3ZN03.GW34

UCAR

UCAR CARBON COMPANY INC.

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

June 17, 1996

3ZN03

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 third (33) 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 third (33) 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

33RD QUARTER

POSITIVE ORGANIC PARAMETERS FROM BW-4

CONTAMINATE	33rd Quarter ppb	Mean Conc. ppb	Range ppb
Trans-1,2-Dichlorethene (Total)	570	385	200 - 570
Trichloroethene	260	289	30 - 740
Tetrachloroethene	200	240	72 - 440
Hexachlorobutadiene	40	49	10 - 160
Vinyl Chloride	180	97	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

SECOND QUARTER, 1996

Prepared By:

ADVANCED ENVIRONMENTAL SERVICES INC.

"A Company Dedicated to Honesty, Quality and Service"

June 3, 1996
REF: CTC61TY/100B

QA/QC VERIFICATION FOR PROJECT ID 61TY

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

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 - Dilution

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

QUARTERLY GROUNDWATER MONITORING - FIELD PARAMETER INFORMATION
May 8, 1996 thru May 10, 1996

UCAR CARBON COMPANY, INC.

Hyde Park Boulevard
Niagara Falls, New York

AES Code: CTC **Project I.D. # 61TY**

Monitoring Well I.D.	Sampling Date	Sampling Time	Water Level (ft.)	Turbidity (NTU)	Filter Time	Field Comments/Observations
BW-1	5/10/96	10:00 AM	14.21	5	1:15 PM	Slight tint with an SO2 odor.
BW-2	5/9/96	2:40 PM	11.6	16	3:40 PM	Clear with strong odor.
BW-3	5/9/96	10:40 AM	7.24	1	11:45 AM	Clear.
BW-4	5/9/96	11:00 AM	8.04	2	11:50 AM	Clear with odor.
BW-5 *	5/8/96	3:15 PM	5.35	1	3:50 PM	Clear.
BW-6	5/9/96	1:40 PM	15.15	6	3:45 PM	Clear with odor.
MW-1	5/10/96	9:30 AM	10.58	3	1:20 AM	Clear
MW-2**	5/10/96	10:20 AM	24.00	330	1:25 AM	Very turbid dark brown with solids.
MW-3	5/9/96	10:10 AM	4.25	50	11:45 AM	Clear.
OW-1 South	5/9/96	2:55 PM	5.42	NA	NA	Required to take water elevation only.
OW-2 North	5/9/96	3:05 PM	5.28	NA	NA	Required to take water elevation only.
Blind Dup	5/9/96	11:00 AM	N/A	3	11:55 AM	Clear with odor.
Trip Blank	5/9/96	8:00 AM	NA	1	NA	Deionized Water

** Insufficient volume and recharge rate to collect for Ammonia & TKN.
Sufficient volume did exist to collect Total Metals, Sol. Metals, Nitrite, & Turbidity.
* Nitrite was collected on 5/9/96 @ 10:05 AM.
The Blind Duplcate site was BW-4.

5-29-96
Field Technician Date

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

QUARTERLY GROUNDWATER MONITORING - WELL INFORMATION
May 8, 1996 thru May 10, 1996

UCAR CARBON COMPANY, INC.

Hyde Park Boulevard
Niagara Falls, New York

AES Code: CTC **Project I.D. # 61TY**

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	5/10/96	610.72	4	13.96	596.76	28.85	9.72	32.0	C
BW-2	5/9/96	608.43	4	11.40	597.03	26.60	9.92	30.0	C
BW-3	5/9/96	604.72	4	7.22	597.50	22.91	10.24	31.0	C
BW-4	5/9/96	607.08	4	7.57	599.51	22.69	9.87	30.0	C
BW-5	5/8/96	603.33	4	5.30	598.03	28.80	15.34	46.0	C
BW-6	5/9/96	607.04	4	12.50	594.54	25.15	8.26	80.0	C
MW-1	5/9/96	609.43	2	10.33	599.10	23.40	2.13	2.5 (Dry)	S
MW-2	5/9/96	607.54	3	23.30	584.24	24.61	0.48	0.5 (Dry)	VS
MW-3	5/8/96	601.61	2	4.50	597.11	16.11	1.89	3.25 (Dry)	R
OW-1 SOUTH	5/9/96	608.81	2	5.42	608.81	36.05	5.00	NR	N/A
OW-2 NORTH	5/9/96	607.06	2	5.28	607.06	35.90	5.00	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

5-29-96
Technician Date

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: MW-1
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 05/10/96 - 9:30
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 61TY-1
PROJECT ID: 61TY

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	3.0	NTU	0.1	EPA 180.1
Ammonia	5.8	mg/L	0.05	EPA 350.1
Nitrite	0.05	mg/L	0.04	HACH 8507
Total Kjeldahl Nitrogen	3.8	mg/L	0.4	EPA 351.2
Total Iron	2.0	mg/L	0.05	EPA 200.7
Soluble Iron	0.19	mg/L	0.05	EPA 200.7
Total Potassium	35	mg/L	1.0	EPA 200.7
Soluble Potassium	37	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: MW-3
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 05/09/96 - 10:10
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 61TY-2
PROJECT ID: 61TY

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	50.0	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	0.61	mg/L	0.4	EPA 351.2
Total Iron	7.9	mg/L	0.05	EPA 200.7
Soluble Iron	0.08	mg/L	0.05	EPA 200.7
Total Potassium	2.7	mg/L	1.0	EPA 200.7
Soluble Potassium	1.7	mg/L	1.0	EPA 200.7
Total Zinc	0.02	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): 05/10/96 - 9:30
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 61TY-3
PROJECT ID: 61TY

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	5.0	NTU	0.1	EPA 180.1
Ammonia	0.67	mg/L	0.05	EPA 350.1
Nitrite	ND	mg/L	0.04	HACH 8507
Total Kjeldahl Nitrogen	2.1	mg/L	0.4	EPA 351.2
Total Iron	1.9	mg/L	0.05	EPA 200.7
Soluble Iron	0.95	mg/L	0.05	EPA 200.7
Total Potassium	4.3	mg/L	1.0	EPA 200.7
Soluble Potassium	3.9	mg/L	1.0	EPA 200.7
Total Zinc	0.21	mg/L	0.02	EPA 200.7
Soluble Zinc	0.08	mg/L	0.02	EPA 200.7

* Analysis performed in the field.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-2
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 05/09/96 - 114:40
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 61TY-4

PROJECT ID: 61TY

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	16.0	NTU	0.1	EPA 180.1
Ammonia	3.6	mg/L	0.05	EPA 350.1
Nitrite	ND **	mg/L	0.04	HACH 8507
Total Kjeldahl Nitrogen	2.1	mg/L	0.4	EPA 351.2
Total Iron	3.4	mg/L	0.05	EPA 200.7
Soluble Iron	2.3	mg/L	0.05	EPA 200.7
Total Potassium	7.0	mg/L	1.0	EPA 200.7
Soluble Potassium	6.8	mg/L	1.0	EPA 200.7
Total Zinc	0.09	mg/L	0.02	EPA 200.7
Soluble Zinc	0.10	mg/L	0.02	EPA 200.7

* Analysis performed in the field.
** Due to an oversight, this sample was analyzed past the 48 hour holding time.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-3
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 05/09/96 - 10:40
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 61TY-5

PROJECT ID: 61TY

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	1.0	NTU	0.1	EPA 180.1
Ammonia	0.2	mg/L	0.05	EPA 350.1
Nitrite	ND	mg/L	0.04	HACH 8507
Total Kjeldahl Nitrogen	0.71	mg/L	0.4	EPA 351.2
Total Iron	0.65	mg/L	0.05	EPA 200.7
Soluble Iron	0.54	mg/L	0.05	EPA 200.7
Total Potassium	3.0	mg/L	1.0	EPA 200.7
Soluble Potassium	1.7	mg/L	1.0	EPA 200.7
Total Zinc	0.17	mg/L	0.02	EPA 200.7
Soluble Zinc	0.17	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): 05/09/96 - 11:00
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 61TY-6
PROJECT ID: 61TY

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	2.0	NTU	0.1	EPA 180.1
Ammonia	3.1	mg/L	0.05	EPA 350.1
Nitrite	ND	mg/L	0.04	HACH 8507
Total Kjeldahl Nitrogen	2.8	mg/L	0.4	EPA 351.2
Total Iron	2.4	mg/L	0.05	EPA 200.7
Soluble Iron	1.8	mg/L	0.05	EPA 200.7
Total Potassium	14	mg/L	1.0	EPA 200.7
Soluble Potassium	13	mg/L	1.0	EPA 200.7
Total Zinc	0.05	mg/L	0.02	EPA 200.7
Soluble Zinc	0.13	mg/L	0.02	EPA 200.7
Chloromethane	ND	µg/L	100	SW 846 8240
Bromomethane	ND	µg/L	100	SW 846 8240
Vinyl chloride	180 D	µg/L	100	SW 846 8240
Chloroethane	ND	µg/L	100	SW 846 8240
Methylene chloride	ND	µg/L	100	SW 846 8240
Acetone	ND	µg/L	100	SW 846 8240
Carbon disulfide	ND	µg/L	100	SW 846 8240
1,1-Dichloroethene	ND	µg/L	100	SW 846 8240
1,1-Dichloroethane	ND	µg/L	100	SW 846 8240
1,2-Dichloroethylene (total)	570 D	µg/L	100	SW 846 8240
Chloroform	ND	µg/L	100	SW 846 8240
1,2-Dichloroethane	ND	µg/L	100	SW 846 8240
2-Butanone	ND	µg/L	100	SW 846 8240
1,1,1-Trichloroethane	ND	µg/L	100	SW 846 8240
Carbon tetrachloride	ND	µg/L	100	SW 846 8240
Bromodichloromethane	ND	µg/L	100	SW 846 8240
1,2-Dichloropropane	ND	µg/L	100	SW 846 8240
cis-1,3-Dichloropropene	ND	µg/L	100	SW 846 8240

* Analysis performed in the field.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-4
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 05/09/96 - 11:00
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 61TY-6

PROJECT ID: 61TY

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Trichloroethene	260 D	µg/L	100	SW 846 8240
Chlorodibromomethane	ND	µg/L	100	SW 846 8240
1,1,2-Trichloroethane	ND	µg/L	100	SW 846 8240
Benzene	ND	µg/L	100	SW 846 8240
trans-1,3-Dichloropropene	ND	µg/L	100	SW 846 8240
Bromoform	ND	µg/L	100	SW 846 8240
4-Methyl-2-pentanone	ND	µg/L	100	SW 846 8240
2-Hexanone	ND	µg/L	100	SW 846 8240
Tetrachloroethene	200 D	µg/L	100	SW 846 8240
Toluene	ND	µg/L	100	SW 846 8240
1,1,2,2-Tetrachloroethane	ND	µg/L	100	SW 846 8240
Chlorobenzene	ND	µg/L	100	SW 846 8240
Ethylbenzene	ND	µg/L	100	SW 846 8240
Styrene	ND	µg/L	100	SW 846 8240
m-Xylene	ND	µg/L	100	SW 846 8240
o/p-Xylene	ND	µg/L	100	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-4
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 05/09/96 - 11:00
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 61TY-6

PROJECT ID: 61TY

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	40	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): 05/09/96 - 11:00
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 61TY-6

PROJECT ID: 61TY

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): 05/08/96 - 05/09/96
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 61TY-7
PROJECT ID: 61TY

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	1.0	NTU	0.1	EPA 180.1
Ammonia	0.06	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	0.97	mg/L	0.05	EPA 200.7
Soluble Iron	0.87	mg/L	0.05	EPA 200.7
Total Potassium	3.6	mg/L	1.0	EPA 200.7
Soluble Potassium	1.3	mg/L	1.0	EPA 200.7
Total Zinc	0.09	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-6
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 05/09/96 - 13:40
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 61TY-8
PROJECT ID: 61TY

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	6.0	NTU	0.1	EPA 180.1
Ammonia	ND	mg/L	0.05	EPA 350.1
Nitrite	0.07	mg/L	0.04	HACH 8507
Total Kjeldahl Nitrogen	0.41	mg/L	0.4	EPA 351.2
Total Iron	2.9	mg/L	0.05	EPA 200.7
Soluble Iron	2.3	mg/L	0.05	EPA 200.7
Total Potassium	2.3	mg/L	1.0	EPA 200.7
Soluble Potassium	ND	mg/L	1.0	EPA 200.7
Total Zinc	ND	mg/L	0.02	EPA 200.7
Soluble Zinc	0.02	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): 05/09/96 - 13:40
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 61TY-8

PROJECT ID: 61TY

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): 05/09/96 - 13:40
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 61TY-8

PROJECT ID: 61TY

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): 05/09/96 - 13:40
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 61TY-8

PROJECT ID: 61TY

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): 05/09/96
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 61TY-9
PROJECT ID: 61TY

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	3.0	NTU	0.1	EPA 180.1
Ammonia	0.32	mg/L	0.05	EPA 350.1
Nitrite	0.05	mg/L	0.04	HACH 8507
Total Kjeldahl Nitrogen	3.5	mg/L	0.4	EPA 351.2
Total Iron	2.4	mg/L	0.05	EPA 200.7
Soluble Iron	1.8	mg/L	0.05	EPA 200.7
Total Potassium	14	mg/L	1.0	EPA 200.7
Soluble Potassium	15	mg/L	1.0	EPA 200.7
Total Zinc	0.05	mg/L	0.02	EPA 200.7
Soluble Zinc	0.08	mg/L	0.02	EPA 200.7
Chloromethane	ND	µg/L	100	SW 846 8240
Bromomethane	ND	µg/L	100	SW 846 8240
Vinyl chloride	200 D	µg/L	100	SW 846 8240
Chloroethane	ND	µg/L	100	SW 846 8240
Methylene chloride	ND	µg/L	100	SW 846 8240
Acetone	ND	µg/L	100	SW 846 8240
Carbon disulfide	ND	µg/L	100	SW 846 8240
1,1-Dichloroethene	ND	µg/L	100	SW 846 8240
1,1-Dichloroethane	ND	µg/L	100	SW 846 8240
1,2-Dichloroethylene (total)	590 D	µg/L	100	SW 846 8240
Chloroform	ND	µg/L	100	SW 846 8240
1,2-Dichloroethane	ND	µg/L	100	SW 846 8240
2-Butanone	ND	µg/L	100	SW 846 8240
1,1,1-Trichloroethane	ND	µg/L	100	SW 846 8240
Carbon tetrachloride	ND	µg/L	100	SW 846 8240
Bromodichloromethane	ND	µg/L	100	SW 846 8240
1,2-Dichloropropane	ND	µg/L	100	SW 846 8240
cis-1,3-Dichloropropene	ND	µg/L	100	SW 846 8240

* Analysis performed in the field.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BLIND DUPLICATE
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 05/09/96
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 61TY-9

PROJECT ID: 61TY

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Trichloroethene	260 D	µg/L	100	SW 846 8240
Chlorodibromomethane	ND	µg/L	100	SW 846 8240
1,1,2-Trichloroethane	ND	µg/L	100	SW 846 8240
Benzene	ND	µg/L	100	SW 846 8240
trans-1,3-Dichloropropene	ND	µg/L	100	SW 846 8240
Bromoform	ND	µg/L	100	SW 846 8240
4-Methyl-2-pentanone	ND	µg/L	100	SW 846 8240
2-Hexanone	ND	µg/L	100	SW 846 8240
Tetrachloroethene	200 D	µg/L	100	SW 846 8240
Toluene	ND	µg/L	100	SW 846 8240
1,1,2,2-Tetrachloroethane	ND	µg/L	100	SW 846 8240
Chlorobenzene	ND	µg/L	100	SW 846 8240
Ethylbenzene	ND	µg/L	100	SW 846 8240
Styrene	ND	µg/L	100	SW 846 8240
m-Xylene	ND	µg/L	100	SW 846 8240
o/p-Xylene	ND	µg/L	100	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): 05/09/96
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 61TY-9

PROJECT ID: 61TY

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	43	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): 05/09/96
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 61TY-9
PROJECT ID: 61TY

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): 05/09/96 - 9:00
SAMPLE TYPE: BAKER WATER

AES CLIENT ID: CTC
AES SAMPLE ID: 61TY-10
PROJECT ID: 61TY

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	1.0 **	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	0.08 **	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

* Analysis performed in the field.
** Positive results have been investigated and source of positive unknown.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: TRIP BLANK
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 05/09/96 - 9:00
SAMPLE TYPE: BAKER WATER

AES CLIENT ID: CTC
AES SAMPLE ID: 61TY-10
PROJECT ID: 61TY

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): 05/09/96 - 9:00
SAMPLE TYPE: BAKER WATER

AES CLIENT ID: CTC
AES SAMPLE ID: 61TY-10
PROJECT ID: 61TY

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): 05/09/96 - 9:00
SAMPLE TYPE: BAKER WATER

AES CLIENT ID: CTC
AES SAMPLE ID: 61TY-10

PROJECT ID: 61TY

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
SAMPLE ID: MW-2
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 05/10/96 - 10:20
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 61TY-11
PROJECT ID: 61TY

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	330.0	NTU	0.1	EPA 180.1
Nitrite	0.27	mg/L	0.04	HACH 8507
Total Iron	120	mg/L	0.05	EPA 200.7
Soluble Iron	0.15	mg/L	0.05	EPA 200.7
Total Potassium	3.2	mg/L	1.0	EPA 200.7
Soluble Potassium	ND	mg/L	1.0	EPA 200.7
Total Zinc	7.4	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

AES CLIENT ID: CTC
PROJECT ID: 61TY

ACCURACY

Analytical Parameter(s)	Method	Sample ID	Type	Percent Recovery
Ammonia	EPA 350.1	61TY-8	Matrix Spike	92
Nitrite	HACH 8507	61TY-8	Matrix Spike	80
Total Kjeldahl Nitrogen	EPA 351.2	61TY-8	Matrix Spike	70 *
Total Iron	EPA 200.7	61TY-8	Matrix Spike	115
Soluble Iron	EPA 200.7	61TY-8	Matrix Spike	99
Total Potassium	EPA 200.7	61TY-8	Matrix Spike	99
Soluble Potassium	EPA 200.7	61TY-8	Matrix Spike	104
Total Zinc	EPA 200.7	61TY-8	Matrix Spike	99
Soluble Zinc	EPA 200.7	61TY-8	Matrix Spike	99
1,1-Dichloroethene	SW 846 8240	61TY-8	Matrix Spike	90
Trichloroethene	SW 846 8240	61TY-8	Matrix Spike	98
Benzene	SW 846 8240	61TY-8	Matrix Spike	96
Toluene	SW 846 8240	61TY-8	Matrix Spike	98
Chlorobenzene	SW 846 8240	61TY-8	Matrix Spike	104
Phenol	SW 846 8270	61TY-8	Matrix Spike	56
2-Chlorophenol	SW 846 8270	61TY-8	Matrix Spike	78
1,4-Dichlorobenzene	SW 846 8270	61TY-8	Matrix Spike	88
n-Nitrosodi-n-propylamine	SW 846 8270	61TY-8	Matrix Spike	100
1,2,4-Trichlorobenzene	SW 846 8270	61TY-8	Matrix Spike	94
4-Chloro-3-methylphenol	SW 846 8270	61TY-8	Matrix Spike	88
2-Methylnaphthalene	SW 846 8270	61TY-8	Matrix Spike	75
Acenaphthene	SW 846 8270	61TY-8	Matrix Spike	94
4-Nitrophenol	SW 846 8270	61TY-8	Matrix Spike	48
2,4-Dinitrotoluene	SW 846 8270	61TY-8	Matrix Spike	106
Pentachlorophenol	SW 846 8270	61TY-8	Matrix Spike	84
Pyrene	SW 846 8270	61TY-8	Matrix Spike	106

* Low spike recovery due to sample matrix. Analytical spike recovery was 103%.

CLIENT: Ucar Carbon Company, Incorporated

AES CLIENT ID: CTC
PROJECT ID: 61TY

PRECISION

Analytical Parameter(s)	Method	Sample ID	Type	Relative % Difference
Ammonia	EPA 350.1	61TY-8	Duplicate	0.5
Nitrite	HACH 8507	61TY-8	Duplicate	0.5
Total Kjeldahl Nitrogen	EPA 351.2	61TY-8	Duplicate	14
Total Iron	EPA 200.7	61TY-8	Duplicate	6.7
Soluble Iron	EPA 200.7	61TY-8	Duplicate	3.0
Total Potassium	EPA 200.7	61TY-8	Duplicate	18
Soluble Potassium	EPA 200.7	61TY-8	Duplicate	NA
Total Zinc	EPA 200.7	61TY-8	Duplicate	NA
Soluble Zinc	EPA 200.7	61TY-8	Duplicate	14
Chloromethane	SW 846 8240	61TY-8	Duplicate	NA
Bromomethane	SW 846 8240	61TY-8	Duplicate	NA
Vinyl chloride	SW 846 8240	61TY-8	Duplicate	NA
Chloroethane	SW 846 8240	61TY-8	Duplicate	NA
Methylene chloride	SW 846 8240	61TY-8	Duplicate	NA
Acetone	SW 846 8240	61TY-8	Duplicate	NA
Carbon disulfide	SW 846 8240	61TY-8	Duplicate	NA
1,1-Dichloroethene	SW 846 8240	61TY-8	Duplicate	NA
1,1-Dichloroethane	SW 846 8240	61TY-8	Duplicate	NA
1,2-Dichloroethylene (total)	SW 846 8240	61TY-8	Duplicate	NA
Chloroform	SW 846 8240	61TY-8	Duplicate	NA
1,2-Dichloroethane	SW 846 8240	61TY-8	Duplicate	NA
2-Butanone	SW 846 8240	61TY-8	Duplicate	NA
1,1,1-Trichloroethane	SW 846 8240	61TY-8	Duplicate	NA
Carbon tetrachloride	SW 846 8240	61TY-8	Duplicate	NA
Bromodichloromethane	SW 846 8240	61TY-8	Duplicate	NA
1,2-Dichloropropane	SW 846 8240	61TY-8	Duplicate	NA
cis-1,3-Dichloropropene	SW 846 8240	61TY-8	Duplicate	NA
Trichloroethene	SW 846 8240	61TY-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: 61TY

PRECISION

Analytical Parameter(s)	Method	Sample ID	Type	Relative % Difference
Chlorodibromomethane	SW 846 8240	61TY-8	Duplicate	NA
1,1,2-Trichloroethane	SW 846 8240	61TY-8	Duplicate	NA
Benzene	SW 846 8240	61TY-8	Duplicate	NA
trans-1,3-Dichloropropene	SW 846 8240	61TY-8	Duplicate	NA
Bromoform	SW 846 8240	61TY-8	Duplicate	NA
4-Methyl-2-pentanone	SW 846 8240	61TY-8	Duplicate	NA
2-Hexanone	SW 846 8240	61TY-8	Duplicate	NA
Tetrachloroethene	SW 846 8240	61TY-8	Duplicate	NA
Toluene	SW 846 8240	61TY-8	Duplicate	NA
1,1,2,2-Tetrachloroethane	SW 846 8240	61TY-8	Duplicate	NA
Chlorobenzene	SW 846 8240	61TY-8	Duplicate	NA
Ethylbenzene	SW 846 8240	61TY-8	Duplicate	NA
Styrene	SW 846 8240	61TY-8	Duplicate	NA
m-Xylene	SW 846 8240	61TY-8	Duplicate	NA
o/p-Xylene	SW 846 8240	61TY-8	Duplicate	NA
Phenol	SW 846 8270	61TY-8	Duplicate	NA
bis(2-chloroethyl)ether	SW 846 8270	61TY-8	Duplicate	NA
2-Chlorophenol	SW 846 8270	61TY-8	Duplicate	NA
1,3-Dichlorobenzene	SW 846 8270	61TY-8	Duplicate	NA
1,4-Dichlorobenzene	SW 846 8270	61TY-8	Duplicate	NA
1,2-Dichlorobenzene	SW 846 8270	61TY-8	Duplicate	NA
2-Methylphenol	SW 846 8270	61TY-8	Duplicate	NA
bis(2-chloroisopropyl)ether	SW 846 8270	61TY-8	Duplicate	NA
4-Methylphenol	SW 846 8270	61TY-8	Duplicate	NA
n-Nitrosodi-n-propylamine	SW 846 8270	61TY-8	Duplicate	NA
Hexachloroethane	SW 846 8270	61TY-8	Duplicate	NA
Nitrobenzene	SW 846 8270	61TY-8	Duplicate	NA
Isophorone	SW 846 8270	61TY-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: 61TY

PRECISION

Analytical Parameter(s)	Method	Sample ID	Type	Relative % Difference
2-Nitrophenol	SW 846 8270	61TY-8	Duplicate	NA
2,4-Dimethylphenol	SW 846 8270	61TY-8	Duplicate	NA
bis(2-chloroethoxy)methane	SW 846 8270	61TY-8	Duplicate	NA
2,4-Dichlorophenol	SW 846 8270	61TY-8	Duplicate	NA
1,2,4-Trichlorobenzene	SW 846 8270	61TY-8	Duplicate	NA
Naphthalene	SW 846 8270	61TY-8	Duplicate	NA
4-Chloroaniline	SW 846 8270	61TY-8	Duplicate	NA
Hexachlorobutadiene	SW 846 8270	61TY-8	Duplicate	NA
4-Chloro-3-methylphenol	SW 846 8270	61TY-8	Duplicate	NA
2-Methylnaphthalene	SW 846 8270	61TY-8	Duplicate	NA
Hexachlorocyclopentadiene	SW 846 8270	61TY-8	Duplicate	NA
2,4,6-Trichlorophenol	SW 846 8270	61TY-8	Duplicate	NA
2,4,5-Trichlorophenol	SW 846 8270	61TY-8	Duplicate	NA
2-Chloronaphthalene	SW 846 8270	61TY-8	Duplicate	NA
2-Nitroaniline	SW 846 8270	61TY-8	Duplicate	NA
Dimethyl phthalate	SW 846 8270	61TY-8	Duplicate	NA
Acenaphthylene	SW 846 8270	61TY-8	Duplicate	NA
2,6-Dinitrotoluene	SW 846 8270	61TY-8	Duplicate	NA
3-Nitroaniline	SW 846 8270	61TY-8	Duplicate	NA
Acenaphthene	SW 846 8270	61TY-8	Duplicate	NA
2,4-Dinitrophenol	SW 846 8270	61TY-8	Duplicate	NA
4-Nitrophenol	SW 846 8270	61TY-8	Duplicate	NA
Dibenzofuran	SW 846 8270	61TY-8	Duplicate	NA
2,4-Dinitrotoluene	SW 846 8270	61TY-8	Duplicate	NA
Diethyl phthalate	SW 846 8270	61TY-8	Duplicate	NA
4-Chlorophenyl phenyl ether	SW 846 8270	61TY-8	Duplicate	NA
Fluorene	SW 846 8270	61TY-8	Duplicate	NA
4-Nitroaniline	SW 846 8270	61TY-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: 61TY

PRECISION

Analytical Parameter(s)	Method	Sample ID	Type	Relative % Difference
4,6-Dinitro-2-methylphenol	SW 846 8270	61TY-8	Duplicate	NA
n-Nitrosodiphenylamine	SW 846 8270	61TY-8	Duplicate	NA
4-Bromophenyl phenyl ether	SW 846 8270	61TY-8	Duplicate	NA
Hexachlorobenzene	SW 846 8270	61TY-8	Duplicate	NA
Pentachlorophenol	SW 846 8270	61TY-8	Duplicate	NA
Phenanthrene	SW 846 8270	61TY-8	Duplicate	NA
Anthracene	SW 846 8270	61TY-8	Duplicate	NA
Carbazole	SW 846 8270	61TY-8	Duplicate	NA
di-n-Butylphthalate	SW 846 8270	61TY-8	Duplicate	NA
Fluoranthene	SW 846 8270	61TY-8	Duplicate	NA
Pyrene	SW 846 8270	61TY-8	Duplicate	NA
Butyl benzyl phthalate	SW 846 8270	61TY-8	Duplicate	NA
3,3'-Dichlorobenzidine	SW 846 8270	61TY-8	Duplicate	NA
Benzo(a)anthracene	SW 846 8270	61TY-8	Duplicate	NA
Chrysene	SW 846 8270	61TY-8	Duplicate	NA
bis(2ethylhexyl)phthalate	SW 846 8270	61TY-8	Duplicate	NA
di-n-Octylphthalate	SW 846 8270	61TY-8	Duplicate	NA
Benzo(b)fluoranthene	SW 846 8270	61TY-8	Duplicate	NA
Benzo(k)fluoranthene	SW 846 8270	61TY-8	Duplicate	NA
Benzo(a)pyrene	SW 846 8270	61TY-8	Duplicate	NA
Indeno(1,2,3-cd)pyrene	SW 846 8270	61TY-8	Duplicate	NA
Dibenzo(a,h)anthracene	SW 846 8270	61TY-8	Duplicate	NA
Benzo(g,h,i)perylene	SW 846 8270	61TY-8	Duplicate	NA

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

Advanced Environmental Services

Sample Traceability Report

AES Job Code CTC

AES Job No. GITY

				SAMPLE PREP			ANALYSIS		
AES Sample No.	Sample Date	Group #	Run #	Method Number	Date	Analyst	Method Number	Date	Analyst
GITY-6	5-9-96	4000	27	—	—	—	8240	5-23-96	MM
-8	〃	〃	〃	—	—	—	〃	〃	〃
-9	〃	〃	〃	—	—	—	〃	〃	〃
-10	〃	〃	〃	—	—	—	〃	〃	〃

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

Advanced Environmental Services

Sample Traceability Report

AES Job Code CTCAT

AES Job No. 61TY

				SAMPLE PREP			ANALYSIS		
AES Sample No.	Sample Date	Group #	Run #	Method Number	Date	Analyst	Method Number	Date	Analyst
61TY-6	5/9/96	4300	30	3510 8270	5/16/96	CF	8270	5/20/96	
-8								5/20/96	
-9								5/20/96	
-10								5/29/96	

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

Advanced Environmental Services

Sample Traceability Report

AES Job Code CTC

AES Job No. 6ITY

				SAMPLE PREP			ANALYSIS		
AES Sample No.	Sample Date	Group #	Run #	Method Number	Date	Analyst	Method Number	Date	Analyst
6ITY-7	5-8-96	2005	20	–	–	–	350.1	5-9-96	LJ
6ITY-7	5-8-96	2027	23	351.2	5-13-96	LJ	351.2	5-14-96	LJ
6ITY-5-6, 8-12	5/9-10/96	2027	24	351.2	5-28-96	LJ	351.2	5-29-96	LJ
6ITY-2,5-7, 9,10	5/8-9/96	2120	20	~~8507~~ LJ	–	–	8507	5-9-96	LJ
6ITY-1,3,8,11	5/9-10/96	2120	20	–	–	–	8507	5-10-96	LJ
6ITY-4	5-9-96	2120	20	–	–	–	353.2	5-21-96	LJ

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

Advanced Environmental Services

Sample Traceability Report

AES Job Code CTC

AES Job No. 617

				SAMPLE PREP			ANALYSIS		
AES Sample No.	Sample Date	Group #	Run #	Method Number	Date	Analyst	Method Number	Date	Analyst
CITY 1-11	5/8,9,10/96	—	—	9.3	5/20	TK	200.7	5/30/96	AVP

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

CHAIN OF CUSTODY RECORD

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

PROJECT NAME: UCAR CARBON

SAMPLER'S SIGNATURE: [signature]

PROJECT I.D. #: 6174

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
5-8-96	15 15	BW-5	X		WATER		2	1					3	TOTAL & SOLUBLE METALS AMMONIA, NITRITE*, TKN

TOTAL NUMBER OF CONTAINERS: 3

* Nitrate recollected in unpres. bottle due to method revision. BJS.

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]	5-8-96	16:00	Tina Schubert
2. RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
3. RELINQUISHED BY:	DATE	TIME	RECEIVED BY:

CHAIN OF CUSTODY RECORD

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

PROJECT NAME: UCAR CARBON

SAMPLER'S SIGNATURE: [signature]

PROJECT I.D. #: 6174

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
5-9-96	11:00	BW-5 ✓	X		WATER	1							1	NITRITE
	10:10	MW-3	X			1	2	1					4	TOTAL Sol METALS, TKN
	10:40	BW-3 ✓	X			1	2	1					4	AMMONIA, NITRITE
	14:40	BW-2 ✓	X			1	2	1					4	
	11:00	BW-4 ✓	X			2	2	1			2		7	TOTAL Sol METALS, TKN
	—	BLIND DUPLICATE	X			2	2	1			2		7	AMMONIA, NITRITE, TCLV, TCLSV
	13:40	BW-6 ✓	X			5	6	3			6		20	
	9:00	TRIP BLANK	X		D.I. WATER	2	1	1			2		6	TOTAL METALS, TCLSV, TCLV
														AMMONIA, NITRITE, TKN
														Q.C. - BW-6

TOTAL NUMBER OF CONTAINERS 33

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]	5-9-96	16:15	Tina Schubert
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

PROJECT NAME: UCAR CARBON LANDFILL

PROJECT I.D. #: 61TY

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
5-10-96	9:30 AM	MW-1 ✓	✓		GROUND H_2O	1	2	1					4	AMMO, TOT. + SOL(**) METALS, TKN,
↓	10:00 AM	BW-1 ✓	✓		↓ ↓	1	2	1					4	NITE, TURB(*).
↓	10:20 AM	MW-2 (*) ✓	✓		↓ ↓	1	2						3	

TOTAL NUMBER OF CONTAINERS 11

(**) = FILTERED BY FIELD
(*) = DONE IN FIELD
(*) = DUE TO LACK OF RECHARGE, AMMO & TKN WERE NOT COLLE

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]	5-10-96	11:30 AM	[signature]
2. RELINQUISHED BY:			
3. RELINQUISHED BY:			