



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

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July 25, 1994

NYSDEC-REG. 9
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Mr. Peter J. Buechi, PE
Regional Engineer
NYS Department of Environmental Conservation
270 Michigan Avenue
Buffalo, New York 14203-2999

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

Dear Mr. Buechi:

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

The following will summarize the positive organic parameters:

<u>Contaminate</u>	<u>Conc. 25th</u> <u>Qtr. ppb.</u>	<u>Mean Conc.</u> <u>ppb.</u>	<u>Range</u> <u>ppb</u>
Vinyl Chloride	120	96	29-300
Trans-1,2-Dichloroethene	580	389	6-1000
Trichloroethene	260	307	30-740
Tetrachloroethene	230	265	72-440
Hexachlorobutadiene	83	52	10-160
1,1,2,2-			
Tetrachloroethane	15	537	6-1600
Chloroform	14	9	5-14

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 contamination.

Letter to Peter J. Buechi
July 25, 1994
Page 2

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

Very truly yours,

A.C. Ogg *je*

A.C. Ogg
Site Manager

A.C. Ogg
nm
enc.

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

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

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UCAR CARBON COMPANY, INCORPORATED

REPUBLIC WASTE MANAGEMENT FACILITY

POST CLOSURE MONITORING PROGRAM

QUARTERLY REPORT

Prepared By:



"A Company Dedicated to Honesty, Quality and Service"

July 14, 1994
REF: CTC42D7/100B

Advanced Environmental Services, Inc.

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

QUARTERLY GROUNDWATER MONITORING - WELL INFORMATION

June 22, 1994 thru June 23, 1994

UCAR CARBON COMPANY, INC.

Hyde Park Boulevard
Niagara Falls, New York

AES Code: CTC

Project I.D. # 42D7

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	6/22/94	610.72	4	15.98	594.74	34.50	12.09	37.0	C
BW-2	6/22/94	608.43	4	13.63	594.80	35.00	13.95	42.0	C
BW-3	6/23/94	604.72	4	11.58	593.14	22.40	7.06	22.0	C
BW-4	6/23/94	607.08	4	11.31	595.77	25.00	8.94	29.0	C
BW-5	6/23/94	603.33	4	9.81	593.52	24.90	9.85	30.0	C
BW-6	6/23/94	607.04	4	13.60	593.44	32.90	12.60	38.0	C
MW-1	6/22/94	609.43	2	11.33	598.10	21.10	1.59	2.0 (Dry)	S
MW-2	6/22/94	607.54	2	24.19	583.35	24.60	0.07	0 (Dry)	VS
MW-3	6/22/94	601.61	2	9.12	592.49	15.25	1.00	3.0	R
OW-1 SOUTH	6/23/94	608.81	2	6.69	602.12	8.70	0.33	NR	N/A
OW-2 NORTH	6/22/94	607.06	2	7.33	599.73	9.74	0.39	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.


Field Technician
7-6-94
Date

Advanced Environmental Services, Inc.

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

QUARTERLY GROUNDWATER MONITORING - FIELD PARAMETER INFORMATION
June 22, 1994 thru June 23, 1994

UCAR CARBON COMPANY, INC.

Hyde Park Boulevard
Niagara Falls, New York

AES Code: CTC

Project I.D. #42D7

Monitoring Well I.D.	Sampling Date	Sampling Time	Water Level (ft.)	Turbidity (NTU)	Filter Time	Field Comments/Observations
BW-1	6/22/94	2:38 PM	16.08	1.2	2:38 PM	Clear with a slight odor
BW-2	6/22/94	3:25 PM	13.96	327	4:15 PM	Turbid grey with a slight odor
BW-3	6/23/94	12:25 PM	11.61	5.0	12:25 PM	Clear
BW-4	6/23/94	11:00 AM	11.95	115	5:05 PM	Clear with black solids, petroleum odor
BW-5	6/23/94	11:40AM	9.86	1.95	11:40 AM	Clear
BW-6	6/23/94	3:25 PM	16.19	65.3	3:35 PM	Slightly turbid tan.
MW-1	6/23/94	3:00 PM	11.59	12.3	5:10 PM	Clear
MW-2	6/22/94	12:30 PM	24.19	**	**	**
MW-3	6/22/94	12:00 PM	14.80	290	4:15 PM	Cloudy turbid tan
OW-1 South	6/23/94	12:10 PM	6.69	NA	NA	Required to take water elevation only.
OW-2 North	6/23/94	12:20 PM	7.33	NA	NA	Required to take water elevation only.
Blind Dup	6/23/94	3:35 PM	16.19	65.3	3:35 PM	Slightly turbid tan
Trip Blank	6/23/94	8:45 AM	NA	0.03	NA	Deionized Water

** Insufficient volume and recharge rate to collect the required parameters.

The Blind Duplicate site is BW-6.


Field Technician

7-6-94
Date

QA/QC VERIFICATION FOR PROJECT ID 42D7

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

Linda A. Ratka

Inorganic Chemistry

Susan Irocchi

Organic Chemistry

Jeff Aheul

Field Services

W. Joseph McDougall

Quality Control

Michael P. Callahan for
Joseph J. Curtis
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

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: MW-1
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 06/23/94
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 4207-1

PROJECT ID: 4207

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	12.3	NTU	0.1	EPA 180.1
Ammonia	0.27	mg/L	0.05	EPA 350.1
Nitrite	BQL	mg/L	0.05	EPA 353.2
Total Kjeldahl Nitrogen	8.0	mg/L	0.1	EPA 351.2
Total Iron	7.09	mg/L	0.05	EPA 200.7
Soluble Iron	0.08	mg/L	0.05	EPA 200.7
Total Potassium	36	mg/L	1.0	EPA 200.7
Soluble Potassium	36	mg/L	1.0	EPA 200.7
Total Zinc	0.10	mg/L	0.02	EPA 200.7
Soluble Zinc	0.02	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): 06/22/94
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 42D7-2

PROJECT ID: 42D7

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	290.0	NTU	0.1	EPA 180.1
Ammonia	0.06	mg/L	0.05	EPA 350.1
Nitrite	BQL	mg/L	0.05	EPA 353.2
Total Kjeldahl Nitrogen	BQL	mg/L	0.1	EPA 351.2
Total Iron	27	mg/L	0.05	EPA 200.7
Soluble Iron	0.05	mg/L	0.05	EPA 200.7
Total Potassium	8.4	mg/L	1.0	EPA 200.7
Soluble Potassium	2.8	mg/L	1.0	EPA 200.7
Total Zinc	0.14	mg/L	0.02	EPA 200.7
Soluble Zinc	BQL	mg/L	0.02	EPA 200.7

* Analysis performed in the field.

CLIENT: Ucar Carbon Company, Incorporated
SAMPLE ID: BW-1
COLLECTION METHOD: GRAB
COLLECTION DATE(S): 06/22/94
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 42D7-3

PROJECT ID: 42D7

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	1.2	NTU	0.1	EPA 180.1
Ammonia	0.25	mg/L	0.05	EPA 350.1
Nitrite	BQL	mg/L	0.05	EPA 353.2
Total Kjeldahl Nitrogen	0.30	mg/L	0.1	EPA 351.2
Total Iron	5.0	mg/L	0.05	EPA 200.7
Soluble Iron	0.95	mg/L	0.05	EPA 200.7
Total Potassium	3.8	mg/L	1.0	EPA 200.7
Soluble Potassium	2.9	mg/L	1.0	EPA 200.7
Total Zinc	4.4	mg/L	0.02	EPA 200.7
Soluble Zinc	1.6	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): 06/22/94
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 42D7-4

PROJECT ID: 42D7

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	327.0	NTU	0.1	EPA 180.1
Ammonia	1.0	mg/L	0.05	EPA 350.1
Nitrite	BQL	mg/L	0.05	EPA 353.2
Total Kjeldahl Nitrogen	1.3	mg/L	0.1	EPA 351.2
Total Iron	13	mg/L	0.05	EPA 200.7
Soluble Iron	2.9	mg/L	0.05	EPA 200.7
Total Potassium	10	mg/L	1.0	EPA 200.7
Soluble Potassium	8.7	mg/L	1.0	EPA 200.7
Total Zinc	22	mg/L	0.02	EPA 200.7
Soluble Zinc	0.02	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): 06/23/94
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 42D7-5

PROJECT ID: 42D7

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	5.0	NTU	0.1	EPA 180.1
Ammonia	1.2	mg/L	0.05	EPA 350.1
Nitrite	BQL	mg/L	0.05	EPA 353.2
Total Kjeldahl Nitrogen	1.3	mg/L	0.1	EPA 351.2
Total Iron	1.4	mg/L	0.05	EPA 200.7
Soluble Iron	1.3	mg/L	0.05	EPA 200.7
Total Potassium	7.9	mg/L	1.0	EPA 200.7
Soluble Potassium	8.7	mg/L	1.0	EPA 200.7
Total Zinc	0.06	mg/L	0.02	EPA 200.7
Soluble Zinc	0.06	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): 06/23/94
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
 AES SAMPLE ID: 42D7-6

PROJECT ID: 42D7

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	115.0	NTU	0.1	EPA 180.1
Ammonia	5.5	mg/L	0.05	EPA 350.1
Nitrite	BQL	mg/L	0.05	EPA 353.2
Total Kjeldahl Nitrogen	6.5	mg/L	0.1	EPA 351.2
Total Iron	17	mg/L	0.05	EPA 200.7
Soluble Iron	2.2	mg/L	0.05	EPA 200.7
Total Potassium	24	mg/L	1.0	EPA 200.7
Soluble Potassium	24	mg/L	1.0	EPA 200.7
Total Zinc	11	mg/L	0.02	EPA 200.7
Soluble Zinc	0.04	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	120	µg/L	10	SW 846 8240
Chloroethane	BQL	µg/L	10	SW 846 8240
Methylene chloride	BQL	µg/L	10	SW 846 8240
Acetone	16	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	580	µg/L	10	SW 846 8240
Chloroform	14	µg/L	10	SW 846 8240
1,2-Dichloroethane	BQL	µg/L	10	SW 846 8240
2-Butanone	BQL	µg/L	10	SW 846 8240
1,1,1-Trichloroethane	BQL	µg/L	10	SW 846 8240
Carbon tetrachloride	BQL	µg/L	10	SW 846 8240
Vinyl acetate	BQL	µg/L	10	SW 846 8240
Bromodichloromethane	BQL	µg/L	10	SW 846 8240
1,2-Dichloropropane	BQL	µg/L	10	SW 846 8240

* Analysis performed in the field.

CLIENT: Ucar Carbon Company, Incorporated
 SAMPLE ID: BW-4
 COLLECTION METHOD: GRAB
 COLLECTION DATE(S): 06/23/94
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
 AES SAMPLE ID: 42D7-6

PROJECT ID: 42D7

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
cis-1,3-Dichloropropene	BQL	µg/L	10	SW 846 8240
Trichloroethene	260	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	230	µg/L	10	SW 846 8240
1,1,2,2-Tetrachloroethane	15	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): 06/23/94
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
 AES SAMPLE ID: 4207-6

PROJECT ID: 4207

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	83	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): 06/23/94
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
 AES SAMPLE ID: 42D7-6

PROJECT ID: 42D7

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): 06/23/94
SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
AES SAMPLE ID: 42D7-7

PROJECT ID: 42D7

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	1.95	NTU	0.1	EPA 180.1
Ammonia	0.19**	mg/L	0.05	EPA 350.1
Nitrite	BQL	mg/L	0.05	EPA 353.2
Total Kjeldahl Nitrogen	0.10**	mg/L	0.1	EPA 351.2
Total Iron	1.2	mg/L	0.05	EPA 200.7
Soluble Iron	1.2	mg/L	0.05	EPA 200.7
Total Potassium	3.0	mg/L	1.0	EPA 200.7
Soluble Potassium	3.4	mg/L	1.0	EPA 200.7
Total Zinc	0.11	mg/L	0.02	EPA 200.7
Soluble Zinc	0.11	mg/L	0.02	EPA 200.7

* Analysis performed in the field.

** Ammonia higher than TKN due to standard error.

CLIENT: Ucar Carbon Company, Incorporated
 SAMPLE ID: BW-6
 COLLECTION METHOD: GRAB
 COLLECTION DATE(S): 06/23/94
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
 AES SAMPLE ID: 42D7-8

PROJECT ID: 42D7

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	65.3	NTU	0.1	EPA 180.1
Ammonia	0.24**	mg/L	0.05	EPA 350.1
Nitrite	BQL	mg/L	0.05	EPA 353.2
Total Kjeldahl Nitrogen	0.10**	mg/L	0.1	EPA 351.2
Total Iron	5.8	mg/L	0.05	EPA 200.7
Soluble Iron	2.8	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	0.03	mg/L	0.02	EPA 200.7
Soluble Zinc	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

* Analysis performed in the field.

** Ammonia higher than TKN due to standard error.

CLIENT: Ucar Carbon Company, Incorporated
 SAMPLE ID: BW-6
 COLLECTION METHOD: GRAB
 COLLECTION DATE(S): 06/23/94
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
 AES SAMPLE ID: 42D7-8

PROJECT ID: 42D7

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): 06/23/94
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
 AES SAMPLE ID: 42D7-8

PROJECT ID: 42D7

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): 06/23/94
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
 AES SAMPLE ID: 42D7-8

PROJECT ID: 42D7

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): 06/23/94
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
 AES SAMPLE ID: 42D7-9

PROJECT ID: 42D7

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	65.3	NTU	0.1	EPA 180.1
Ammonia	0.06	mg/L	0.05	EPA 350.1
Nitrite	BQL	mg/L	0.05	EPA 353.2
Total Kjeldahl Nitrogen	1.2	mg/L	0.1	EPA 351.2
Total Iron	5.5	mg/L	0.05	EPA 200.7
Soluble Iron	2.7	mg/L	0.05	EPA 200.7
Total Potassium	3.9	mg/L	1.0	EPA 200.7
Soluble Potassium	2.9	mg/L	1.0	EPA 200.7
Total Zinc	0.03	mg/L	0.02	EPA 200.7
Soluble Zinc	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

* Analysis performed in the field.

CLIENT: Ucar Carbon Company, Incorporated
 SAMPLE ID: BLIND DUPLICATE
 COLLECTION METHOD: GRAB
 COLLECTION DATE(S): 06/23/94
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
 AES SAMPLE ID: 42D7-9

PROJECT ID: 42D7

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: BLIND DUPLICATE
 COLLECTION METHOD: GRAB
 COLLECTION DATE(S): 06/23/94
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
 AES SAMPLE ID: 42D7-9

PROJECT ID: 42D7

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: BLIND DUPLICATE
 COLLECTION METHOD: GRAB
 COLLECTION DATE(S): 06/23/94
 SAMPLE TYPE: GROUNDWATER

AES CLIENT ID: CTC
 AES SAMPLE ID: 42D7-9

PROJECT ID: 42D7

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

CLIENT: Ucar Carbon Company, Incorporated
 SAMPLE ID: TRIP BLANK
 COLLECTION METHOD: GRAB
 COLLECTION DATE(S): 06/23/94
 SAMPLE TYPE: BAKER WATER

AES CLIENT ID: CTC
 AES SAMPLE ID: 42D7-10

PROJECT ID: 42D7

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Turbidity *	.03	NTU	0.1	EPA 180.1
Ammonia	BQL	mg/L	0.05	EPA 350.1
Nitrite	BQL	mg/L	0.05	EPA 353.2
Total Kjeldahl Nitrogen	BQL	mg/L	0.1	EPA 351.2
Total Iron	BQL	mg/L	0.05	EPA 200.7
Total Potassium	BQL	mg/L	1.0	EPA 200.7
Total Zinc	BQL	mg/L	0.02	EPA 200.7
Chloromethane	BQL	µg/L	10	SW 846 8240
Bromomethane	BQL	µg/L	10	SW 846 8240
Vinyl chloride	BQL	µg/L	10	SW 846 8240
Chloroethane	BQL	µg/L	10	SW 846 8240
Methylene chloride	BQL	µg/L	10	SW 846 8240
Acetone	BQL	µg/L	10	SW 846 8240
Carbon disulfide	BQL	µg/L	10	SW 846 8240
1,1-Dichloroethene	BQL	µg/L	10	SW 846 8240
1,1-Dichloroethane	BQL	µg/L	10	SW 846 8240
trans-1,2-Dichloroethene	BQL	µg/L	10	SW 846 8240
Chloroform	BQL	µg/L	10	SW 846 8240
1,2-Dichloroethane	BQL	µg/L	10	SW 846 8240
2-Butanone	BQL	µg/L	10	SW 846 8240
1,1,1-Trichloroethane	BQL	µg/L	10	SW 846 8240
Carbon tetrachloride	BQL	µg/L	10	SW 846 8240
Vinyl acetate	BQL	µg/L	10	SW 846 8240
Bromodichloromethane	BQL	µg/L	10	SW 846 8240
1,2-Dichloropropane	BQL	µg/L	10	SW 846 8240
cis-1,3-Dichloropropene	BQL	µg/L	10	SW 846 8240
Trichloroethene	BQL	µg/L	10	SW 846 8240
Benzene	BQL	µg/L	10	SW 846 8240

* Analysis performed in the field.

CLIENT: Ucar Carbon Company, Incorporated
 SAMPLE ID: TRIP BLANK
 COLLECTION METHOD: GRAB
 COLLECTION DATE(S): 06/23/94
 SAMPLE TYPE: BAKER WATER

AES CLIENT ID: CTC
 AES SAMPLE ID: 42D7-10

PROJECT ID: 42D7

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

CLIENT: Ucar Carbon Company, Incorporated
 SAMPLE ID: TRIP BLANK
 COLLECTION METHOD: GRAB
 COLLECTION DATE(S): 06/23/94
 SAMPLE TYPE: BAKER WATER

AES CLIENT ID: CTC
 AES SAMPLE ID: 42D7-10

PROJECT ID: 42D7

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

CLIENT: Ucar Carbon Company, Incorporated
 SAMPLE ID: TRIP BLANK
 COLLECTION METHOD: GRAB
 COLLECTION DATE(S): 06/23/94
 SAMPLE TYPE: BAKER WATER

AES CLIENT ID: CTC
 AES SAMPLE ID: 42D7-10

PROJECT ID: 42D7

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

CLIENT: Ucar Carbon Company, Incorporated

AES CLIENT ID: CTC
PROJECT ID: 42D7

ACCURACY

Analytical Parameter(s)	Method	Sample ID	Type	Percent Recovery
Ammonia	EPA 350.1	42D7-6	Matrix Spike	115
Nitrite	EPA 353.2	42D7-6	Matrix Spike	104
Total Kjeldahl Nitrogen	EPA 351.2	42D7-6	Matrix Spike	80
Total Iron	EPA 200.7	42D7-6	Matrix Spike	88
Soluble Iron	EPA 200.7	42D7-6	Matrix Spike	88
Total Potassium	EPA 200.7	42D7-6	Matrix Spike	94
Soluble Potassium	EPA 200.7	42D7-6	Matrix Spike	97
Total Zinc	EPA 200.7	42D7-6	Matrix Spike	118
Soluble Zinc	EPA 200.7	42D7-6	Matrix Spike	94
1,1-Dichloroethene	SW 846 8240	42D7-6	Matrix Spike	104
Trichloroethene	SW 846 8240	42D7-6	Matrix Spike	78
Benzene	SW 846 8240	42D7-6	Matrix Spike	100
Toluene	SW 846 8240	42D7-6	Matrix Spike	96
Chlorobenzene	SW 846 8240	42D7-6	Matrix Spike	98
1,4-Dichlorobenzene	SW 846 8270	42D7-6	Matrix Spike	97
n-Nitrosodi-n-propylamine	SW 846 8270	42D7-6	Matrix Spike	99
1,2,4-Trichlorobenzene	SW 846 8270	42D7-6	Matrix Spike	93
Acenaphthene	SW 846 8270	42D7-6	Matrix Spike	89
2,4-Dinitrotoluene	SW 846 8270	42D7-6	Matrix Spike	101
Hexachlorobenzene	SW 846 8270	42D7-6	Matrix Spike	94
Pyrene	SW 846 8270	42D7-6	Matrix Spike	101
Phenol	SW 846 8270	42D7-6	Matrix Spike	45
2-Chlorophenol	SW 846 8270	42D7-6	Matrix Spike	90
4-Chloro-3-methylphenol	SW 846 8270	42D7-6	Matrix Spike	96
4-Nitrophenol	SW 846 8270	42D7-6	Matrix Spike	51
Pentachlorophenol	SW 846 8270	42D7-6	Matrix Spike	99

ADVANCED ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL REPORT

PAGE 24

CLIENT: Ucar Carbon Company, Incorporated

AES CLIENT ID: CTC
PROJECT ID: 42D7

PRECISION

Analytical Parameter(s)	Method	Sample ID	Type	Relative % Difference
Ammonia	EPA 350.1	42D7-6	Duplicate	0
Nitrite	EPA 353.2	42D7-6	Duplicate	NA
Total Kjeldahl Nitrogen	EPA 351.2	42D7-6	Duplicate	0
Total Iron	EPA 200.7	42D7-6	Duplicate	0.59
Soluble Iron	EPA 200.7	42D7-6	Duplicate	4.2
Total Potassium	EPA 200.7	42D7-6	Duplicate	0
Soluble Potassium	EPA 200.7	42D7-6	Duplicate	0
Total Zinc	EPA 200.7	42D7-6	Duplicate	2.1
Soluble Zinc	EPA 200.7	42D7-6	Duplicate	71
Chloromethane	SW 846 8240	42D7-6	Duplicate	NA
Bromomethane	SW 846 8240	42D7-6	Duplicate	NA
Vinyl chloride	SW 846 8240	42D7-6	Duplicate	6

CLIENT: Ucar Carbon Company, Incorporated

AES CLIENT ID: CTC
PROJECT ID: 42D7

PRECISION

Analytical Parameter(s)	Method	Sample ID	Type	Relative % Difference
Trichloroethene	SW 846 8240	42D7-6	Duplicate	2
Benzene	SW 846 8240	42D7-6	Duplicate	NA
trans-1,3-Dichloropropene	SW 846 8240	42D7-6	Duplicate	NA
Chlorodibromomethane	SW 846 8240	42D7-6	Duplicate	NA
1,1,2-Trichloroethane	SW 846 8240	42D7-6	Duplicate	NA
Bromoform	SW 846 8240	42D7-6	Duplicate	NA
4-Methyl-2-pentanone	SW 846 8240	42D7-6	Duplicate	NA
2-Hexanone	SW 846 8240	42D7-6	Duplicate	NA
Tetrachloroethene	SW 846 8240	42D7-6	Duplicate	8
1,1,2,2-Tetrachloroethane	SW 846 8240	42D7-6	Duplicate	NA
Toluene	SW 846 8240	42D7-6	Duplicate	NA
Chlorobenzene	SW 846 8240	42D7-6	Duplicate	NA
Ethylbenzene	SW 846 8240	42D7-6	Duplicate	NA
Styrene	SW 846 8240	42D7-6	Duplicate	NA
m-Xylene	SW 846 8240	42D7-6	Duplicate	NA
o/p-Xylene	SW 846 8240	42D7-6	Duplicate	NA
bis(2-chloroethyl)ether	SW 846 8270	42D7-6	Duplicate	NA
1,3-Dichlorobenzene	SW 846 8270	42D7-6	Duplicate	NA
1,4-Dichlorobenzene	SW 846 8270	42D7-6	Duplicate	NA
Benzyl alcohol	SW 846 8270	42D7-6	Duplicate	NA
1,2-Dichlorobenzene	SW 846 8270	42D7-6	Duplicate	NA
bis(2-chloroisopropyl)ether	SW 846 8270	42D7-6	Duplicate	NA
n-Nitrosodi-n-propylamine	SW 846 8270	42D7-6	Duplicate	NA
Hexachloroethane	SW 846 8270	42D7-6	Duplicate	NA
Nitrobenzene	SW 846 8270	42D7-6	Duplicate	NA
Isophorone	SW 846 8270	42D7-6	Duplicate	NA
bis(2-chloroethoxy)methane	SW 846 8270	42D7-6	Duplicate	NA
1,2,4-Trichlorobenzene	SW 846 8270	42D7-6	Duplicate	NA

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

CLIENT: Ucar Carbon Company, Incorporated

AES CLIENT ID: CTC
PROJECT ID: 42D7

PRECISION

Analytical Parameter(s)	Method	Sample ID	Type	Relative % Difference
Naphthalene	SW 846 8270	42D7-6	Duplicate	NA
4-Chloroaniline	SW 846 8270	42D7-6	Duplicate	NA
Hexachlorobutadiene	SW 846 8270	42D7-6	Duplicate	3.6
2-Methylnaphthalene	SW 846 8270	42D7-6	Duplicate	NA
Hexachlorocyclopentadiene	SW 846 8270	42D7-6	Duplicate	NA
2-Chloronaphthalene	SW 846 8270	42D7-6	Duplicate	NA
2-Nitroaniline	SW 846 8270	42D7-6	Duplicate	NA
Dimethyl phthalate	SW 846 8270	42D7-6	Duplicate	NA
2,6-Dinitrotoluene	SW 846 8270	42D7-6	Duplicate	NA
Acenaphthylene	SW 846 8270	42D7-6	Duplicate	NA
3-Nitroaniline	SW 846 8270	42D7-6	Duplicate	NA
Acenaphthene	SW 846 8270	42D7-6	Duplicate	NA
2,4-Dinitrotoluene	SW 846 8270	42D7-6	Duplicate	NA
Dibenzofuran	SW 846 8270	42D7-6	Duplicate	NA
Diethyl phthalate	SW 846 8270	42D7-6	Duplicate	NA
4-Chlorophenyl phenyl ether	SW 846 8270	42D7-6	Duplicate	NA
Fluorene	SW 846 8270	42D7-6	Duplicate	NA
4-Nitroaniline	SW 846 8270	42D7-6	Duplicate	NA
n-Nitrosodiphenylamine	SW 846 8270	42D7-6	Duplicate	NA
4-Bromophenyl phenyl ether	SW 846 8270	42D7-6	Duplicate	NA
Hexachlorobenzene	SW 846 8270	42D7-6	Duplicate	NA
Phenanthrene	SW 846 8270	42D7-6	Duplicate	NA
Anthracene	SW 846 8270	42D7-6	Duplicate	NA
di-n-Butylphthalate	SW 846 8270	42D7-6	Duplicate	NA
Fluoranthene	SW 846 8270	42D7-6	Duplicate	NA
Pyrene	SW 846 8270	42D7-6	Duplicate	NA
Butyl benzyl phthalate	SW 846 8270	42D7-6	Duplicate	NA
3,3'-Dichlorobenzidine	SW 846 8270	42D7-6	Duplicate	NA

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

CLIENT: Ucar Carbon Company, Incorporated

AES CLIENT ID: CTC
PROJECT ID: 42D7

PRECISION

Analytical Parameter(s)	Method	Sample ID	Type	Relative % Difference
bis(2ethylhexyl)phthalate	SW 846 8270	42D7-6	Duplicate	NA
Benzo(a)anthracene	SW 846 8270	42D7-6	Duplicate	NA
Chrysene	SW 846 8270	42D7-6	Duplicate	NA
di-n-Octylphthalate	SW 846 8270	42D7-6	Duplicate	NA
Benzo(b)fluoranthene	SW 846 8270	42D7-6	Duplicate	NA
Benzo(k)fluoranthene	SW 846 8270	42D7-6	Duplicate	NA
Benzo(a)pyrene	SW 846 8270	42D7-6	Duplicate	NA
Indeno(1,2,3-cd)pyrene	SW 846 8270	42D7-6	Duplicate	NA
Dibenzo(a,h)anthracene	SW 846 8270	42D7-6	Duplicate	NA
Benzo(g,h,i)perylene	SW 846 8270	42D7-6	Duplicate	NA
Phenol	SW 846 8270	42D7-6	Duplicate	NA
2-Chlorophenol	SW 846 8270	42D7-6	Duplicate	NA
2-Methylphenol	SW 846 8270	42D7-6	Duplicate	NA
4-Methylphenol	SW 846 8270	42D7-6	Duplicate	NA
2-Nitrophenol	SW 846 8270	42D7-6	Duplicate	NA
2,4-Dimethylphenol	SW 846 8270	42D7-6	Duplicate	NA
Benzoic acid	SW 846 8270	42D7-6	Duplicate	NA
2,4-Dichlorophenol	SW 846 8270	42D7-6	Duplicate	NA
4-Chloro-3-methylphenol	SW 846 8270	42D7-6	Duplicate	NA
2,4,6-Trichlorophenol	SW 846 8270	42D7-6	Duplicate	NA
2,4,5-Trichlorophenol	SW 846 8270	42D7-6	Duplicate	NA
2,4-Dinitrophenol	SW 846 8270	42D7-6	Duplicate	NA
4-Nitrophenol	SW 846 8270	42D7-6	Duplicate	NA
4,6-Dinitro-2-methylphenol	SW 846 8270	42D7-6	Duplicate	NA
Pentachlorophenol	SW 846 8270	42D7-6	Duplicate	NA

Advanced Environmental Services

AES Job Code CTC

Sample Traceability Report

AES Job No. 42D7

				SAMPLE PREP			ANALYSIS		
AES Sample No.	Sample Date	Group #	Run #	Method Number	Date	Analyst	Method Number	Date	Analyst
42D7- ^(01,06,03,04) 56	6/21-6/23/94	2027	40	351.2	6-27-94	SF	351.2	7-1-94	CW
42D7-56	6-23-94	2027	41	351.2	7-5-94	SF	351.2	7-8-94	CW
42D7-1-10	6/21-23/94	2005	40	—	—	—	350.1	7-5-94	CW
42D7-1-10	6/21-23/94	2120	24	—	—	—	353.2	7-10-94	CW
42D7-5,7-8	6-23-94	2005	40	—	—	—	350.1	7-11-94	CW

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. 4207

				SAMPLE PREP			ANALYSIS		
AES Sample No.	Sample Date	Group #	Run #	Method Number	Date	Analyst	Method Number	Date	Analyst
-6	6/23/94	4300	74	3510 8270	6/29/94	PQ.	8270	7/7/94	SCS
-8	↓	↓	↓	↓	↓	↓	↓	↓	↓
-9	↓	↓	↓	↓	↓	↓	↓	7/8/94	↓
-10	↓	↓	↓	↓	↓	↓	↓	↓	↓

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. 42D7

				SAMPLE PREP			ANALYSIS		
AES Sample No.	Sample Date	Group #	Run #	Method Number	Date	Analyst	Method Number	Date	Analyst
42D7-6	6-23-94	4000	68	—	—	—	8240	6-24-94	LM
42D7-8	↓	↓	↓	—	—	—	↓	↓	↓
42D7-9	↓	↓	↓	—	—	—	↓	↓	↓
42D7-10	↓	↓	↓	—	—	—	↓	↓	↓

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. 4207

Inorganics Analysis

				SAMPLE PREP			ANALYSIS		
AES Sample No.	Sample Date	Group #	Run #	Method Number	Date	Analyst	Method Number	Date	Analyst
4207-1-10	6-22-23-94	1010	154	9.3	6-30	C.S.	200.7	7-7	MTS

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



ENVIRONMENTAL SERVICES, INC.
2186 LIBERTY DRIVE
NIAGARA FALLS, NY 14304 • (716) 283-3120

CHAIN OF CUSTODY RECORD

4207

PROJECT NAME: ULAR CARBIDE LANDFILL

SAMPLER'S SIGNATURE: K. Hunt / Hunt

CONTAINER CLASSIFICATION

JOB CODE: CTC

IDENTIFICATION OF
BLIND FIELD DUPLICATE SITE: _____

DATE	TIME	SAMPLE IDENTIFICATION	GRAB	COMPOSITE	SAMPLE TYPE
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UNPRESERVED	HNO ₃	H ₂ SO ₄	HCL	NAOH	VIAL (PRES.)	VIAL (UNPRES.)	TOTAL
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PARAMETERS/REMARKS

[illegible]

TOTAL NUMBER OF CONTAINERS	4	C
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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 6/22/94	TIME 4:25 PM	RECEIVED BY: 
2. RELINQUISHED BY: _____	DATE	TIME	RECEIVED BY: _____
3. RELINQUISHED BY: _____	DATE	TIME	RECEIVED BY: _____



1. RELINQUISHED BY: <i>Patricia Quinte</i>	DATE 6/23/94	TIME 5:25 PM	RECEIVED BY: <i>Marilee P. Dymond</i>
2. RELINQUISHED BY: _____	DATE _____	TIME _____	RECEIVED BY: _____
3. RELINQUISHED BY: _____	DATE _____	TIME _____	RECEIVED BY: _____