32N03.GW41

UCAR

UCAR CARBON COMPANY INC.

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

December 16, 1996

1996

32N03

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 fifth (35) 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 fifth (35) 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

35TH QUARTER

POSITIVE ORGANIC PARAMETERS FROM BW-4

CONTAMINATE	34th Quarter ppb	Mean Conc. ppb	Range ppb
1,2-Dichlorethene (Total)	160	318	200 - 570
Trichloroethene	340	296	30 - 740
Tetrachloroethene	150	238	72 - 440
Vinyl Chloride	80	96	29 - 300

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

FOURTH QUARTER, 1996

Prepared By:

ADVANCED ENVIRONMENTAL SERVICES INC.

"A Company Dedicated to Honesty, Quality and Service"

December 11, 1996
REF: CTC63KP/100B

Analytical Comment

The sample from BW-4 for Method 8270 contained interfering substances. It was analyzed twice, but each time the recovery of six surrogate compounds was below the method limit. Therefore, those results are reported only as estimated.

QA/QC VERIFICATION FOR PROJECT ID 63KP

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

Metals Department

Linda A Ratka

Inorganic Chemistry

Organic Chemistry

Field Services

W. Joseph McDougall

Quality Control

Kristen L Olson

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 - FIELD PARAMETER INFORMATION
November 13, 1996 thru November 15, 1996

UCAR CARBON COMPANY, INC.

Hyde Park Boulevard
Niagara Falls, New York

AES Code: CTC **Project I.D. # 63KP**

Monitoring Well I.D.	Sampling Date	Sampling Time	Water Level (ft.)	Turbidity (NTU)	Filter Time	Field Comments/Observations
BW-1	11/15/96	11:10 AM	15.15	5	12:50 PM	Clear
BW-2	11/15/96	10:45 AM	12.51	10	12:45 PM	Clear with strong odor.
BW-3	11/14/96	2:55 PM	8.29	8	3:54 PM	Clear.
BW-4	11/14/96	2:00 PM	8.32	9	3:40 PM	Clear with sheen.
BW-5	11/14/96	11:35 AM	6.31	7	4:00 PM	Clear
BW-6	11/15/96	10:20 AM	15.85	13	12:30 PM	Clear
MW-1	11/15/96	10:35 AM	11.68	14	12:55 PM	Clear
MW-2	11/14/96	2:50 PM	24.04	95	3:48 PM	Cloudy with solids
MW-3	11/14/96	11:10 AM	3.55	75	3:57 PM	Slightly cloudy
OW-1 South	11/15/96	10:50 AM	6.45	NA	NA	Required to take water elevation only.
OW-2 North	11/15/96	10:55 AM	6.19	NA	NA	Required to take water elevation only.
Blind Dup	11/14/96	2:00 PM	N/A	10	3:43 PM	Clear with sheen.
Trip Blank	11/14/96	9:30 AM	NA	5	NA	Deionized Water

› Blind Duplcate site was BW-4.

Field Technician 12-1-96 Date

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

QUARTERLY GROUNDWATER MONITORING - WELL INFORMATION
November 13, 1996 thru November 15, 1996

UCAR CARBON COMPANY, INC.

Hyde Park Boulevard
Niagara Falls, New York

AES Code: CTC **Project I.D. # 63KP**

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	11/15/96	610.72	4	14.95	595.77	28.85	9.07	35.0	C
BW-2	11/15/96	608.43	4	12.25	596.18	26.60	9.37	35.0	C
BW-3	11/14/96	604.72	4	8.26	596.46	22.91	9.56	30.0	C
BW-4	11/14/96	607.08	4	8.32	598.76	22.69	9.38	29.0	C
BW-5	11/14/96	603.33	4	6.21	597.12	28.80	14.75	45.0	C
BW-6	11/15/96	607.04	4	13.03	594.01	25.15	7.91	24.0	C
MW-1	11/14/96	609.43	2	10.86	598.57	23.40	2.05	2.25 (Dry)	S
MW-2	11/13/96	607.54	3	23.21	584.33	24.61	0.51	0.5 (Dry)	VS
MW-3	11/13/96	601.61	2	3.50	598.11	16.11	2.06	3.75 (Dry)	S
OW-1 SOUTH	11/15/96	608.81	2	6.45	608.81	36.05	4.83	NR	N/A
OW-2 NORTH	11/15/96	607.06	2	6.19	607.06	35.90	4.85	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

12-1-96
Technician Date

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: MW-1
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 11/15/96
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 63KP-1

PROJECT ID: 63KP

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	14	NTU	0.1	EPA 180.1
Ammonia	5.1 D	mg/L	0.05	EPA 350.1
Nitrite	ND	mg/L	0.05	HACH 8507
Total Kjeldahl Nitrogen	10 D	mg/L	0.4	EPA 351.2
Total Iron	4.8	mg/L	0.05	EPA 200.7
Soluble Iron	0.11	mg/L	0.05	EPA 200.7
Total Potassium	40	mg/L	1.0	EPA 200.7
Soluble Potassium	42	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): 11/14/96
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 63KP-2
PROJECT ID: 63KP

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	75	NTU	0.1	EPA 180.1
Ammonia	ND	mg/L	0.05	EPA 350.1
Nitrite	ND	mg/L	0.05	HACH 8507
Total Kjeldahl Nitrogen	ND	mg/L	0.4	EPA 351.2
Total Iron	7.1	mg/L	0.05	EPA 200.7
Soluble Iron	0.07	mg/L	0.05	EPA 200.7
Total Potassium	3.1	mg/L	1.0	EPA 200.7
Soluble Potassium	2.1	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

* Analysis performed in the field.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-1
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 11/15/96
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 63KP-3
PROJECT ID: 63KP

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	5	NTU	0.1	EPA 180.1
Ammonia	0.46	mg/L	0.05	EPA 350.1
Nitrite	ND	mg/L	0.05	HACH 8507
Total Kjeldahl Nitrogen	2.1	mg/L	0.4	EPA 351.2
Total Iron	1.3	mg/L	0.05	EPA 200.7
Soluble Iron	1.3	mg/L	0.05	EPA 200.7
Total Potassium	5.4	mg/L	1.0	EPA 200.7
Soluble Potassium	5.5	mg/L	1.0	EPA 200.7
Total Zinc	0.06	mg/L	0.02	EPA 200.7
Soluble Zinc	0.04	mg/L	0.02	EPA 200.7

* Analysis performed in the field.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-2
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 11/15/96
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 63KP-4
PROJECT ID: 63KP

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	10	NTU	0.1	EPA 180.1
Ammonia	0.72 D	mg/L	0.05	EPA 350.1
Nitrite	ND	mg/L	0.05	HACH 8507
Total Kjeldahl Nitrogen	2.4	mg/L	0.4	EPA 351.2
Total Iron	3.4	mg/L	0.05	EPA 200.7
Soluble Iron	3.3	mg/L	0.05	EPA 200.7
Total Potassium	6.7	mg/L	1.0	EPA 200.7
Soluble Potassium	5.9	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

* Analysis performed in the field.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-3
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 11/14/96
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 63KP-5

PROJECT ID: 63KP

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	8	NTU	0.1	EPA 180.1
Ammonia	1.9 D	mg/L	0.05	EPA 350.1
Nitrite	ND	mg/L	0.05	HACH 8507
Total Kjeldahl Nitrogen	1.8	mg/L	0.4	EPA 351.2
Total Iron	1.1	mg/L	0.05	EPA 200.7
Soluble Iron	1.0	mg/L	0.05	EPA 200.7
Total Potassium	6.4	mg/L	1.0	EPA 200.7
Soluble Potassium	3.8	mg/L	1.0	EPA 200.7
Total Zinc	0.06	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-4
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 11/14/96
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 63KP-6
PROJECT ID: 63KP

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	9	NTU	0.1	EPA 180.1
Ammonia	4.0 D	mg/L	0.05	EPA 350.1
Nitrite	ND	mg/L	0.05	HACH 8507
Total Kjeldahl Nitrogen	5.8 D	mg/L	0.4	EPA 351.2
Total Iron	2.5	mg/L	0.05	EPA 200.7
Soluble Iron	2.1	mg/L	0.05	EPA 200.7
Total Potassium	16	mg/L	1.0	EPA 200.7
Soluble Potassium	16	mg/L	1.0	EPA 200.7
Total Zinc	0.34	mg/L	0.02	EPA 200.7
Soluble Zinc	0.05	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	80 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)	160 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): 11/14/96
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 63KP-6
PROJECT ID: 63KP

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Trichloroethene	340 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	150 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
Aniline	ND *	µg/L	10	SW 846 8270
Benzoic acid	ND *	µg/L	10	SW 846 8270
Benzyl alcohol	ND *	µg/L	5.0	SW 846 8270
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

* Estimated result due to low surrogate recoveries as a result of possible matrix interferences.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-4
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 11/14/96
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 63KP-6

PROJECT ID: 63KP

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
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
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

* Estimated result due to low surrogate recoveries as a result of possible matrix interferences.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-4
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 11/14/96
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 63KP-6
PROJECT ID: 63KP

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
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
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

* Estimated result due to low surrogate recoveries as a result of possible matrix interferences.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-5
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 11/14/96
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 63KP-7
PROJECT ID: 63KP

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	7	NTU	0.1	EPA 180.1
Ammonia	0.05	mg/L	0.05	EPA 350.1
Nitrite	ND	mg/L	0.05	HACH 8507
Total Kjeldahl Nitrogen	ND	mg/L	0.4	EPA 351.2
Total Iron	1.1	mg/L	0.05	EPA 200.7
Soluble Iron	0.77	mg/L	0.05	EPA 200.7
Total Potassium	3.1	mg/L	1.0	EPA 200.7
Soluble Potassium	2.7	mg/L	1.0	EPA 200.7
Total Zinc	0.10	mg/L	0.02	EPA 200.7
Soluble Zinc	0.09	mg/L	0.08	EPA 200.7

* Analysis performed in the field.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-6
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 11/15/96
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 63KP-8

PROJECT ID: 63KP

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	13	NTU	0.1	EPA 180.1
Ammonia	0.07	mg/L	0.05	EPA 350.1
Nitrite	ND	mg/L	0.05	HACH 8507
Total Kjeldahl Nitrogen	ND	mg/L	0.4	EPA 351.2
Total Iron	7.7	mg/L	0.05	EPA 200.7
Soluble Iron	7.2	mg/L	0.05	EPA 200.7
Total Potassium	2.4	mg/L	1.0	EPA 200.7
Soluble Potassium	1.9	mg/L	1.0	EPA 200.7
Total Zinc	ND	mg/L	0.02	EPA 200.7
Soluble Zinc	ND	mg/L	0.08	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): 11/15/96
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 63KP-8

PROJECT ID: 63KP

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
Aniline	ND	µg/L	10	SW 846 8270
Benzoic acid	ND	µg/L	10	SW 846 8270
Benzyl alcohol	ND	µg/L	5.0	SW 846 8270
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

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-6
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 11/15/96
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 63KP-8

PROJECT ID: 63KP

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
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
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

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-6
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 11/15/96
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 63KP-8

PROJECT ID: 63KP

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
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
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): 11/14/96
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 63KP-9

PROJECT ID: 63KP

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	10	NTU	0.1	EPA 180.1
Ammonia	2.6 D	mg/L	0.05	EPA 350.1
Nitrite	ND	mg/L	0.05	HACH 8507
Total Kjeldahl Nitrogen	6.6 D	mg/L	0.4	EPA 351.2
Total Iron	2.4	mg/L	0.05	EPA 200.7
Soluble Iron	2.1	mg/L	0.05	EPA 200.7
Total Potassium	18	mg/L	1.0	EPA 200.7
Soluble Potassium	15	mg/L	1.0	EPA 200.7
Total Zinc	0.30	mg/L	0.02	EPA 200.7
Soluble Zinc	0.05	mg/L	0.08	EPA 200.7
Chloromethane	ND	µg/L	50	SW 846 8240
Bromomethane	ND	µg/L	50	SW 846 8240
Vinyl chloride	84 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)	180 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: BLIND DUPLICATE
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 11/14/96
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 63KP-9

PROJECT ID: 63KP

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Trichloroethene	350 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	160 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
Aniline	ND	µg/L	10	SW 846 8270
Benzoic acid	ND	µg/L	10	SW 846 8270
Benzyl alcohol	ND	µg/L	5.0	SW 846 8270
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

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BLIND DUPLICATE
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 11/14/96
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 63KP-9

PROJECT ID: 63KP

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
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
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	35	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

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BLIND DUPLICATE
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 11/14/96
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 63KP-9

PROJECT ID: 63KP

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
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
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): 11/14/96
SAMPLE TYPE: BAKER WATER

AES CLIENT ID: CTC
AES SAMPLE ID: 63KP-10

PROJECT ID: 63KP

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Ammonia	ND	mg/L	0.05	EPA 350.1
Nitrite	ND	mg/L	0.05	HACH 8507
Total Kjeldahl Nitrogen	ND	mg/L	0.4	EPA 351.2
Total Iron	0.09	mg/L	0.05	EPA 200.7
Total Potassium	1.6	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
Benzene	ND	µg/L	10	SW 846 8240
trans-1,3-Dichloropropene	ND	µg/L	10	SW 846 8240

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: TRIP BLANK
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 11/14/96
SAMPLE TYPE: BAKER WATER

AES CLIENT ID: CTC
AES SAMPLE ID: 63KP-10

PROJECT ID: 63KP

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
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
Aniline	ND	µg/L	10	SW 846 8270
Benzoic acid	ND	µg/L	10	SW 846 8270
Benzyl alcohol	ND	µg/L	5.0	SW 846 8270
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

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: TRIP BLANK
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 11/14/96
SAMPLE TYPE: BAKER WATER

AES CLIENT ID: CTC
AES SAMPLE ID: 63KP-10

PROJECT ID: 63KP

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
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
n-Nitrosodiphenylamine	ND	µg/L	5.0	SW 846 8270
4-Bromophenyl phenyl ether	ND	µg/L	5.0	SW 846 8270

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: TRIP BLANK
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 11/14/96
SAMPLE TYPE: BAKER WATER

AES CLIENT ID: CTC
AES SAMPLE ID: 63KP-10

PROJECT ID: 63KP

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
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: MW-2
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 11/14/96 - 11/15/96
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 63KP-11
PROJECT ID: 63KP

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	95	NTU	0.1	EPA 180.1
Ammonia	2.8 D	mg/L	0.05	EPA 350.1
Nitrite	ND	mg/L	0.05	HACH 8507
Total Kjeldahl Nitrogen	6.8 D	mg/L	0.4	EPA 351.2
Total Iron	22	mg/L	0.05	EPA 200.7
Soluble Iron	ND	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	1.1	mg/L	0.02	EPA 200.7
Soluble Zinc	ND	mg/L	0.08	EPA 200.7

* Analysis performed in the field.

ADVANCED ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL REPORT

CLIENT: Ucar Carbon Company, Incorporated

AES CLIENT ID: CTC
PROJECT ID: 63KP

ACCURACY

Analytical Parameter(s)	Method	Sample ID	Type	Percent Recovery
Ammonia	EPA 350.1	63KP-8	Matrix Spike	114
Nitrite	HACH 8507	63KP-8	Matrix Spike	104
Total Kjeldahl Nitrogen	EPA 351.2	63KP-8	Matrix Spike	113
Total Iron	EPA 200.7	63KP-8	Matrix Spike	86
Soluble Iron	EPA 200.7	63KP-8	Matrix Spike	100
Total Potassium	EPA 200.7	63KP-8	Matrix Spike	97
Soluble Potassium	EPA 200.7	63KP-8	Matrix Spike	109
Total Zinc	EPA 200.7	63KP-8	Matrix Spike	98
Soluble Zinc	EPA 200.7	63KP-8	Matrix Spike	106
Chloromethane	SW 846 8240	63KP-8	Matrix Spike	104
Bromomethane	SW 846 8240	63KP-8	Matrix Spike	106
Vinyl chloride	SW 846 8240	63KP-8	Matrix Spike	126
Chloroethane	SW 846 8240	63KP-8	Matrix Spike	112
Methylene chloride	SW 846 8240	63KP-8	Matrix Spike	106
1,1-Dichloroethene	SW 846 8240	63KP-8	Matrix Spike	104
1,1-Dichloroethane	SW 846 8240	63KP-8	Matrix Spike	108
1,2-Dichloroethylene (total)	SW 846 8240	63KP-8	Matrix Spike	102
Chloroform	SW 846 8240	63KP-8	Matrix Spike	114
1,2-Dichloroethane	SW 846 8240	63KP-8	Matrix Spike	112
1,1,1-Trichloroethane	SW 846 8240	63KP-8	Matrix Spike	114
Carbon tetrachloride	SW 846 8240	63KP-8	Matrix Spike	116
Bromodichloromethane	SW 846 8240	63KP-8	Matrix Spike	112
1,2-Dichloropropane	SW 846 8240	63KP-8	Matrix Spike	120
cis-1,3-Dichloropropene	SW 846 8240	63KP-8	Matrix Spike	118
Trichloroethene	SW 846 8240	63KP-8	Matrix Spike	108
Chlorodibromomethane	SW 846 8240	63KP-8	Matrix Spike	120
1,1,2-Trichloroethane	SW 846 8240	63KP-8	Matrix Spike	124
Benzene	SW 846 8240	63KP-8	Matrix Spike	108
trans-1,3-Dichloropropene	SW 846 8240	63KP-8	Matrix Spike	110

CLIENT: Ucar Carbon Company, Incorporated

AES CLIENT ID: CTC
PROJECT ID: 63KP

ACCURACY

Analytical Parameter(s)	Method	Sample ID	Type	Percent Recovery
Bromoform	SW 846 8240	63KP-8	Matrix Spike	114
Tetrachloroethene	SW 846 8240	63KP-8	Matrix Spike	106
Toluene	SW 846 8240	63KP-8	Matrix Spike	106
1,1,2,2-Tetrachloroethane	SW 846 8240	63KP-8	Matrix Spike	120
Chlorobenzene	SW 846 8240	63KP-8	Matrix Spike	106
Ethylbenzene	SW 846 8240	63KP-8	Matrix Spike	104
Phenol	SW 846 8270	63KP-8	Matrix Spike	51
bis(2-chloroethyl)ether	SW 846 8270	63KP-8	Matrix Spike	70
2-Chlorophenol	SW 846 8270	63KP-8	Matrix Spike	71
1,3-Dichlorobenzene	SW 846 8270	63KP-8	Matrix Spike	62
1,4-Dichlorobenzene	SW 846 8270	63KP-8	Matrix Spike	62
1,2-Dichlorobenzene	SW 846 8270	63KP-8	Matrix Spike	68
bis(2-chloroisopropyl)ether	SW 846 8270	63KP-8	Matrix Spike	79
n-Nitrosodi-n-propylamine	SW 846 8270	63KP-8	Matrix Spike	88
Hexachloroethane	SW 846 8270	63KP-8	Matrix Spike	59
Nitrobenzene	SW 846 8270	63KP-8	Matrix Spike	73
Isophorone	SW 846 8270	63KP-8	Matrix Spike	74
2-Nitrophenol	SW 846 8270	63KP-8	Matrix Spike	80
2,4-Dimethylphenol	SW 846 8270	63KP-8	Matrix Spike	71
bis(2-chloroethoxy)methane	SW 846 8270	63KP-8	Matrix Spike	75
2,4-Dichlorophenol	SW 846 8270	63KP-8	Matrix Spike	81
1,2,4-Trichlorobenzene	SW 846 8270	63KP-8	Matrix Spike	68
Naphthalene	SW 846 8270	63KP-8	Matrix Spike	67
Hexachlorobutadiene	SW 846 8270	63KP-8	Matrix Spike	62
4-Chloro-3-methylphenol	SW 846 8270	63KP-8	Matrix Spike	87
Hexachlorocyclopentadiene	SW 846 8270	63KP-8	Matrix Spike	57
2,4,6-Trichlorophenol	SW 846 8270	63KP-8	Matrix Spike	80
2,4,5-Trichlorophenol	SW 846 8270	63KP-8	Matrix Spike	67
2-Chloronaphthalene	SW 846 8270	63KP-8	Matrix Spike	67

CLIENT: Ucar Carbon Company, Incorporated

AES CLIENT ID: CTC
PROJECT ID: 63KP

ACCURACY

Analytical Parameter(s)	Method	Sample ID	Type	Percent Recovery
Dimethyl phthalate	SW 846 8270	63KP-8	Matrix Spike	74
Acenaphthylene	SW 846 8270	63KP-8	Matrix Spike	66
2,6-Dinitrotoluene	SW 846 8270	63KP-8	Matrix Spike	82
Acenaphthene	SW 846 8270	63KP-8	Matrix Spike	67
2,4-Dinitrophenol	SW 846 8270	63KP-8	Matrix Spike	123
4-Nitrophenol	SW 846 8270	63KP-8	Matrix Spike	52
2,4-Dinitrotoluene	SW 846 8270	63KP-8	Matrix Spike	82
Diethyl phthalate	SW 846 8270	63KP-8	Matrix Spike	67
4-Chlorophenyl phenyl ether	SW 846 8270	63KP-8	Matrix Spike	75
Fluorene	SW 846 8270	63KP-8	Matrix Spike	64
4,6-Dinitro-2-methylphenol	SW 846 8270	63KP-8	Matrix Spike	109
n-Nitrosodiphenylamine	SW 846 8270	63KP-8	Matrix Spike	83
4-Bromophenyl phenyl ether	SW 846 8270	63KP-8	Matrix Spike	83
Hexachlorobenzene	SW 846 8270	63KP-8	Matrix Spike	77
Pentachlorophenol	SW 846 8270	63KP-8	Matrix Spike	95
Phenanthrene	SW 846 8270	63KP-8	Matrix Spike	70
Anthracene	SW 846 8270	63KP-8	Matrix Spike	68
Carbazole	SW 846 8270	63KP-8	Matrix Spike	81
di-n-Butylphthalate	SW 846 8270	63KP-8	Matrix Spike	71
Fluoranthene	SW 846 8270	63KP-8	Matrix Spike	74
Pyrene	SW 846 8270	63KP-8	Matrix Spike	70
Butyl benzyl phthalate	SW 846 8270	63KP-8	Matrix Spike	78
3,3'-Dichlorobenzidine	SW 846 8270	63KP-8	Matrix Spike	12
Benzo(a)anthracene	SW 846 8270	63KP-8	Matrix Spike	74
Chrysene	SW 846 8270	63KP-8	Matrix Spike	63
bis(2ethylhexyl)phthalate	SW 846 8270	63KP-8	Matrix Spike	74
di-n-Octylphthalate	SW 846 8270	63KP-8	Matrix Spike	96
Benzo(b)fluoranthene	SW 846 8270	63KP-8	Matrix Spike	90
Benzo(k)fluoranthene	SW 846 8270	63KP-8	Matrix Spike	80

CLIENT: Ucar Carbon Company, Incorporated

AES CLIENT ID: CTC
PROJECT ID: 63KP

ACCURACY

Analytical Parameter(s)	Method	Sample ID	Type	Percent Recovery
Benzo(a)pyrene	SW 846 8270	63KP-8	Matrix Spike	78
Indeno(1,2,3-cd)pyrene	SW 846 8270	63KP-8	Matrix Spike	31
Aniline	SW 846 8270	63KP-8	Matrix Spike	53
Benzoic Acid	SW 846 8270	63KP-8	Matrix Spike	71
Dibenzo(a,h)anthracene	SW 846 8270	63KP-8	Matrix Spike	31
Benzo(g,h,i)perylene	SW 846 8270	63KP-8	Matrix Spike	20

ADVANCED ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL REPORT

CLIENT: Ucar Carbon Company, Incorporated

AES CLIENT ID: CTC
PROJECT ID: 63KP

PRECISION

Analytical Parameter(s)	Method	Sample ID	Type	Relative % Difference
Ammonia	EPA 350.1	63KP-8	Duplicate	13
Nitrite	HACH 8507	63KP-8	Duplicate	NA *
Total Kjeldahl Nitrogen	EPA 351.2	63KP-8	Duplicate	NA
Total Iron	EPA 200.7	63KP-8	Duplicate	2.6
Soluble Iron	EPA 200.7	63KP-8	Duplicate	0
Total Potassium	EPA 200.7	63KP-8	Duplicate	4.1
Soluble Potassium	EPA 200.7	63KP-8	Duplicate	11
Total Zinc	EPA 200.7	63KP-8	Duplicate	NA
Soluble Zinc	EPA 200.7	63KP-8	Duplicate	NA
Chloromethane	SW 846 8240	63KP-8	Duplicate	NA
Bromomethane	SW 846 8240	63KP-8	Duplicate	NA
Vinyl chloride	SW 846 8240	63KP-8	Duplicate	NA
Chloroethane	SW 846 8240	63KP-8	Duplicate	NA
Methylene chloride	SW 846 8240	63KP-8	Duplicate	NA
Acetone	SW 846 8240	63KP-8	Duplicate	NA
Carbon disulfide	SW 846 8240	63KP-8	Duplicate	NA
1,1-Dichloroethene	SW 846 8240	63KP-8	Duplicate	NA
1,1-Dichloroethane	SW 846 8240	63KP-8	Duplicate	NA
1,2-Dichloroethylene (total)	SW 846 8240	63KP-8	Duplicate	NA
Chloroform	SW 846 8240	63KP-8	Duplicate	NA
1,2-Dichloroethane	SW 846 8240	63KP-8	Duplicate	NA
2-Butanone	SW 846 8240	63KP-8	Duplicate	NA
1,1,1-Trichloroethane	SW 846 8240	63KP-8	Duplicate	NA
Carbon tetrachloride	SW 846 8240	63KP-8	Duplicate	NA
Bromodichloromethane	SW 846 8240	63KP-8	Duplicate	NA
1,2-Dichloropropane	SW 846 8240	63KP-8	Duplicate	NA
cis-1,3-Dichloropropene	SW 846 8240	63KP-8	Duplicate	NA
Trichloroethene	SW 846 8240	63KP-8	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: 63KP

PRECISION

Analytical Parameter(s)	Method	Sample ID	Type	Relative % Difference
Chlorodibromomethane	SW 846 8240	63KP-8	Duplicate	NA
1,1,2-Trichloroethane	SW 846 8240	63KP-8	Duplicate	NA
Benzene	SW 846 8240	63KP-8	Duplicate	NA
trans-1,3-Dichloropropene	SW 846 8240	63KP-8	Duplicate	NA
Bromoform	SW 846 8240	63KP-8	Duplicate	NA
4-Methyl-2-pentanone	SW 846 8240	63KP-8	Duplicate	NA
2-Hexanone	SW 846 8240	63KP-8	Duplicate	NA
Tetrachloroethene	SW 846 8240	63KP-8	Duplicate	NA
Toluene	SW 846 8240	63KP-8	Duplicate	NA
1,1,2,2-Tetrachloroethane	SW 846 8240	63KP-8	Duplicate	NA
Chlorobenzene	SW 846 8240	63KP-8	Duplicate	NA
Ethylbenzene	SW 846 8240	63KP-8	Duplicate	NA
Styrene	SW 846 8240	63KP-8	Duplicate	NA
m-Xylene	SW 846 8240	63KP-8	Duplicate	NA
o/p-Xylene	SW 846 8240	63KP-8	Duplicate	NA
Phenol	SW 846 8270	63KP-8	Duplicate	NA
bis(2-chloroethyl)ether	SW 846 8270	63KP-8	Duplicate	NA
2-Chlorophenol	SW 846 8270	63KP-8	Duplicate	NA
1,3-Dichlorobenzene	SW 846 8270	63KP-8	Duplicate	NA
1,4-Dichlorobenzene	SW 846 8270	63KP-8	Duplicate	NA
1,2-Dichlorobenzene	SW 846 8270	63KP-8	Duplicate	NA
2-Methylphenol	SW 846 8270	63KP-8	Duplicate	NA
bis(2-chloroisopropyl)ether	SW 846 8270	63KP-8	Duplicate	NA
4-Methylphenol	SW 846 8270	63KP-8	Duplicate	NA
n-Nitrosodi-n-propylamine	SW 846 8270	63KP-8	Duplicate	NA
Hexachloroethane	SW 846 8270	63KP-8	Duplicate	NA
Nitrobenzene	SW 846 8270	63KP-8	Duplicate	NA
Isophorone	SW 846 8270	63KP-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: 63KP

PRECISION

Analytical Parameter(s)	Method	Sample ID	Type	Relative % Difference
2-Nitrophenol	SW 846 8270	63KP-8	Duplicate	NA
2,4-Dimethylphenol	SW 846 8270	63KP-8	Duplicate	NA
bis(2-chloroethoxy)methane	SW 846 8270	63KP-8	Duplicate	NA
2,4-Dichlorophenol	SW 846 8270	63KP-8	Duplicate	NA
1,2,4-Trichlorobenzene	SW 846 8270	63KP-8	Duplicate	NA
Naphthalene	SW 846 8270	63KP-8	Duplicate	NA
4-Chloroaniline	SW 846 8270	63KP-8	Duplicate	NA
Hexachlorobutadiene	SW 846 8270	63KP-8	Duplicate	NA
4-Chloro-3-methylphenol	SW 846 8270	63KP-8	Duplicate	NA
2-Methylnaphthalene	SW 846 8270	63KP-8	Duplicate	NA
Hexachlorocyclopentadiene	SW 846 8270	63KP-8	Duplicate	NA
2,4,6-Trichlorophenol	SW 846 8270	63KP-8	Duplicate	NA
2,4,5-Trichlorophenol	SW 846 8270	63KP-8	Duplicate	NA
2-Chloronaphthalene	SW 846 8270	63KP-8	Duplicate	NA
2-Nitroaniline	SW 846 8270	63KP-8	Duplicate	NA
Dimethyl phthalate	SW 846 8270	63KP-8	Duplicate	NA
Acenaphthylene	SW 846 8270	63KP-8	Duplicate	NA
2,6-Dinitrotoluene	SW 846 8270	63KP-8	Duplicate	NA
3-Nitroaniline	SW 846 8270	63KP-8	Duplicate	NA
Acenaphthene	SW 846 8270	63KP-8	Duplicate	NA
2,4-Dinitrophenol	SW 846 8270	63KP-8	Duplicate	NA
4-Nitrophenol	SW 846 8270	63KP-8	Duplicate	NA
Dibenzofuran	SW 846 8270	63KP-8	Duplicate	NA
2,4-Dinitrotoluene	SW 846 8270	63KP-8	Duplicate	NA
Diethyl phthalate	SW 846 8270	63KP-8	Duplicate	NA
4-Chlorophenyl phenyl ether	SW 846 8270	63KP-8	Duplicate	NA
Fluorene	SW 846 8270	63KP-8	Duplicate	NA
4-Nitroaniline	SW 846 8270	63KP-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: 63KP

PRECISION

Analytical Parameter(s)	Method	Sample ID	Type	Relative % Difference
4,6-Dinitro-2-methylphenol	SW 846 8270	63KP-8	Duplicate	NA
n-Nitrosodiphenylamine	SW 846 8270	63KP-8	Duplicate	NA
4-Bromophenyl phenyl ether	SW 846 8270	63KP-8	Duplicate	NA
Hexachlorobenzene	SW 846 8270	63KP-8	Duplicate	NA
Pentachlorophenol	SW 846 8270	63KP-8	Duplicate	NA
Phenanthrene	SW 846 8270	63KP-8	Duplicate	NA
Anthracene	SW 846 8270	63KP-8	Duplicate	NA
Carbazole	SW 846 8270	63KP-8	Duplicate	NA
di-n-Butylphthalate	SW 846 8270	63KP-8	Duplicate	NA
Fluoranthene	SW 846 8270	63KP-8	Duplicate	NA
Pyrene	SW 846 8270	63KP-8	Duplicate	NA
Butyl benzyl phthalate	SW 846 8270	63KP-8	Duplicate	NA
3,3'-Dichlorobenzidine	SW 846 8270	63KP-8	Duplicate	NA
Benzo(a)anthracene	SW 846 8270	63KP-8	Duplicate	NA
Chrysene	SW 846 8270	63KP-8	Duplicate	NA
bis(2ethylhexyl)phthalate	SW 846 8270	63KP-8	Duplicate	NA
di-n-Octylphthalate	SW 846 8270	63KP-8	Duplicate	NA
Benzo(b)fluoranthene	SW 846 8270	63KP-8	Duplicate	NA
Benzo(k)fluoranthene	SW 846 8270	63KP-8	Duplicate	NA
Benzo(a)pyrene	SW 846 8270	63KP-8	Duplicate	NA
Indeno(1,2,3-cd)pyrene	SW 846 8270	63KP-8	Duplicate	NA
Aniline	SW 846 8270	63KP-8	Duplicate	NA
Benzoic Acid	SW 846 8270	63KP-8	Duplicate	NA
Benzyl Alcohol	SW 846 8270	63KP-8	Duplicate	NA
Dibenzo(a,h)anthracene	SW 846 8270	63KP-8	Duplicate	NA
Benzo(g,h,i)perylene	SW 846 8270	63KP-8	Duplicate	NA

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

Advanced Environmental Services, Inc.
Sample Traceability Report

Project Identification CTC 63KP

Sample #	Sample Collection	Group #	Run #	Prep Method	Prep Date	Analyst	Analytical Methodology	Analysis Date	Analyst
63KP 111	11/14/1996	—	-	9-3	11/25/96	JG	200.7	12/3/96	JMP

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

Advanced Environmental Services, Inc.
Sample Traceability Report

Project Identification CTC 63KP

Sample #	Sample Collection	Group #	Run #	Prep Method	Prep Date	Analyst	Analytical Methodology	Analysis Date	Analyst
~~63KP-CTC~~ 1-11	11/14-15/96	2005	41	-	-		350.1	11-19-96	CB
63KP-1-11	11/14-15/96	2120	47	-	-	-	8507	11-15-96	CR
63KP-1-11	11/14-15/96	2027	40	351.2	11-25-96	UB	351.2	11-26 96	UB

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

Advanced Environmental Services, Inc.
Sample Traceability Report

Project Identification CTC 63KP

Sample #	Sample Collection	Group #	Run #	Prep Method	Prep Date	Analyst	Analytical Methodology	Analysis Date	Analyst
63KP-6	11-14-96			—	—	—	8240	11-22-96	MM
-8	11-15-96			—	—	—	"	"	"
-9	11-14-96			—	—	—	"	"	"
-10	11-14-96			—	—	—	"	"	"

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

Advanced Environmental Services, Inc.
Sample Traceability Report

Project Identification: CTC 63KP

Sample #	Sample Collection	Group #	Run #	Prep Method	Prep Date	Analyst	Analytical Methodology	Analysis Date	Analyst
63KP-6	11-14-96	—	—	3510/8270	11-20-96	TH (K)	8270	12/2/96	
63KP-8	11-15-96	—	—	↓	↓	↓	↓	↓	↓
63KP-9	11-14-96	—	—					12/4/96	
63KP-10	11-14-96	—	—					↓	

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

ADVANCED

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

PROJECT I.D. #: 63KP

SAMPLER'S SIGNATURE: [signature]

JOB CODE: CTC

DATE	TIME	SAMPLE IDENTIFICATION	GRAB	COMP	SAMPLE TYPE	UNPRESERVED	HNO_3	H_2SO_4	HCL	NAOH	VIAL (PRES.)	VIAL (UNPRES.)	TOTAL	PARAMETERS/REMARKS
11/14/96	11:10 Am	MW-3	✓		Ground H_2O	1	2	1					4	Tot. + Sol.⊛ Metals, Ammo,
↓	11 35 Am	BW-5	✓		↓	1	2	1					4	TKN, N/ite, Turb* →
↓	2 55 pm	BW-3	✓		↓	1	2	1					4	→
11/14/96	2:50 pm	MW-2	✓		Ground H_2O	1	2						3	Tot. + Sol.⊛ Metals, Turb*, N/ite
11/14/96	9 30 Am	Trip Blank	✓		DI H_2O	3	1	1			2		7	Semi-Volatiles, Volatiles, Metals, N/ite, Ammo, TKN, Turb*
11/14/96	2:00 pm	BW-4	✓		Ground H_2O	2	2	1			2		7	Semi-Volatiles, Volatiles, N/ite,
11	—	Blind Duplicate	✓		Ground H_2O	2	2	1			2		7	Tot. + Sol.⊛ Metals, Ammo, TKN, Turb* →

⊛ - Filtered By Field.
* - Done in Field

TOTAL NUMBER OF CONTAINERS: 36

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

	DATE	TIME	
1. RELINQUISHED BY: [signature]	1-14-96	4:00 pm	RECEIVED BY: [signature]
2. RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
3. RELINQUISHED BY:	DATE	TIME	RECEIVED BY:

CHAIN OF CUSTODY RECORD

ENVIRONMENTAL SERVICES, INC.
2186 LIBERTY DRIVE
NIAGARA FALLS, NEW YORK 14304
(716) 283-3120
(800) 791-3120
FAX (716) 283-4727

63 RP

PROJECT NAME: UCAR CARBON

PROJECT I.D. #: ~~63RP~~ 63RP

SAMPLER'S SIGNATURE: [signature]

JOB CODE: CTC

DATE	TIME	SAMPLE IDENTIFICATION	GRAB	COMP	SAMPLE TYPE	CONTAINER CLASSIFICATION: UNPRESERVED	HNO_3	H_2SO_4	HCL	NAOH	VIAL (PRES.)	VIAL (UNPRES.)	TOTAL	PARAMETERS/REMARKS
11-5-96	10:20 am	BW-6	X		GROUNDWATER	6	6	3			6		21	TOTAL & SOL METALS, WHITE, AMMO, TKN, TCLV, TCLSV
11-5-96	11:10 AM	BW-1	X		〃	1	2	1					4	TOTAL & SOL METALS, TKN
〃	10 45 AM	BW 2	X		〃	1	2	1					4	WHITE, AMMO
〃	10 35 AM	MW-1	X		〃	1	2	1					4	
11-5-96	10:50 AM	MW-2	X		〃			1					1	AMMO, TKN

TOTAL NUMBER OF CONTAINERS 34

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

	DATE	TIME	RECEIVED BY:
1. RELINQUISHED BY: [signature]	11/5/96	2 30 PM	[signature]
2. RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
3. RELINQUISHED BY:	DATE	TIME	RECEIVED BY: