32N03.GW31

UCAR

UCAR CARBON COMPANY INC.

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

September 5, 1995

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

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

Dear Mr. Buechi:

I am enclosing a copy of the thirtieth (30) quarter's groundwater sampling analysis from the closed Republic Waste Management Facility. Bedrock well, BW-4-86, continues to demonstrate some slight volatile organic contamination in the less than one part per million range.

The following will summarize the positive organic parameters:

Contaminate	Conc. 30th Qtr. ppb.	Mean Conc. ppb.	Range ppb
Trans-1,2-Dichlorethene	290	377	6-1000
Trichloroethene	280	300	30-740
Tetrachloroethene	170	257	72-440
Hexachlorobutadiene	29	51	10-160
Vinyl Chloride	92	95	29-300

UCAR Carbon Company Inc. continues to maintain the position that this contamination at well, BW-4-86 is not related to the closed Republic Waste Management Facility given the fact that

downgradient bedrock well, BW-6-86, continues to show no similar contamination.

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

Very truly yours,

A.C. Ogg
Site Manager

A.C. Ogg
nm
enc.

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

UCAR CARBON COMPANY, INCORPORATED

REPUBLIC WASTE MANAGEMENT FACILITY

POST CLOSURE MONITORING PROGRAM

QUARTERLY REPORT

Prepared By:

ADVANCED ENVIRONMENTAL SERVICES INC.

"A Company Dedicated to Honesty, Quality and Service"

August 28, 1995
REF: CTC5202/100B

QA/QC VERIFICATION FOR PROJECT ID 5202

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.

Christopher M. Smith

Metals Department

Linda A. Fatka

Inorganic Chemistry

Susan Sorock

Organic Chemistry

Field Services

W. Joseph McDougall

Quality Control

Bonnie J. Simpson

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

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

QUARTERLY GROUNDWATER MONITORING - WELL INFORMATION
August 7, 1995 thru August 9, 1995

UCAR CARBON COMPANY, INC.

Hyde Park Boulevard
Niagara Falls, New York

AES Code: CTC **Project I.D. # 52O2**

Monitoring Well I.D.	Evacuation Date	Top of Inner Casing Elevation (ft.)	Monitoring Well Diameter	Water Level (ft.)	Water Elevation (ft.)	Bottom of Well (ft.)	Volume of Standing Water (gallons)	Volume of Evacuated Water (gallons)	Recharge Rate
BW-1	8/9/95	610.72	4	18.34	592.38	28.85	6.86	21.0	C
BW-2	8/9/95	608.43	4	15.72	592.71	26.12	6.79	21.0	C
BW-3	8/7/95	604.72	4	14.88	589.84	22.91	5.24	20.0	C
BW-4	8/7/95	607.08	4	14.82	592.26	22.69	5.14	16.0	C
BW-5	8/8/95	603.33	4	13.08	590.25	28.80	10.26	31.0	C
BW-6	8/8/95	607.04	4	14.64	592.40	25.15	6.86	23.0	C
MW-1	8/8/95	609.43	2	13.07	596.36	23.40	1.69	1.75 (Dry)	S
MW-2	8/8/95	607.54	2	22.55	584.99	24.61	0.34	.85 (DRY)	VS
MW-3	8/8/95	601.61	2	12.60	589.01	16.11	0.57	2.0	R
OW-1 SOUTH	8/9/95	608.81	2	8.21	600.60	8.70	0.08	NR	N/A
OW-2 NORTH	8/9/95	607.06	2	7.84	599.22	9.74	0.31	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.

8-17-95
Field Technician Date

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

QUARTERLY GROUNDWATER MONITORING - FIELD PARAMETER INFORMATION
August 7, 1995 thru August 9, 1995

UCAR CARBON COMPANY, INC.

Hyde Park Boulevard
Niagara Falls, New York

AES Code: CTC **Project I.D. #52O2**

Monitoring Well I.D.	Sampling Date	Sampling Time	Water Level (ft.)	Turbidity (NTU)	Filter Time	Field Comments/Observations
BW-1	8/9/95	2:30 PM	18.56	13.0	3:30 PM	Clear.
BW-2	8/9/95	2:50 PM	16.18	20.00	3:20 PM	Clear with a odor.
BW-3	8/7/95	2:00 PM	14.89	3.0	3:10 PM	Clear.
BW-4	8/7/95	2:30 PM	15.01	205.00	3:15 PM	Clear with black and orange solids, oil and grease sheen, and odor.
BW-5	8/8/95	2:20 PM	13.15	3.70	3:45 PM	Clear.
BW-6	8/8/95	3:15 PM	19.14	77.0	3:50 PM	Clear.
MW-1	8/9/95	2:35 PM	13.25	44.0	3:00 PM	Slightly cloudy.
MW-2**	8/9/95	2:20 PM	23.14	540.00	3:25 PM	Very cloudy orange.
MW-3	8/7/95	3:00 PM	15.50	1009	3:30 PM	Cloudy with settling solids.
OW-1 South	8/9/95	2:50 PM	8.21	NA	NA	Required to take water elevation only.
OW-2 North	8/9/95	2:53 PM	7.84	NA	NA	Required to take water elevation only.
Blind Dup	8/7/95	2:30 PM	N/A	201.00	3:15 PM	Clear with black and orange solids, oil and grease sheen, and odor.
Trip Blank	8/8/95	1:35 PM	NA	2.70	NA	Deionized Water

** Insufficient volume and recharge rate to collect for Ammonia, TKN, and Nitrate. Sufficient volume did exist to collect Total and Soluble Metals, & Turbidity.
The Blind Duplicate site is BW-4.

Field Technician — 8-17-95 — Date

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: MW-1
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 08/09/95
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 5202-1

PROJECT ID: 5202

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	44	NTU	0.1	EPA 180.1
Ammonia	6.2	mg/L	0.05	EPA 350.1
Nitrite	BQL	mg/L	0.05	EPA 353.2
Kjeldahl Nitrogen,Total	10	mg/L	0.1	EPA 351.2
Iron, Total	8.1	mg/L	0.05	EPA 200.7
Iron, Soluble	0.06	mg/L	0.05	EPA 200.7
Potassium, Total	36	mg/L	1.0	EPA 200.7
Potassium, Soluble	36	mg/L	1.0	EPA 200.7
Zinc, Total	0.13	mg/L	0.02	EPA 200.7
Zinc, Soluble	0.07	mg/L	0.02	EPA 200.7

* Analysis performed in field.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: MW-3
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 08/07/95
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 5202-2
PROJECT ID: 5202

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	1009	NTU	0.1	EPA 180.1
Ammonia	BQL	mg/L	0.05	EPA 350.1
Nitrite	BQL	mg/L	0.05	EPA 353.2
Kjeldahl Nitrogen,Total	BQL	mg/L	0.1	EPA 351.2
Iron, Total	56	mg/L	0.05	EPA 200.7
Iron, Soluble	0.16	mg/L	0.05	EPA 200.7
Potassium, Total	4.9	mg/L	1.0	EPA 200.7
Potassium, Soluble	BQL	mg/L	1.0	EPA 200.7
Zinc, Total	0.28	mg/L	0.02	EPA 200.7
Zinc, Soluble	0.11	mg/L	0.02	EPA 200.7

* Analysis performed in field.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-1
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 08/09/95
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 5202-3
PROJECT ID: 5202

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	13	NTU	0.1	EPA 180.1
Ammonia	0.69	mg/L	0.05	EPA 350.1
Nitrite	BQL	mg/L	0.05	EPA 353.2
Kjeldahl Nitrogen,Total	1.4	mg/L	0.1	EPA 351.2
Iron, Total	1.2	mg/L	0.05	EPA 200.7
Iron, Soluble	0.94	mg/L	0.05	EPA 200.7
Potassium, Total	4.8	mg/L	1.0	EPA 200.7
Potassium, Soluble	4.5	mg/L	1.0	EPA 200.7
Zinc, Total	1.0	mg/L	0.02	EPA 200.7
Zinc, Soluble	0.43	mg/L	0.02	EPA 200.7

* Analysis performed in field.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-2
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 08/09/95
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 5202-4

PROJECT ID: 5202

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	20	NTU	0.1	EPA 180.1
Ammonia	1.2	mg/L	0.05	EPA 350.1
Nitrite	BQL	mg/L	0.05	EPA 353.2
Kjeldahl Nitrogen,Total	1.6	mg/L	0.1	EPA 351.2
Iron, Total	3.9	mg/L	0.05	EPA 200.7
Iron, Soluble	2.9	mg/L	0.05	EPA 200.7
Potassium, Total	5.5	mg/L	1.0	EPA 200.7
Potassium, Soluble	5.5	mg/L	1.0	EPA 200.7
Zinc, Total	1.3	mg/L	0.02	EPA 200.7
Zinc, Soluble	0.14	mg/L	0.02	EPA 200.7

* Analysis performed in field.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-3
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 08/07/95
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 5202-5
PROJECT ID: 5202

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	3	NTU	0.1	EPA 180.1
Ammonia	0.70	mg/L	0.05	EPA 350.1
Nitrite	BQL	mg/L	0.05	EPA 353.2
Kjeldahl Nitrogen,Total	1.5	mg/L	0.1	EPA 351.2
Iron, Total	0.92	mg/L	0.05	EPA 200.7
Iron, Soluble	0.73	mg/L	0.05	EPA 200.7
Potassium, Total	3.6 **	mg/L	1.0	EPA 200.7
Potassium, Soluble	4.2 **	mg/L	1.0	EPA 200.7
Zinc, Total	0.04	mg/L	0.02	EPA 200.7
Zinc, Soluble	0.16	mg/L	0.02	EPA 200.7

* Analysis performed in field.
** The soluble result is higher than the total result, but within 20% relative percent difference. The difference is insignificant.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-4
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 08/07/95
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 5202-6

PROJECT ID: 5202

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	205	NTU	0.1	EPA 180.1
Ammonia	4.9	mg/L	0.05	EPA 350.1
Nitrite	BQL	mg/L	0.05	EPA 353.2
Kjeldahl Nitrogen,Total	7.6	mg/L	0.1	EPA 351.2
Iron, Total	36	mg/L	0.05	EPA 200.7
Iron, Soluble	3.6	mg/L	0.05	EPA 200.7
Potassium, Total	22	mg/L	1.0	EPA 200.7
Potassium, Soluble	20	mg/L	1.0	EPA 200.7
Zinc, Total	12	mg/L	0.02	EPA 200.7
Zinc, Soluble	0.78	mg/L	0.02	EPA 200.7
Chloromethane	BQL	µg/L	10	SW 846 8240
Bromomethane	BQL	µg/L	10	SW 846 8240
Vinyl chloride	92	µg/L	10	SW 846 8240
Chloroethane	BQL	µg/L	10	SW 846 8240
Methylene chloride	BQL	µg/L	10	SW 846 8240
Acetone	BQL	µg/L	10	SW 846 8240
Carbon disulfide	BQL	µg/L	10	SW 846 8240
1,1-Dichloroethene	BQL	µg/L	10	SW 846 8240
1,1-Dichloroethane	BQL	µg/L	10	SW 846 8240
trans-1,2-Dichloroethene	290	µg/L	10	SW 846 8240
Chloroform	BQL	µg/L	10	SW 846 8240
1,2-Dichloroethane	BQL	µg/L	10	SW 846 8240
2-Butanone	BQL	µg/L	10	SW 846 8240
1,1,1-Trichloroethane	BQL	µg/L	10	SW 846 8240
Carbon tetrachloride	BQL	µg/L	10	SW 846 8240
Vinyl acetate	BQL	µg/L	10	SW 846 8240
Bromodichloromethane	BQL	µg/L	10	SW 846 8240
1,2-Dichloropropane	BQL	µg/L	10	SW 846 8240

* Analysis performed in field.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-4
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 08/07/95
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 5202-6

PROJECT ID: 5202

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
cis-1,3-Dichloropropene	BQL	µg/L	10	SW 846 8240
Trichloroethene	280	µg/L	10	SW 846 8240
Benzene	BQL	µg/L	10	SW 846 8240
trans-1,3-Dichloropropene	BQL	µg/L	10	SW 846 8240
Chlorodibromomethane	BQL	µg/L	10	SW 846 8240
1,1,2-Trichloroethane	BQL	µg/L	10	SW 846 8240
Bromoform	BQL	µg/L	10	SW 846 8240
4-Methyl-2-pentanone	BQL	µg/L	10	SW 846 8240
2-Hexanone	BQL	µg/L	10	SW 846 8240
Tetrachloroethene	170	µg/L	10	SW 846 8240
1,1,2,2-Tetrachloroethane	BQL	µg/L	10	SW 846 8240
Toluene	BQL	µg/L	10	SW 846 8240
Chlorobenzene	BQL	µg/L	10	SW 846 8240
Ethylbenzene	BQL	µg/L	10	SW 846 8240
Styrene	BQL	µg/L	10	SW 846 8240
m-Xylene	BQL	µg/L	10	SW 846 8240
o/p-Xylene	BQL	µg/L	10	SW 846 8240
bis(2-chloroethyl)ether	BQL	µg/L	10	SW 846 8270
1,3-Dichlorobenzene	BQL	µg/L	10	SW 846 8270
1,4-Dichlorobenzene	BQL	µg/L	10	SW 846 8270
Benzyl alcohol	BQL	µg/L	10	SW 846 8270
1,2-Dichlorobenzene	BQL	µg/L	10	SW 846 8270
bis(2-chloroisopropyl)ether	BQL	µg/L	10	SW 846 8270
n-Nitrosodi-n-propylamine	BQL	µg/L	10	SW 846 8270
Hexachloroethane	BQL	µg/L	10	SW 846 8270
Nitrobenzene	BQL	µg/L	10	SW 846 8270
Isophorone	BQL	µg/L	10	SW 846 8270
bis(2-chloroethoxy)methane	BQL	µg/L	10	SW 846 8270
1,2,4-Trichlorobenzene	BQL	µg/L	10	SW 846 8270

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-4
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 08/07/95
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 5202-6

PROJECT ID: 5202

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Naphthalene	BQL	µg/L	10	SW 846 8270
4-Chloroaniline	BQL	µg/L	10	SW 846 8270
Hexachlorobutadiene	29	µg/L	10	SW 846 8270
2-Methylnaphthalene	BQL	µg/L	10	SW 846 8270
Hexachlorocyclopentadiene	BQL	µg/L	10	SW 846 8270
2-Chloronaphthalene	BQL	µg/L	10	SW 846 8270
2-Nitroaniline	BQL	µg/L	10	SW 846 8270
Dimethyl phthalate	BQL	µg/L	10	SW 846 8270
2,6-Dinitrotoluene	BQL	µg/L	10	SW 846 8270
Acenaphthylene	BQL	µg/L	10	SW 846 8270
3-Nitroaniline	BQL	µg/L	10	SW 846 8270
Acenaphthene	BQL	µg/L	10	SW 846 8270
2,4-Dinitrotoluene	BQL	µg/L	10	SW 846 8270
Dibenzofuran	BQL	µg/L	10	SW 846 8270
Diethyl phthalate	BQL	µg/L	10	SW 846 8270
4-Chlorophenyl phenyl ether	BQL	µg/L	10	SW 846 8270
Fluorene	BQL	µg/L	10	SW 846 8270
4-Nitroaniline	BQL	µg/L	10	SW 846 8270
n-Nitrosodiphenylamine	BQL	µg/L	10	SW 846 8270
4-Bromophenyl phenyl ether	BQL	µg/L	10	SW 846 8270
Hexachlorobenzene	BQL	µg/L	10	SW 846 8270
Phenanthrene	BQL	µg/L	10	SW 846 8270
Anthracene	BQL	µg/L	10	SW 846 8270
di-n-Butylphthalate	BQL	µg/L	10	SW 846 8270
Fluoranthene	BQL	µg/L	10	SW 846 8270
Pyrene	BQL	µg/L	10	SW 846 8270
Butyl benzyl phthalate	BQL	µg/L	10	SW 846 8270
3,3'-Dichlorobenzidine	BQL	µg/L	10	SW 846 8270
bis(2ethylhexyl)phthalate	BQL	µg/L	10	SW 846 8270

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-4
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 08/07/95
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 5202-5

PROJECT ID: 5202

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

.CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-5
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 08/08/95
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 5202-7

PROJECT ID: 5202

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	4	NTU	0.1	EPA 180.1
Ammonia	0.18	mg/L	0.05	EPA 350.1
Nitrite	BQL	mg/L	0.05	EPA 353.2
Kjeldahl Nitrogen,Total	0.52	mg/L	0.1	EPA 351.2
Iron, Total	1.2	mg/L	0.05	EPA 200.7
Iron, Soluble	1.1	mg/L	0.05	EPA 200.7
Potassium, Total	2.9 **	mg/L	1.0	EPA 200.7
Potassium, Soluble	3.0 **	mg/L	1.0	EPA 200.7
Zinc, Total	0.17	mg/L	0.02	EPA 200.7
Zinc, Soluble	0.22	mg/L	0.02	EPA 200.7

* Analysis performed in field.
** The solube result is higher than the total result, but within 20% relative percent difference.
The difference is insignificant.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-6
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 08/08/95
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 5202-8

PROJECT ID: 5202

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	77	NTU	0.1	EPA 180.1
Ammonia	0.10	mg/L	0.05	EPA 350.1
Nitrite	BQL	mg/L	0.05	EPA 353.2
Kjeldahl Nitrogen,Total	0.30	mg/L	0.1	EPA 351.2
Iron, Total	6.9	mg/L	0.05	EPA 200.7
Iron, Soluble	2.9	mg/L	0.05	EPA 200.7
Potassium, Total	BQL	mg/L	1.0	EPA 200.7
Potassium, Soluble	BQL	mg/L	1.0	EPA 200.7
Zinc, Total	0.04	mg/L	0.02	EPA 200.7
Zinc, Soluble	0.15	mg/L	0.02	EPA 200.7
Chloromethane	BQL	µg/L	10	SW 846 8240
Bromomethane	BQL	µg/L	10	SW 846 8240
Vinyl chloride	BQL	µg/L	10	SW 846 8240
Chloroethane	BQL	µg/L	10	SW 846 8240
Methylene chloride	BQL	µg/L	10	SW 846 8240
Acetone	BQL	µg/L	10	SW 846 8240
Carbon disulfide	BQL	µg/L	10	SW 846 8240
1,1-Dichloroethene	BQL	µg/L	10	SW 846 8240
1,1-Dichloroethane	BQL	µg/L	10	SW 846 8240
trans-1,2-Dichloroethene	BQL	µg/L	10	SW 846 8240
Chloroform	BQL	µg/L	10	SW 846 8240
1,2-Dichloroethane	BQL	µg/L	10	SW 846 8240
2-Butanone	BQL	µg/L	10	SW 846 8240
1,1,1-Trichloroethane	BQL	µg/L	10	SW 846 8240
Carbon tetrachloride	BQL	µg/L	10	SW 846 8240
Vinyl acetate	BQL	µg/L	10	SW 846 8240
Bromodichloromethane	BQL	µg/L	10	SW 846 8240
1,2-Dichloropropane	BQL	µg/L	10	SW 846 8240

* Analysis performed in field.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-6
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 08/08/95
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 5202-8

PROJECT ID: 5202

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

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-6
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 08/08/95
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 5202-8

PROJECT ID: 5202

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Naphthalene	BQL	µg/L	10	SW 846 8270
4-Chloroaniline	BQL	µg/L	10	SW 846 8270
Hexachlorobutadiene	BQL	µg/L	10	SW 846 8270
2-Methylnaphthalene	BQL	µg/L	10	SW 846 8270
Hexachlorocyclopentadiene	BQL	µg/L	10	SW 846 8270
2-Chloronaphthalene	BQL	µg/L	10	SW 846 8270
2-Nitroaniline	BQL	µg/L	10	SW 846 8270
Dimethyl phthalate	BQL	µg/L	10	SW 846 8270
2,6-Dinitrotoluene	BQL	µg/L	10	SW 846 8270
Acenaphthylene	BQL	µg/L	10	SW 846 8270
3-Nitroaniline	BQL	µg/L	10	SW 846 8270
Acenaphthene	BQL	µg/L	10	SW 846 8270
2,4-Dinitrotoluene	BQL	µg/L	10	SW 846 8270
Dibenzofuran	BQL	µg/L	10	SW 846 8270
Diethyl phthalate	BQL	µg/L	10	SW 846 8270
4-Chlorophenyl phenyl ether	BQL	µg/L	10	SW 846 8270
Fluorene	BQL	µg/L	10	SW 846 8270
4-Nitroaniline	BQL	µg/L	10	SW 846 8270
n-Nitrosodiphenylamine	BQL	µg/L	10	SW 846 8270
4-Bromophenyl phenyl ether	BQL	µg/L	10	SW 846 8270
Hexachlorobenzene	BQL	µg/L	10	SW 846 8270
Phenanthrene	BQL	µg/L	10	SW 846 8270
Anthracene	BQL	µg/L	10	SW 846 8270
di-n-Butylphthalate	BQL	µg/L	10	SW 846 8270
Fluoranthene	BQL	µg/L	10	SW 846 8270
Pyrene	BQL	µg/L	10	SW 846 8270
Butyl benzyl phthalate	BQL	µg/L	10	SW 846 8270
3,3'-Dichlorobenzidine	BQL	µg/L	10	SW 846 8270
bis(2ethylhexyl)phthalate	BQL	µg/L	10	SW 846 8270

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-6
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 08/08/95
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 5202-8

PROJECT ID: 5202

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

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BLIND DUPLICATE
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 08/07/95
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 5202-9

PROJECT ID: 5202

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	201	NTU	0.1	EPA 180.1
Ammonia	4.9	mg/L	0.05	EPA 350.1
Nitrite	BQL	mg/L	0.05	EPA 353.2
Kjeldahl Nitrogen,Total	7.3	mg/L	0.1	EPA 351.2
Iron, Total	35	mg/L	0.05	EPA 200.7
Iron, Soluble	3.6	mg/L	0.05	EPA 200.7
Potassium, Total	22	mg/L	1.0	EPA 200.7
Potassium, Soluble	21	mg/L	1.0	EPA 200.7
Zinc, Total	11	mg/L	0.02	EPA 200.7
Zinc, Soluble	0.73	mg/L	0.02	EPA 200.7
Chloromethane	BQL	µg/L	20 **	SW 846 8240
Bromomethane	BQL	µg/L	20 **	SW 846 8240
Vinyl chloride	84	µg/L	20 **	SW 846 8240
Chloroethane	BQL	µg/L	20 **	SW 846 8240
Methylene chloride	BQL	µg/L	20 **	SW 846 8240
Acetone	BQL	µg/L	20 **	SW 846 8240
Carbon disulfide	BQL	µg/L	20 **	SW 846 8240
1,1-Dichloroethene	BQL	µg/L	20 **	SW 846 8240
1,1-Dichloroethane	BQL	µg/L	20 **	SW 846 8240
trans-1,2-Dichloroethene	310	µg/L	20 **	SW 846 8240
Chloroform	BQL	µg/L	20 **	SW 846 8240
1,2-Dichloroethane	BQL	µg/L	20 **	SW 846 8240
2-Butanone	BQL	µg/L	20 **	SW 846 8240
1,1,1-Trichloroethane	BQL	µg/L	20 **	SW 846 8240
Carbon tetrachloride	BQL	µg/L	20 **	SW 846 8240
Vinyl acetate	BQL	µg/L	20 **	SW 846 8240
Bromodichloromethane	BQL	µg/L	20 **	SW 846 8240
1,2-Dichloropropane	BQL	µg/L	20 **	SW 846 8240

* Analysis performed in field.
** High limit due to sample matrix; dilution was required.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BLIND DUPLICATE
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 08/07/95
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 5202-9

PROJECT ID: 5202

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
cis-1,3-Dichloropropene	BQL	µg/L	20 *	SW 846 8240
Trichloroethene	310	µg/L	20 *	SW 846 8240
Benzene	BQL	µg/L	20 *	SW 846 8240
trans-1,3-Dichloropropene	BQL	µg/L	20 *	SW 846 8240
Chlorodibromomethane	BQL	µg/L	20 *	SW 846 8240
1,1,2-Trichloroethane	BQL	µg/L	20 *	SW 846 8240
Bromoform	BQL	µg/L	20 *	SW 846 8240
4-Methyl-2-pentanone	BQL	µg/L	20 *	SW 846 8240
2-Hexanone	BQL	µg/L	20 *	SW 846 8240
Tetrachloroethene	190	µg/L	20 *	SW 846 8240
1,1,2,2-Tetrachloroethane	BQL	µg/L	20 *	SW 846 8240
Toluene	BQL	µg/L	20 *	SW 846 8240
Chlorobenzene	BQL	µg/L	20 *	SW 846 8240
Ethylbenzene	BQL	µg/L	20 *	SW 846 8240
Styrene	BQL	µg/L	20 *	SW 846 8240
m-Xylene	BQL	µg/L	20 *	SW 846 8240
o/p-Xylene	BQL	µg/L	20 *	SW 846 8240
bis(2-chloroethyl)ether	BQL	µg/L	10	SW 846 8270
1,3-Dichlorobenzene	BQL	µg/L	10	SW 846 8270
1,4-Dichlorobenzene	BQL	µg/L	10	SW 846 8270
Benzyl alcohol	BQL	µg/L	10	SW 846 8270
1,2-Dichlorobenzene	BQL	µg/L	10	SW 846 8270
bis(2-chloroisopropyl)ether	BQL	µg/L	10	SW 846 8270
n-Nitrosodi-n-propylamine	BQL	µg/L	10	SW 846 8270
Hexachloroethane	BQL	µg/L	10	SW 846 8270
Nitrobenzene	BQL	µg/L	10	SW 846 8270
Isophorone	BQL	µg/L	10	SW 846 8270
bis(2-chloroethoxy)methane	BQL	µg/L	10	SW 846 8270

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

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BLIND DUPLICATE
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 08/07/95
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 5202-9

PROJECT ID: 5202

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
1,2,4-Trichlorobenzene	BQL	µg/L	10	SW 846 8270
Naphthalene	BQL	µg/L	10	SW 846 8270
4-Chloroaniline	BQL	µg/L	10	SW 846 8270
Hexachlorobutadiene	56	µg/L	10	SW 846 8270
2-Methylnaphthalene	BQL	µg/L	10	SW 846 8270
Hexachlorocyclopentadiene	BQL	µg/L	10	SW 846 8270
2-Chloronaphthalene	BQL	µg/L	10	SW 846 8270
2-Nitroaniline	BQL	µg/L	10	SW 846 8270
Dimethyl phthalate	BQL	µg/L	10	SW 846 8270
2,6-Dinitrotoluene	BQL	µg/L	10	SW 846 8270
Acenaphthylene	BQL	µg/L	10	SW 846 8270
3-Nitroaniline	BQL	µg/L	10	SW 846 8270
Acenaphthene	BQL	µg/L	10	SW 846 8270
2,4-Dinitrotoluene	BQL	µg/L	10	SW 846 8270
Dibenzofuran	BQL	µg/L	10	SW 846 8270
Diethyl phthalate	BQL	µg/L	10	SW 846 8270
4-Chlorophenyl phenyl ether	BQL	µg/L	10	SW 846 8270
Fluorene	BQL	µg/L	10	SW 846 8270
4-Nitroaniline	BQL	µg/L	10	SW 846 8270
n-Nitrosodiphenylamine	BQL	µg/L	10	SW 846 8270
4-Bromophenyl phenyl ether	BQL	µg/L	10	SW 846 8270
Hexachlorobenzene	BQL	µg/L	10	SW 846 8270
Phenanthrene	BQL	µg/L	10	SW 846 8270
Anthracene	BQL	µg/L	10	SW 846 8270
di-n-Butylphthalate	BQL	µg/L	10	SW 846 8270
Fluoranthene	BQL	µg/L	10	SW 846 8270
Pyrene	BQL	µg/L	10	SW 846 8270
Butyl benzyl phthalate	BQL	µg/L	10	SW 846 8270
3,3'-Dichlorobenzidine	BQL	µg/L	10	SW 846 8270

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BLIND DUPLICATE
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 08/07/95
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 5202-9

PROJECT ID: 5202

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

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: TRIP BLANK *
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 08/08/95
SAMPLE TYPE: BAKER WATER

AES CLIENT ID: CTC
AES SAMPLE ID: 5202-10
PROJECT ID: 5202

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity **	2.7	NTU	0.1	EPA 180.1
Ammonia	BQL	mg/L	0.05	EPA 350.1
Nitrite	BQL	mg/L	0.05	EPA 353.2
Kjeldahl Nitrogen,Total	BQL	mg/L	0.1	EPA 351.2
Iron, Total	BQL	mg/L	0.05	EPA 200.7
Potassium, Total	BQL	mg/L	1.0	EPA 200.7
Zinc, Total	0.02	mg/L	0.02	EPA 200.7
Chloromethane	BQL	µg/L	10	SW 846 8240
Bromomethane	BQL	µg/L	10	SW 846 8240
Vinyl chloride	BQL	µg/L	10	SW 846 8240
Chloroethane	BQL	µg/L	10	SW 846 8240
Methylene chloride	BQL	µg/L	10	SW 846 8240
Acetone	BQL	µg/L	10	SW 846 8240
Carbon disulfide	BQL	µg/L	10	SW 846 8240
1,1-Dichloroethene	BQL	µg/L	10	SW 846 8240
1,1-Dichloroethane	BQL	µg/L	10	SW 846 8240
trans-1,2-Dichloroethene	BQL	µg/L	10	SW 846 8240
Chloroform	BQL	µg/L	10	SW 846 8240
1,2-Dichloroethane	BQL	µg/L	10	SW 846 8240
2-Butanone	BQL	µg/L	10	SW 846 8240
1,1,1-Trichloroethane	BQL	µg/L	10	SW 846 8240
Carbon tetrachloride	BQL	µg/L	10	SW 846 8240
Vinyl acetate	BQL	µg/L	10	SW 846 8240
Bromodichloromethane	BQL	µg/L	10	SW 846 8240
1,2-Dichloropropane	BQL	µg/L	10	SW 846 8240
cis-1,3-Dichloropropene	BQL	µg/L	10	SW 846 8240
Trichloroethene	BQL	µg/L	10	SW 846 8240
Benzene	BQL	µg/L	10	SW 846 8240

* Due to laboratory error, no trip blank data is available for the semi-volatile fraction.
** Analysis performed in the field.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: TRIP BLANK
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 08/08/95
SAMPLE TYPE: BAKER WATER

AES CLIENT ID: CTC
AES SAMPLE ID: 5202-10

PROJECT ID: 5202

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
trans-1,3-Dichloropropene	BQL	µg/L	10	SW 846 8240
Chlorodibromomethane	BQL	µg/L	10	SW 846 8240
1,1,2-Trichloroethane	BQL	µg/L	10	SW 846 8240
Bromoform	BQL	µg/L	10	SW 846 8240
4-Methyl-2-pentanone	BQL	µg/L	10	SW 846 8240
2-Hexanone	BQL	µg/L	10	SW 846 8240
Tetrachloroethene	BQL	µg/L	10	SW 846 8240
1,1,2,2-Tetrachloroethane	BQL	µg/L	10	SW 846 8240
Toluene	BQL	µg/L	10	SW 846 8240
Chlorobenzene	BQL	µg/L	10	SW 846 8240
Ethylbenzene	BQL	µg/L	10	SW 846 8240
Styrene	BQL	µg/L	10	SW 846 8240
m-Xylene	BQL	µg/L	10	SW 846 8240
o/p-Xylene	BQL	µg/L	10	SW 846 8240

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: MW-2
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 08/09/95
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 5202-11
PROJECT ID: 5202

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	44	NTU	0.1	EPA 180.1
Iron, Total	257	mg/L	0.05	EPA 200.7
Iron, Soluble	0.18	mg/L	0.05	EPA 200.7
Potassium, Total	2.6	mg/L	1.0	EPA 200.7
Potassium, Soluble	2.0	mg/L	1.0	EPA 200.7
Zinc, Total	6.3	mg/L	0.02	EPA 200.7
Zinc, Soluble	0.02	mg/L	0.02	EPA 200.7

* Analysis performed in field.

CLIENT: Ucar Carbon Company, Incorporated

AES CLIENT ID: CTC
PROJECT ID: 5202

ACCURACY

Analytical Parameter(s)	Method	Sample ID	Type	Percent Recovery
Ammonia	EPA 350.1	5202-8	Matrix Spike	100
Nitrite	EPA 353.2	5202-8	Matrix Spike	104
Kjeldahl Nitrogen,Total	EPA 351.2	5202-8	Matrix Spike	101
Iron, Total	EPA 200.7	5202-8	Matrix Spike	84
Iron, Soluble	EPA 200.7	5202-8	Matrix Spike	97
Potassium, Total	EPA 200.7	5202-8	Matrix Spike	97
Potassium, Soluble	EPA 200.7	5202-8	Matrix Spike	96
Zinc, Total	EPA 200.7	5202-8	Matrix Spike	91
Zinc, Soluble	EPA 200.7	5202-8	Matrix Spike	82
1,1-Dichloroethene	SW 846 8240	5202-8	Matrix Spike	75
Trichloroethene	SW 846 8240	5202-8	Matrix Spike	94
Benzene	SW 846 8240	5202-8	Matrix Spike	86
Toluene	SW 846 8240	5202-8	Matrix Spike	93
Chlorobenzene	SW 846 8240	5202-8	Matrix Spike	109
1,4-Dichlorobenzene	SW 846 8270	5202-8	Matrix Spike	37
n-Nitrosodi-n-propylamine	SW 846 8270	5202-8	Matrix Spike	95
1,2,4-Trichlorobenzene	SW 846 8270	5202-8	Matrix Spike	42
Acenaphthene	SW 846 8270	5202-8	Matrix Spike	64
2,4-Dinitrotoluene	SW 846 8270	5202-8	Matrix Spike	83
Pyrene	SW 846 8270	5202-8	Matrix Spike	77
Phenol	SW 846 8270	5202-8	Matrix Spike	27
2-Chlorophenol	SW 846 8270	5202-8	Matrix Spike	59
4-Chloro-3-methylphenol	SW 846 8270	5202-8	Matrix Spike	47
4-Nitrophenol	SW 846 8270	5202-8	Matrix Spike	82
Pentachlorophenol	SW 846 8270	5202-8	Matrix Spike	63

CLIENT: Ucar Carbon Company, Incorporated

AES CLIENT ID: CTC
PROJECT ID: 5202

PRECISION

Analytical Parameter(s)	Method	Sample ID	Type	Relative % Difference
Ammonia	EPA 350.1	5202-8	Duplicate	9.5
Nitrite	EPA 353.2	5202-8	Duplicate	NA
Kjeldahl Nitrogen,Total	EPA 351.2	5202-8	Duplicate	0
Iron, Total	EPA 200.7	5202-8	Duplicate	3
Iron, Soluble	EPA 200.7	5202-8	Duplicate	0
Potassium, Total	EPA 200.7	5202-8	Duplicate	NA
Potassium, Soluble	EPA 200.7	5202-8	Duplicate	NA
Zinc, Total	EPA 200.7	5202-8	Duplicate	53
Zinc, Soluble	EPA 200.7	5202-8	Duplicate	50
Chloromethane	SW 846 8240	5202-8	Duplicate	NA
Bromomethane	SW 846 8240	5202-8	Duplicate	NA
Vinyl chloride	SW 846 8240	5202-8	Duplicate	NA
Chloroethane	SW 846 8240	5202-8	Duplicate	NA
Methylene chloride	SW 846 8240	5202-8	Duplicate	NA
Acetone	SW 846 8240	5202-8	Duplicate	NA
Carbon disulfide	SW 846 8240	5202-8	Duplicate	NA
1,1-Dichloroethene	SW 846 8240	5202-8	Duplicate	NA
1,1-Dichloroethane	SW 846 8240	5202-8	Duplicate	NA
trans-1,2-Dichloroethene	SW 846 8240	5202-8	Duplicate	NA
Chloroform	SW 846 8240	5202-8	Duplicate	NA
1,2-Dichloroethane	SW 846 8240	5202-8	Duplicate	NA
2-Butanone	SW 846 8240	5202-8	Duplicate	NA
1,1,1-Trichloroethane	SW 846 8240	5202-8	Duplicate	NA
Carbon tetrachloride	SW 846 8240	5202-8	Duplicate	NA
Vinyl acetate	SW 846 8240	5202-8	Duplicate	NA
Bromodichloromethane	SW 846 8240	5202-8	Duplicate	NA
1,2-Dichloropropane	SW 846 8240	5202-8	Duplicate	NA
cis-1,3-Dichloropropene	SW 846 8240	5202-8	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: 5202

PRECISION

Analytical Parameter(s)	Method	Sample ID	Type	Relative % Difference
Trichloroethene	SW 846 8240	5202-8	Duplicate	NA
Benzene	SW 846 8240	5202-8	Duplicate	NA
trans-1,3-Dichloropropene	SW 846 8240	5202-8	Duplicate	NA
Chlorodibromomethane	SW 846 8240	5202-8	Duplicate	NA
1,1,2-Trichloroethane	SW 846 8240	5202-8	Duplicate	NA
Bromoform	SW 846 8240	5202-8	Duplicate	NA
4-Methyl-2-pentanone	SW 846 8240	5202-8	Duplicate	NA
2-Hexanone	SW 846 8240	5202-8	Duplicate	NA
Tetrachloroethene	SW 846 8240	5202-8	Duplicate	NA
1,1,2,2-Tetrachloroethane	SW 846 8240	5202-8	Duplicate	NA
Toluene	SW 846 8240	5202-8	Duplicate	NA
Chlorobenzene	SW 846 8240	5202-8	Duplicate	NA
Ethylbenzene	SW 846 8240	5202-8	Duplicate	NA
Styrene	SW 846 8240	5202-8	Duplicate	NA
m-Xylene	SW 846 8240	5202-8	Duplicate	NA
o/p-Xylene	SW 846 8240	5202-8	Duplicate	NA
bis(2-chloroethyl)ether	SW 846 8270	5202-8	Duplicate	NA
1,3-Dichlorobenzene	SW 846 8270	5202-8	Duplicate	NA
1,4-Dichlorobenzene	SW 846 8270	5202-8	Duplicate	NA
Benzyl alcohol	SW 846 8270	5202-8	Duplicate	NA
1,2-Dichlorobenzene	SW 846 8270	5202-8	Duplicate	NA
bis(2-chloroisopropyl)ether	SW 846 8270	5202-8	Duplicate	NA
n-Nitrosodi-n-propylamine	SW 846 8270	5202-8	Duplicate	NA
Hexachloroethane	SW 846 8270	5202-8	Duplicate	NA
Nitrobenzene	SW 846 8270	5202-8	Duplicate	NA
Isophorone	SW 846 8270	5202-8	Duplicate	NA
bis(2-chloroethoxy)methane	SW 846 8270	5202-8	Duplicate	NA
1,2,4-Trichlorobenzene	SW 846 8270	5202-8	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: 5202

PRECISION

Analytical Parameter(s)	Method	Sample ID	Type	Relative % Difference
Naphthalene	SW 846 8270	5202-8	Duplicate	NA
4-Chloroaniline	SW 846 8270	5202-8	Duplicate	NA
Hexachlorobutadiene	SW 846 8270	5202-8	Duplicate	NA
2-Methylnaphthalene	SW 846 8270	5202-8	Duplicate	NA
Hexachlorocyclopentadiene	SW 846 8270	5202-8	Duplicate	NA
2-Chloronaphthalene	SW 846 8270	5202-8	Duplicate	NA
2-Nitroaniline	SW 846 8270	5202-8	Duplicate	NA
Dimethyl phthalate	SW 846 8270	5202-8	Duplicate	NA
2,6-Dinitrotoluene	SW 846 8270	5202-8	Duplicate	NA
Acenaphthylene	SW 846 8270	5202-8	Duplicate	NA
3-Nitroaniline	SW 846 8270	5202-8	Duplicate	NA
Acenaphthene	SW 846 8270	5202-8	Duplicate	NA
2,4-Dinitrotoluene	SW 846 8270	5202-8	Duplicate	NA
Dibenzofuran	SW 846 8270	5202-8	Duplicate	NA
Diethyl phthalate	SW 846 8270	5202-8	Duplicate	NA
4-Chlorophenyl phenyl ether	SW 846 8270	5202-8	Duplicate	NA
Fluorene	SW 846 8270	5202-8	Duplicate	NA
4-Nitroaniline	SW 846 8270	5202-8	Duplicate	NA
n-Nitrosodiphenylamine	SW 846 8270	5202-8	Duplicate	NA
4-Bromophenyl phenyl ether	SW 846 8270	5202-8	Duplicate	NA
Hexachlorobenzene	SW 846 8270	5202-8	Duplicate	NA
Phenanthrene	SW 846 8270	5202-8	Duplicate	NA
Anthracene	SW 846 8270	5202-8	Duplicate	NA
di-n-Butylphthalate	SW 846 8270	5202-8	Duplicate	NA
Fluoranthene	SW 846 8270	5202-8	Duplicate	NA
Pyrene	SW 846 8270	5202-8	Duplicate	NA
Butyl benzyl phthalate	SW 846 8270	5202-8	Duplicate	NA
3,3'-Dichlorobenzidine	SW 846 8270	5202-8	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. 5202

				SAMPLE PREP			ANALYSIS		
AES Sample No.	Sample Date	Group #	Run #	Method Number	Date	Analyst	Method Number	Date	Analyst
5202-1-11	8-9	-	-	9.3	8/22	MH	200.7	8-25-95	MH

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. 5202

				SAMPLE PREP			ANALYSIS		
AES Sample No.	Sample Date	Group #	Run #	Method Number	Date	Analyst	Method Number	Date	Analyst
5202(2,5,6,9)	8-7-95	2005	92	—	—	—	350.1	8-8-95	TS
5202(2,5,6,9)	8-7-95	2027	166	351.2	8-9-95	TS	351.2	8/9/95	JK
5202(7,8,10,13)	8/8-9/95	2027	167	351.2	8-11-95	TS	351.2	8/11/95	JK
5202(1-10)	8/7-9/95	2122	78	—	—	—	353.2	8/10/95	TS
5202-11	8.9-95	2027	168	351.2	8/14/95	TS	351.2	8/14/95	JK
5202(1,3,4,7,8,10)	8-7-9-95	2005	93	—	—	—	350.1	8-17-95	TS

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

Advanced Environmental Services

AES Job Code CTC

Sample Traceability Report

AES Job No. 5202

				SAMPLE PREP			ANALYSIS		
AES Sample No.	Sample Date	Group #	Run #	Method Number	Date	Analyst	Method Number	Date	Analyst
5202 - 06	8/7/95	4300	199	3150 8270	8/11/95	SF/SMR	8270	8/14/95	SCS
-09	8/7/95	↓	↓	↓	↓	↓	↓	↓	↓
-08	8/8/95								
-08DUP	↓								
-08MS									
-09	↓	↓	↓	↓	↓	↓	↓	↓	↓

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. 5202

				SAMPLE PREP			ANALYSIS		
AES Sample No.	Sample Date	Group #	Run #	Method Number	Date	Analyst	Method Number	Date	Analyst
5202-6	8/7/95	4000	153	—	—	—	8240	8/8/95	MM(KA)
5202-8	8/8/95	"	"	—	—	—	"	8/9/95	"
5202-9	8/7/95	"	"	—	—	—	"	8/8/95	"
5202-10	8/8/95	"	"	—	—	—	"	8/9/95	"

Note: Areas marked using a dash indicate that no sample preparation was 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. #: 5202

SAMPLER'S 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
8/7/95	2:00pm	BW-3	✓		Ground H_2O		2	1					3	TKN, N/T, TC, Amm, T.+Sol. Me...
	3:00pm	MW-3	✓		" "		2	1					3	TOC's *
	2:30pm	BW-4	✓		Ground H_2O		2	1				2	5	TKN, N/T, Amm, TOT+ Sol. Me...
	—	Blind Dup.	✓		" "		2	1				2	5	TOC's *, TCLV → (TCLVSV) KJB

TOTAL NUMBER OF CONTAINERS 16

* = Done in Field

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

1. RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
	8-7-95	4:05pm	Wendy Herbst
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

PROJECT I.D. #: 5206

SAMPLER'S 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
8 8 95	2 20pm	BW-5	✓		GROUND H2O		2	1					3	TOT + SOL METALS, TKN, AMMO, N/I TE, TURB *
8-8 95	3 15pm	BW-6 (QC SITE)	✓		GROUND H2O	3	6	3			6		18	TCLP, TOT + SOL METALS, TKN AMMO, N/ITE, TCLP, TURB *
8-8-95	1 35pm	TRIP BLANK	✓		DI H2O		2	1			2		5	TOT METALS, TCLP, TCLP, AMMO, N/ITE, TKN, TURB *

TOTAL NUMBER OF CONTAINERS 26

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:	8-8-95	3:55pm.	Wendy Pelot
2. RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
3. RELINQUISHED BY:	DATE	TIME	RECEIVED BY:

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

PROJECT I.D. #: 5202

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
8/9/95	14:20	MW-2	X		GROUNDWATER		2						2	TOTAL & SOL METALS
"	14:35	MW-1	X		"		2	1					3	TOTAL & SOL METALS, TKN,
"	14:30	BW-1	X		"		2	1					3	NITRITE, AMMONIA
"	14:50	BW-2	X		"		2	1					3	"

TOTAL NUMBER OF CONTAINERS (11)

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

1. RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
[signature]	8/9/95	13:55	Wendy Herbst
2. RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
3. RELINQUISHED BY:	DATE	TIME	RECEIVED BY: