane	ND	µg/L	10	SW 846 8240
Bromomethane	ND	µg/L	10	SW 846 8240
Vinyl chloride	ND	µg/L	10	SW 846 8240
Chloroethane	ND	µg/L	10	SW 846 8240
Methylene chloride	ND	µg/L	10	SW 846 8240
Acetone	ND	µg/L	10	SW 846 8240
Carbon disulfide	ND	µg/L	10	SW 846 8240
1,1-Dichloroethene	ND	µg/L	10	SW 846 8240
1,1-Dichloroethane	ND	µg/L	10	SW 846 8240
1,2-Dichloroethylene (total)	ND	µg/L	10	SW 846 8240
Chloroform	ND	µg/L	10	SW 846 8240
1,2-Dichloroethane	ND	µg/L	10	SW 846 8240
2-Butanone	ND	µg/L	10	SW 846 8240
1,1,1-Trichloroethane	ND	µg/L	10	SW 846 8240
Carbon tetrachloride	ND	µg/L	10	SW 846 8240
Bromodichloromethane	ND	µg/L	10	SW 846 8240
1,2-Dichloropropane	ND	µg/L	10	SW 846 8240
cis-1,3-Dichloropropene	ND	µg/L	10	SW 846 8240
Trichloroethene	ND	µg/L	10	SW 846 8240
Chlorodibromomethane	ND	µg/L	10	SW 846 8240
1,1,2-Trichloroethane	ND	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): 08/12/96 - 08/14/96  
 SAMPLE TYPE: BAKER WATER

AES CLIENT ID: CTC  
 AES SAMPLE ID: 62CY-10

PROJECT ID: 62CY

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Benzene	ND	µg/L	10	SW 846 8240
trans-1,3-Dichloropropene	ND	µg/L	10	SW 846 8240
Bromoform	ND	µg/L	10	SW 846 8240
4-Methyl-2-pentanone	ND	µg/L	10	SW 846 8240
2-Hexanone	ND	µg/L	10	SW 846 8240
Tetrachloroethene	ND	µg/L	10	SW 846 8240
Toluene	ND	µg/L	10	SW 846 8240
1,1,2,2-Tetrachloroethane	ND	µg/L	10	SW 846 8240
Chlorobenzene	ND	µg/L	10	SW 846 8240
Ethylbenzene	ND	µg/L	10	SW 846 8240
Styrene	ND	µg/L	10	SW 846 8240
m-Xylene	ND	µg/L	10	SW 846 8240
o/p-Xylene	ND	µg/L	10	SW 846 8240
Phenol	ND	µg/L	5.0	SW 846 8270
bis(2-chloroethyl)ether	ND	µg/L	5.0	SW 846 8270
2-Chlorophenol	ND	µg/L	5.0	SW 846 8270
1,3-Dichlorobenzene	ND	µg/L	5.0	SW 846 8270
1,4-Dichlorobenzene	ND	µg/L	5.0	SW 846 8270
1,2-Dichlorobenzene	ND	µg/L	5.0	SW 846 8270
2-Methylphenol	ND	µg/L	5.0	SW 846 8270
bis(2-chloroisopropyl)ether	ND	µg/L	5.0	SW 846 8270
4-Methylphenol	ND	µg/L	5.0	SW 846 8270
n-Nitrosodi-n-propylamine	ND	µg/L	5.0	SW 846 8270
Hexachloroethane	ND	µg/L	5.0	SW 846 8270
Nitrobenzene	ND	µg/L	5.0	SW 846 8270
Isophorone	ND	µg/L	5.0	SW 846 8270
2-Nitrophenol	ND	µg/L	5.0	SW 846 8270
2,4-Dimethylphenol	ND	µg/L	5.0	SW 846 8270
bis(2-chloroethoxy)methane	ND	µg/L	5.0	SW 846 8270

CLIENT: Ucar Carbon Company, Incorporated  
 SAMPLE ID: TRIP BLANK  
 COLLECTION METHOD: GRAB  
 COLLECTION DATE(S): 08/12/96 - 08/14/96  
 SAMPLE TYPE: BAKER WATER

AES CLIENT ID: CTC  
 AES SAMPLE ID: 62CY-10

PROJECT ID: 62CY

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
2,4-Dichlorophenol	ND	µg/L	5.0	SW 846 8270
1,2,4-Trichlorobenzene	ND	µg/L	5.0	SW 846 8270
Naphthalene	ND	µg/L	5.0	SW 846 8270
4-Chloroaniline	ND	µg/L	10	SW 846 8270
Hexachlorobutadiene	ND	µg/L	5.0	SW 846 8270
4-Chloro-3-methylphenol	ND	µg/L	5.0	SW 846 8270
2-Methylnaphthalene	ND	µg/L	5.0	SW 846 8270
Hexachlorocyclopentadiene	ND	µg/L	5.0	SW 846 8270
2,4,6-Trichlorophenol	ND	µg/L	5.0	SW 846 8270
2,4,5-Trichlorophenol	ND	µg/L	5.0	SW 846 8270
2-Chloronaphthalene	ND	µg/L	5.0	SW 846 8270
2-Nitroaniline	ND	µg/L	5.0	SW 846 8270
Dimethyl phthalate	ND	µg/L	10	SW 846 8270
Acenaphthylene	ND	µg/L	5.0	SW 846 8270
2,6-Dinitrotoluene	ND	µg/L	5.0	SW 846 8270
3-Nitroaniline	ND	µg/L	10	SW 846 8270
Acenaphthene	ND	µg/L	5.0	SW 846 8270
2,4-Dinitrophenol	ND	µg/L	10	SW 846 8270
4-Nitrophenol	ND	µg/L	5.0	SW 846 8270
Dibenzofuran	ND	µg/L	5.0	SW 846 8270
2,4-Dinitrotoluene	ND	µg/L	5.0	SW 846 8270
Diethyl phthalate	ND	µg/L	10	SW 846 8270
4-Chlorophenyl phenyl ether	ND	µg/L	5.0	SW 846 8270
Fluorene	ND	µg/L	5.0	SW 846 8270
4-Nitroaniline	ND	µg/L	5.0	SW 846 8270
4,6-Dinitro-2-methylphenol	ND	µg/L	10	SW 846 8270
n-Nitrosodiphenylamine	ND	µg/L	5.0	SW 846 8270
4-Bromophenyl phenyl ether	ND	µg/L	5.0	SW 846 8270
Hexachlorobenzene	ND	µg/L	5.0	SW 846 8270

CLIENT: Ucar Carbon Company, Incorporated SAMPLE ID: TRIP BLANK COLLECTION METHOD: GRAB COLLECTION DATE(S): 08/12/96 - 08/14/96 SAMPLE TYPE: BAKER WATER	AES CLIENT ID: CTC AES SAMPLE ID: 62CY-10  PROJECT ID: 62CY
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Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Pentachlorophenol	ND	µg/L	5.0	SW 846 8270
Phenanthrene	ND	µg/L	5.0	SW 846 8270
Anthracene	ND	µg/L	5.0	SW 846 8270
Carbazole	ND	µg/L	50	SW 846 8270
di-n-Butylphthalate	ND	µg/L	10	SW 846 8270
Fluoranthene	ND	µg/L	5.0	SW 846 8270
Pyrene	ND	µg/L	5.0	SW 846 8270
Butyl benzyl phthalate	ND	µg/L	10	SW 846 8270
3,3'-Dichlorobenzidine	ND	µg/L	10	SW 846 8270
Benzo(a)anthracene	ND	µg/L	5.0	SW 846 8270
Chrysene	ND	µg/L	5.0	SW 846 8270
bis(2ethylhexyl)phthalate	ND	µg/L	10	SW 846 8270
di-n-Octylphthalate	ND	µg/L	5.0	SW 846 8270
Benzo(b)fluoranthene	ND	µg/L	5.0	SW 846 8270
Benzo(k)fluoranthene	ND	µg/L	10	SW 846 8270
Benzo(a)pyrene	ND	µg/L	5.0	SW 846 8270
Indeno(1,2,3-cd)pyrene	ND	µg/L	10	SW 846 8270
Dibenzo(a,h)anthracene	ND	µg/L	10	SW 846 8270
Benzo(g,h,i)perylene	ND	µg/L	10	SW 846 8270

CLIENT: Ucar Carbon Company, Incorporated	AES CLIENT ID: CTC PROJECT ID: 62CY
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ACCURACY

Analytical Parameter(s)	Method	Sample ID	Type	Percent Recovery
Ammonia	EPA 350.1	62CY-6	Matrix Spike	84
Nitrite	HACH 8507	62CY-6	Matrix Spike	80
Total Kjeldahl Nitrogen	EPA 351.2	62CY-6	Matrix Spike	115
Total Iron	EPA 200.7	62CY-6	Matrix Spike	95
Soluble Iron	EPA 200.7	62CY-6	Matrix Spike	96
Total Potassium	EPA 200.7	62CY-6	Matrix Spike	107
Soluble Potassium	EPA 200.7	62CY-6	Matrix Spike	100
Total Zinc	EPA 200.7	62CY-6	Matrix Spike	106
Soluble Zinc	EPA 200.7	62CY-6	Matrix Spike	98
1,1-Dichloroethene	SW 846 8240	62CY-6	Matrix Spike	120
Trichloroethene	SW 846 8240	62CY-6	Matrix Spike	103
Benzene	SW 846 8240	62CY-6	Matrix Spike	102
Toluene	SW 846 8240	62CY-6	Matrix Spike	100
Chlorobenzene	SW 846 8240	62CY-6	Matrix Spike	104
Phenol	SW 846 8270	62CY-6	Matrix Spike	37
2-Chlorophenol	SW 846 8270	62CY-6	Matrix Spike	83
1,4-Dichlorobenzene	SW 846 8270	62CY-6	Matrix Spike	61
n-Nitrosodi-n-propylamine	SW 846 8270	62CY-6	Matrix Spike	73
1,2,4-Trichlorobenzene	SW 846 8270	62CY-6	Matrix Spike	64
4-Chloro-3-methylphenol	SW 846 8270	62CY-6	Matrix Spike	89
Acenaphthene	SW 846 8270	62CY-6	Matrix Spike	78
4-Nitrophenol	SW 846 8270	62CY-6	Matrix Spike	37
2,4-Dinitrotoluene	SW 846 8270	62CY-6	Matrix Spike	81
Pentachlorophenol	SW 846 8270	62CY-6	Matrix Spike	102
Pyrene	SW 846 8270	62CY-6	Matrix Spike	80

CLIENT: Ucar Carbon Company, Incorporated	AES CLIENT ID: CTC PROJECT ID: 62CY
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PRECISION

Analytical Parameter(s)	Method	Sample ID	Type	Relative % Difference
Ammonia	EPA 350.1	62CY-6	Duplicate	2.4
Nitrite	HACH 8507	62CY-6	Duplicate	NA
Total Kjeldahl Nitrogen	EPA 351.2	62CY-6	Duplicate	4.1
Total Iron	EPA 200.7	62CY-6	Duplicate	4.7
Soluble Iron	EPA 200.7	62CY-6	Duplicate	0.0
Total Potassium	EPA 200.7	62CY-6	Duplicate	0.0
Soluble Potassium	EPA 200.7	62CY-6	Duplicate	0.0
Total Zinc	EPA 200.7	62CY-6	Duplicate	0.0
Soluble Zinc	EPA 200.7	62CY-6	Duplicate	NA
Chloromethane	SW 846 8240	62CY-6	Duplicate	NA
Bromomethane	SW 846 8240	62CY-6	Duplicate	NA
Vinyl chloride	SW 846 8240	62CY-6	Duplicate	0.0
Chloroethane	SW 846 8240	62CY-6	Duplicate	NA
Methylene chloride	SW 846 8240	62CY-6	Duplicate	NA
Acetone	SW 846 8240	62CY-6	Duplicate	NA
Carbon disulfide	SW 846 8240	62CY-6	Duplicate	NA
1,1-Dichloroethene	SW 846 8240	62CY-6	Duplicate	NA
1,1-Dichloroethane	SW 846 8240	62CY-6	Duplicate	NA
1,2-Dichloroethylene (total)	SW 846 8240	62CY-6	Duplicate	5.6
Chloroform	SW 846 8240	62CY-6	Duplicate	NA
1,2-Dichloroethane	SW 846 8240	62CY-6	Duplicate	NA
2-Butanone	SW 846 8240	62CY-6	Duplicate	NA
1,1,1-Trichloroethane	SW 846 8240	62CY-6	Duplicate	NA
Carbon tetrachloride	SW 846 8240	62CY-6	Duplicate	NA
Bromodichloromethane	SW 846 8240	62CY-6	Duplicate	NA
1,2-Dichloropropane	SW 846 8240	62CY-6	Duplicate	NA
cis-1,3-Dichloropropene	SW 846 8240	62CY-6	Duplicate	NA
Trichloroethene	SW 846 8240	62CY-6	Duplicate	0.0

CLIENT: Ucar Carbon Company, Incorporated

AES CLIENT ID: CTC  
 PROJECT ID: 62CY

PRECISION

Analytical Parameter(s)	Method	Sample ID	Type	Relative % Difference
Chlorodibromomethane	SW 846 8240	62CY-6	Duplicate	NA
1,1,2-Trichloroethane	SW 846 8240	62CY-6	Duplicate	NA
Benzene	SW 846 8240	62CY-6	Duplicate	NA
trans-1,3-Dichloropropene	SW 846 8240	62CY-6	Duplicate	NA
Bromoform	SW 846 8240	62CY-6	Duplicate	NA
4-Methyl-2-pentanone	SW 846 8240	62CY-6	Duplicate	NA
2-Hexanone	SW 846 8240	62CY-6	Duplicate	NA
Tetrachloroethene	SW 846 8240	62CY-6	Duplicate	0.0
Toluene	SW 846 8240	62CY-6	Duplicate	NA
1,1,2,2-Tetrachloroethane	SW 846 8240	62CY-6	Duplicate	NA
Chlorobenzene	SW 846 8240	62CY-6	Duplicate	NA
Ethylbenzene	SW 846 8240	62CY-6	Duplicate	NA
Styrene	SW 846 8240	62CY-6	Duplicate	NA
m-Xylene	SW 846 8240	62CY-6	Duplicate	NA
o/p-Xylene	SW 846 8240	62CY-6	Duplicate	NA
Phenol	SW 846 8270	62CY-6	Duplicate	NA *
bis(2-chloroethyl)ether	SW 846 8270	62CY-6	Duplicate	NA
2-Chlorophenol	SW 846 8270	62CY-6	Duplicate	NA
1,3-Dichlorobenzene	SW 846 8270	62CY-6	Duplicate	NA
1,4-Dichlorobenzene	SW 846 8270	62CY-6	Duplicate	NA
1,2-Dichlorobenzene	SW 846 8270	62CY-6	Duplicate	NA
2-Methylphenol	SW 846 8270	62CY-6	Duplicate	NA
bis(2-chloroisopropyl)ether	SW 846 8270	62CY-6	Duplicate	NA
4-Methylphenol	SW 846 8270	62CY-6	Duplicate	NA
n-Nitrosodi-n-propylamine	SW 846 8270	62CY-6	Duplicate	NA
Hexachloroethane	SW 846 8270	62CY-6	Duplicate	10
Nitrobenzene	SW 846 8270	62CY-6	Duplicate	NA
Isophorone	SW 846 8270	62CY-6	Duplicate	NA

NA = NOT AVAILABLE - ORIGINAL AND/OR DUPLICATE RESULTS ARE BELOW REPORTED LIMITS  
 \* Not available.

CLIENT: Ucar Carbon Company, Incorporated

AES CLIENT ID: CTC  
 PROJECT ID: 62CY

PRECISION

Analytical Parameter(s)	Method	Sample ID	Type	Relative % Difference
2-Nitrophenol	SW 846 8270	62CY-6	Duplicate	NA
2,4-Dimethylphenol	SW 846 8270	62CY-6	Duplicate	NA
bis(2-chloroethoxy)methane	SW 846 8270	62CY-6	Duplicate	NA
2,4-Dichlorophenol	SW 846 8270	62CY-6	Duplicate	NA
1,2,4-Trichlorobenzene	SW 846 8270	62CY-6	Duplicate	NA
Naphthalene	SW 846 8270	62CY-6	Duplicate	NA
4-Chloroaniline	SW 846 8270	62CY-6	Duplicate	NA
Hexachlorobutadiene	SW 846 8270	62CY-6	Duplicate	8
4-Chloro-3-methylphenol	SW 846 8270	62CY-6	Duplicate	NA
2-Methylnaphthalene	SW 846 8270	62CY-6	Duplicate	NA
Hexachlorocyclopentadiene	SW 846 8270	62CY-6	Duplicate	NA
2,4,6-Trichlorophenol	SW 846 8270	62CY-6	Duplicate	NA
2,4,5-Trichlorophenol	SW 846 8270	62CY-6	Duplicate	NA
2-Chloronaphthalene	SW 846 8270	62CY-6	Duplicate	NA
2-Nitroaniline	SW 846 8270	62CY-6	Duplicate	NA
Dimethyl phthalate	SW 846 8270	62CY-6	Duplicate	NA
Acenaphthylene	SW 846 8270	62CY-6	Duplicate	NA
2,6-Dinitrotoluene	SW 846 8270	62CY-6	Duplicate	NA
3-Nitroaniline	SW 846 8270	62CY-6	Duplicate	NA
Acenaphthene	SW 846 8270	62CY-6	Duplicate	NA
2,4-Dinitrophenol	SW 846 8270	62CY-6	Duplicate	NA
4-Nitrophenol	SW 846 8270	62CY-6	Duplicate	NA
Dibenzofuran	SW 846 8270	62CY-6	Duplicate	NA
2,4-Dinitrotoluene	SW 846 8270	62CY-6	Duplicate	NA
Diethyl phthalate	SW 846 8270	62CY-6	Duplicate	NA
4-Chlorophenyl phenyl ether	SW 846 8270	62CY-6	Duplicate	NA
Fluorene	SW 846 8270	62CY-6	Duplicate	NA
4-Nitroaniline	SW 846 8270	62CY-6	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: 62CY

PRECISION

Analytical Parameter(s)	Method	Sample ID	Type	Relative % Difference
4,6-Dinitro-2-methylphenol	SW 846 8270	62CY-6	Duplicate	NA
n-Nitrosodiphenylamine	SW 846 8270	62CY-6	Duplicate	NA
4-Bromophenyl phenyl ether	SW 846 8270	62CY-6	Duplicate	NA
Hexachlorobenzene	SW 846 8270	62CY-6	Duplicate	NA
Pentachlorophenol	SW 846 8270	62CY-6	Duplicate	NA
Phenanthrene	SW 846 8270	62CY-6	Duplicate	NA
Anthracene	SW 846 8270	62CY-6	Duplicate	NA
Carbazole	SW 846 8270	62CY-6	Duplicate	NA
di-n-Butylphthalate	SW 846 8270	62CY-6	Duplicate	NA
Fluoranthene	SW 846 8270	62CY-6	Duplicate	NA
Pyrene	SW 846 8270	62CY-6	Duplicate	NA
Butyl benzyl phthalate	SW 846 8270	62CY-6	Duplicate	NA
3,3'-Dichlorobenzidine	SW 846 8270	62CY-6	Duplicate	NA
Benzo(a)anthracene	SW 846 8270	62CY-6	Duplicate	NA
Chrysene	SW 846 8270	62CY-6	Duplicate	NA
bis(2ethylhexyl)phthalate	SW 846 8270	62CY-6	Duplicate	NA
di-n-Octylphthalate	SW 846 8270	62CY-6	Duplicate	NA
Benzo(b)fluoranthene	SW 846 8270	62CY-6	Duplicate	NA
Benzo(k)fluoranthene	SW 846 8270	62CY-6	Duplicate	NA
Benzo(a)pyrene	SW 846 8270	62CY-6	Duplicate	NA
Indeno(1,2,3-cd)pyrene	SW 846 8270	62CY-6	Duplicate	NA
Dibenzo(a,h)anthracene	SW 846 8270	62CY-6	Duplicate	NA
Benzo(g,h,i)perylene	SW 846 8270	62CY-6	Duplicate	NA

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

Advanced Environmental Services, Inc.  
 Sample Traceability Report

Project Identification CTC 62CY

Sample #	Sample Collection	Group #	Run #	Prep Method	Prep Date	Analyst	Analytical Methodology	Analysis Date	Analyst
62CY(34,6) (7,10)	8/12+13/96	2120	30	-	-	-	8507	8/13/96	LR
62CY(2,5) (8,9)	8/14/96	2120	31	-	-	-	8507	8/14/96	LR
62CY(1-10)	8/12-14/96	2027	31	351.2	8-26-96	LB	351.2	8/27/96	LB
62CY(170)	8/12-14/96	2005	31	-	-	-	350.1	8/28/96	LB

Please note: Areas marked by a dash indicate that no sample preparation is required under the applied methodology.

Advanced Environmental Services, Inc.  
 Sample Traceability Report

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Project Identification: CTC 62CY

Sample #	Sample Collection	Group #	Run #	Prep Method	Prep Date	Analyst	Analytical Methodology	Analysis Date	Analyst
62CY 1-10	8/12-14/96	—	—	9-3	8/26/96	FR	200.7	8/27/96	FS
62CY 1-10	8/12-14/96	—	—	—	—	—	200.7	8/28/96	FS

Please note: Areas marked by a dash indicate that no sample preparation is required under the applied methodology

Advanced Environmental Services, Inc.  
 Sample Traceability Report

Project Identification

CTC 62CY

Sample #	Sample Collection	Group #	Run #	Prep Method	Prep Date	Analyst	Analytical Methodology	Analysis Date	Analyst
62CY-6	8-13-96	4000	40	—	—	—	8240	8-17-96	MM
I -8	8-14-96	I	I	—	—	—	I	I	I
I -9	8-14-96	I	I	—	—	—	I	I	I
I -10	8-12-96 8-14-96	I	I	—	—	—	I	I	I

Please note: Areas marked by a dash indicate that no sample preparation is required under the applied methodology.

Advanced Environmental Services, Inc.  
 Sample Traceability Report

Project Identification CTC 6204

Sample #	Sample Collection	Group #	Run #	Prep Method	Prep Date	Analyst	Analytical Methodology	Analysis Date	Analyst
6204-6	8/13/96	4300	-	3510/8270	8/16/96	SK(L)	8270	8/19/96	K
6204-8	8/14/96		-		↓			↓	
6204-9	8/14/96		-		8/19/96			8/20/96	
6204-10	8/12-8/14/96		-		8/16/96			8/19/96	

Please note: Areas marked by a dash indicate that no sample preparation is required under the applied methodology



ENVIRONMENTAL SERVICES, INC.  
2186 LIBERTY DRIVE  
NIAGARA FALLS, NEW YORK 14304

(716) 283-3120  
(800) 791-3120  
FAX (716) 283-4727

# CHAIN OF CUSTODY RECORD

PROJECT NAME: UCAR CARBON

SAMPLER'S SIGNATURE: 

PROJECT I.D. #: 6204

JOB CODE: CTC

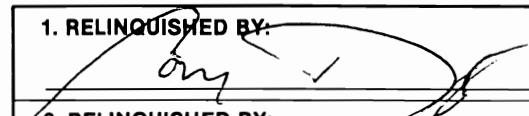
CONTAINER CLASSIFICATION							
UNPRESERVED							
HNO <sub>3</sub>							
H <sub>2</sub> SO <sub>4</sub>							
HCL							
NAOH							
VIAL (PRES.)							
VIAL (UNPRES.)							
TOTAL							

DATE	TIME	SAMPLE IDENTIFICATION	GRAB	COMP	SAMPLE TYPE	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	HCL	NAOH	VIAL (PRES.)	VIAL (UNPRES.)	TOTAL	PARAMETERS/REMARKS
8-12-96	11:10am	BW-1	✓		GROUND H <sub>2</sub> O	1	2	1				4	TOT + SOL (*) METALS, TKN, AMMO, N/ITE, TURB*
"	3:05pm	BW-5	✓		" "	1	2	1				4	
8-12-96	9:30am	TRIP BLANK	✓		DI H <sub>2</sub> O	3	1	1				5	METALS, TCLSV, TCLUSV, TKN, AMMO, N/ITE, TURB*

(\*) = FILTERED IN FIELD.  
\* = DONE IN FIELD.

TOTAL NUMBER OF CONTAINERS 13

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

1. RELINQUISHED BY: 	DATE <u>8-12-96</u>	TIME <u>3:50pm</u>	RECEIVED BY: <u>Tina Schuberl</u>
2. RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
3. RELINQUISHED BY:	DATE	TIME	RECEIVED BY:



ENVIRONMENTAL SERVICES, INC.  
 2186 LIBERTY DRIVE  
 NIAGARA FALLS, NEW YORK 14304

(716) 283-3120  
 (800) 791-3120  
 FAX (716) 283-4727

# CHAIN OF CUSTODY RECORD

PROJECT NAME: UCAR CARBON

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

PROJECT I.D. #: 62CY

JOB CODE: CTC

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
8-13-96	11:05	BW-2	X		GROUNDWATER	1	2	1					4	TOTAL & SOLUBLE METALS AMMONIA, IRN, NITRITE
8-13-96	14:00	BW-4 (Q.C.)	X		GROUNDWATER	6	6	3			6		21	TOTAL & SOLUBLE METALS AMMONIA, IRN, NITRITE TCLV, TCLSV  TURBIDITY & FILTERING PERFORMED IN THE FIELD.

TOTAL NUMBER OF CONTAINERS 25

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 8-13-96	TIME 15:15	RECEIVED BY: <u>Tina Schubert</u>
2. RELINQUISHED BY: _____	DATE	TIME	RECEIVED BY: _____
3. RELINQUISHED BY: _____	DATE	TIME	RECEIVED BY: _____



ENVIRONMENTAL SERVICES, INC.  
2186 LIBERTY DRIVE  
NIAGARA FALLS, NEW YORK 14304

(716) 283-3120  
(800) 791-3120  
FAX (716) 283-4727

# CHAIN OF CUSTODY RECORD

PROJECT NAME: UCAR CARBON

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

PROJECT I.D. #: 62CY

JOB CODE: CTC

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
8-14-96	—	TRIP BLANK	X		D.T. WATER						2	2		TCLV
	13:00	MW-1 ✓	X		GROUND WATER	1	2	1					4	TOTAL & SOLUBLE METALS,
	13:15	MW-3 ✓	X			1	2	1					4	TKN, AMMONIA, NITRATE
	10:30	BW-3	X			1	2	1					4	
	11:20	BW-6	X			2	2	1		2				ALL ABOVE PARAMETERS
	—	BLIND DUPLICATE	X			2	2	1		2				PLUS, TCLV, TCLSV.
		MW-2			—									DRY - NO SAMPLES COLLECTED

TOTAL NUMBER OF CONTAINERS 28

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 8-14-96	TIME 14 20	RECEIVED BY: <u>Tina Schubert</u>
2. RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
3. RELINQUISHED BY:	DATE	TIME	RECEIVED BY: