UNION CARBIDE

UCAR CARBON COMPANY INC. P.O. BOX 513, COLUMBIA, TENNESSEE 38402-0513

December 18, 1990

Logged on nb 8/15/91
file gw copies
Union Carbide
1990
(monitoring TKN well 2

Mr. Robert J. Mitrey
Associate Sanitary Engineer
New York State Department of Environmental Conservation
600 Delaware Ave.
Buffalo, New York 14202-1073

Re: Quarterly Report of Groundwater Analysis
- Republic Solid Waste Management Facility
Post-closure Monitoring Program

Dear Mr. Mitrey:

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

The following will summarize the current groundwater data from BW-4:

Contaminate	Mean Conc. ppb	Range ppb	10th Qtr. ppb
Hexachlorobutadine	45	10-150	85
Trichloroethylene	371	30-740	400
Vinyl Chloride	80	29-250	43
Chloroform	6.7	5.5-9.2	9.2
Tetrachloroethylene	323	290-380	380
1,1,2,2-Tetrachloroethylene	889	44-1600	0

We do not feel that this contamination at BW-4-86 is related to the Republic Waste Management Facility.

If you have further questions or concerns about this data, please contact me at 615-380-4215.

Very truly yours,

R.A. Bolton

R.A. Bolton, Manager
HS&EA

RAB:nr

Enclosure

cc: Mr Jim Devald, Sr. Public Health Engineer
Niagara County Health Department

Mr. Dave O'Tool, New York Department of Environmental Conservation

Mr. A.C. Ogg

ADVANCED
ENVIRONMENTAL SERVICES INC.

REPUBLIC SOLID WASTE MANAGEMENT FACILITY POST CLOSURE MONITORING PROGRAM QUARTERLY REPORT

Report Prepared For

UNION CARBIDE CORPORATION
CARBON PRODUCTS DIVISION

Dawn T. Marasco
Customer Service Representative

Paul T. McMahon
Quality Control Officer

October 12, 1990
AES Report CTC

COMMITMENT
TO
HONESTY - QUALITY - SERVICE

ADVANCED ENVIRONMENTAL SERVICES, INC.

FIELD REPORT

CLIENT: UNION CARBIDE AES JOB CODE: CTC

DATE PURGED: ** DATE SAMPLED: **

WELL IDENTIFICATION	TOP OF PIPE ELEVATION	ELEVATION BEFORE PURGING	AMOUNT PURGED	ELEVATION BEFORE SAMPLIN
B-W-1	601.72	582.22	24.0 gal.	582.11
*M-W-1	609.43	595.48	1.5 gal.	575.14
B-W-2	608.43	591.38	18.0 gal.	591.28
*MW-2	607.54	586.20	2.1 gal.	583.79
B-W-3	604.72	588.85	16.0 gal.	588.84
*M-W-3	601.61	587.31	2.5 gal.	585.86
B-W-4	607.08	591.66	13.5 gal.	591.18
B-W-5	603.33	588.77	27.0 gal.	588.77
B-W-6	607.04	589.46	24.0 gal.	587.09
O-W-1 South	608.81	600.21	N/A	N/A
O-W-2 North	607.06	597.56	N/A	N/A

* - Well Purged to Dryness
** - For Purging and Sampling Dates See Table 1

SCOTT ABEL
SENIOR FIELD TECHNICIAN

TABLE I

CTC - UNION CARBIDE 9/21/90

Well No	Date Purged	Date Sampled
B-W-1 -	9-21-90	9-21-90
M-W-1 -	9-18-90	9-20-90/9-21-90
B-W-2 -	9-19-90	9-19-90
M-W-2 -	9-19-90	9-20-90/9-21-90
B-W-3 -	9-21-90	9-21-90
M -W-3 -	9-18-90	9-20-90
B-W-4 -	9-18-90	9-18-90
B-W-5 -	9-18-90	9-18-90
B-W-6 -	9-19-90	9-20-90

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: INORGANICS

Client: UNION CARBIDE A.E.S. JOB CODE CTC

Analytical Parameter(s)	Method No.	Quant. Limits	AES Lab No. - / Sample ID - / Sample Date-	9003 BW-5 GRAB 09/18/90	9004 BW-4 GRAB 09/18/90	9005 BLIND DUP(BW-4) GRAB 09/18/90
Ammonia (as N) (mg/l)	350.1	0.02		0.22	6.05	6.72
Nitrite (mg/l)	353.2	0.01		BQL *	BQL	BQL
Total Kjeldahl Nitrogen(mg/l)	351.2	0.1		0.7	6.4	6.8

* Below Quantifiable Limit.

Gary L. Amato
Technical Supervisor

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: INORGANICS

Client: UNION CARBIDE A.E.S. JOB CODE CTC

AES Lab No. - 9032
Sample ID - B-W-2

Analytical Parameter(s)	Method No.	Quant. Limits	Sample Date-	GRAB 09/19/90
Ammonia (as N) (mg/l)	350.1	0.02		1.45
Total Kjeldahl Nitrogen(mg/l)	351.2	0.1		1.4
Nitrite (mg/l)	353.2	0.01		BQL *

* Below Quantifiable Limit.

Gary L. Amato
Technical Supervisor

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: INORGANICS

Client: UNION CARBIDE **A.E.S. JOB CODE** CTC

Analytical Parameter(s)	Method No.	Quant. Limits				
AES Lab No. -				9069	9071	9072
Sample ID -				MW-1	MW-3	BW-6
Sample Date-				GRAB 09/20/90	GRAB 09/20/90	GRAB 09/20/90
Ammonia (as N)(mg/l)	350.1	0.02		NR *	0.10	0.30
Nitrite (mg/l)	353.2	0.01		0.04	BQL **	BQL
Total Kjeldahl Nitrogen(mg/l)	351.2	0.1		NR	0.1	0.4

* Not Requested.
** Below Quantifiable Limit.

Gary L. Amato
Technical Supervisor

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT
QUALITY CONTROL - ACCURACY

Type of Analysis: Matrix Spikes and E.P.A. Standards
Client: UNION CARBIDE A.E.S. Job Code: CTC

(Units:mg/l or ppm)

Analytical Parameters	Sample No.	Type	Observed Conc.	Original Conc.	Added Conc.	Percent Recovery*
Nitrite	9072	SPK	0.258	BQL **	0.250	103
Total Kjedahl Nitrogen	9072	SPK	5.8	0.4	5.0	108
Total Kjedahl Nitrogen	---	EPA	5.6	5.0	---	112
Ammonia	---	INDSTD	51.2	50.0	---	102
Ammonia	9072	SPK	0.82	0.30	0.50	104

* % Recovery=100 x ((Observed Conc. - "background" Original Conc.)/"Spike" Added Conc.)

* Below Quantifiable Limit.

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT
QUALITY CONTROL - PRECISION

Type of Analysis: Duplicate Analysis
Units of Analysis: Milligrams/Liter or ppm
Client: UNION CARBIDE A.E.S. Job Code:CTC

Analytical Parameters	Sample No.	Original Conc.	Duplicate Conc.	Average Conc.	Range	Rel. % Difference
Nitrite	9072	BQL *	BQL	BQL	NA **	NA
Total Kjedahl Nitrogen	9072	0.4	0.4	0.4	0	0
Ammonia	9072	0.29	0.30	0.30	0.01	3.3

Relative Percent Difference =
Range/Average X 100
* Below Quantifiable Limit. ** Not Available.

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: INORGANICS

Client: UNION CARBIDE A.E.S. JOB CODE CTC

Analytical Parameter(s)	Method No.	Quant. Limits	AES Lab No. - / Sample ID - / Sample Date-	9108 MW-1 GRAB 09/21/90	9109 MW-2 GRAB 09/21/90	9110 BW-3 GRAB 09/21/90	9111 BW-1 GRAB 09/21/90
Ammonia (mg/l)	350.1	0.02		9.12	NR *	0.85	0.32
Total Kjeldhal Nitrogen(mg/l)	351.2	0.1		10	NR	0.9	0.5
Nitrite	353.2	0.01		NR	0.02	BQL **	BQL

* Not Requested.
** Below Quantifiable Limit.

Gary L. Amato
Technical Supervisor

AES INORGANIC DEPARTMENT TRACEABILITY

JOB CODE: CTC

Technician Signature	AES Sample #	Method	Date o Analys
Daryl Amatte	9003-05	353.2	9-19-90
T. Ho	9003-05	351.2	9-25-9(
T. Ho	9003-05	350.1	9-26-9(

AES INORGANIC DEPARTMENT TRACEABILITY
JOB CODE: CTC

Technician Signature	AES Sample #	Method	Date c Analys
T. Sko	9032	353.2	9-20-90
T. Sko	9032	351.2	9-25-
	9032	350.1	9-26-9

AES INORGANIC DEPARTMENT TRACEABILITY
JOB CODE: CTC

Technician Signature	AES Sample #	Method	Date Analyzed
T. Allen	9071-72	351.2	9-25-9
T. Allen	9071-72	350.1	9-26-9
T. Allen	9069-72	353.2	9-21-9

AES INORGANIC DEPARTMENT TRACEABILITY
JOB CODE: CTC

Technician Signature	AES Sample #	Method	Date Analyzed
Daryl Arnold	9109-11	353.2	9-22-90
T. Ho	9108, 10, 11	351.2	9-25-
T. Ho	9108, 10, 11	TS ~~350.7~~ 350.1	9-26-

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: INORGANICS

Client: UNION CARBIDE A.E.S. Job Code CTC

(All results are in mg/l)

Analytical Parameter(s)	Method No.	Quant. Limits	AES Lab No. -	9003	9004	9005
			Sample ID -	BW-5 GRAB	BW-4 GRAB	BLIND DUP GRAB (BW-4)
			Sample Date-	09/18/90	09/18/90	09/18/90
Total Iron (Fe)	236.1	0.30		11.0	46.6	32.8
Soluble Iron (Fe)	236.1	0.30		0.95	2.65	1.84
Total Potassium (K)	258.1	1.00		4.48	32.0	31.8
Soluble Potassium (K)	258.1	1.00		4.32	31.8	31.6
Total Zinc (Zn)	289.1	0.05		2.80	4.20	4.20
Soluble Zinc (Zn)	289.1	0.05		0.16	0.43	0.42

Gary L. Amato
Technical Supervisor

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: INORGANICS

Client: UNION CARBIDE A.E.S. Job Code CTC

(All results are in mg/l)

Analytical Parameter(s)	Method No.	Quant. Limits	AES Lab No. - 9032 Sample ID - B-W-2 Sample Date- 09/19/90 GRAB
Total Iron (Fe)	236.1	0.30	7.32
Soluble Iron (Fe)	236.1	0.30	2.41
Total Potassium (K)	258.1	1.00	9.74
Soluble Potassium (K)	258.1	1.00	9.44
Total Zinc (Zn)	289.1	0.05	17.8
Soluble Zinc (Zn)	289.1	0.05	0.59

Gary L. Amato
Technical Supervisor

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: INORGANICS

Client: UNION CARBIDE A.E.S. Job Code CTC

(All results are in mg/l)

Analytical Parameter(s)	Method No.	Quant. Limits	AES Lab No. - / Sample ID - / Sample Date-	9069 MW-1 GRAB 09/20/90	9070 MW-2 GRAB 09/20/90	9071 MW-3 GRAB 09/20/90	9072 BW-6 GRAB 09/20/90
Total Iron (Fe)	236.1	0.30		20.5	418	29.0	80.2
Soluble Iron (Fe)	236.1	0.30		0.38	0.64	0.80	4.52
Total Potassium (K)	258.1	1.00		54.8	10.6	10.3	27.7
Soluble Potassium (K)	258.1	1.00		50.1	9.18	1.94	14.0
Total Zinc (Zn)	289.1	0.05		2.13	4.05	0.33	0.34
Soluble Zinc (Zn)	289.1	0.05		0.07	0.09	0.11	0.26

Gary L. Amato
Technical Supervisor

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT
QUALITY CONTROL - PRECISION

Type of Analysis: Duplicate Analysis
Units of Analysis: Milligrams/Liter, or ppm
Client: UNION CARBIDE A.E.S. Job Code:CTC

Analytical Parameters	Sample No.	Original Conc.	Duplicate Conc.	Average Conc.	Range	Rel. % Difference
Total Iron	9072	80.2	80.2	80.2	0	0
Soluble Iron	9072	4.55	4.48	4.52	0.07	1.5
Total Potassium	9072	27.7	27.7	27.7	0	0
Soluble Potassium	9072	14.0	14.1	14.0	0.1	0.7
Total Zinc	9072	0.35	0.33	0.34	0.02	5.9
Soluble Zinc	9072	0.25	0.26	0.26	0.01	3.8

Relative Percent Difference =
Range/Average X 100

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT
QUALITY CONTROL - ACCURACY

Type of Analysis: Matrix Spikes and E.P.A. Standards
Client: UNION CARBIDE A.E.S. Job Code: CTC

(Units:mg/l or ppm)

Analytical Parameters	Sample No.	Type	Observed Conc.	Original Conc.	Added Conc.	Percent Recovery*
Total Iron	9072	SPK *	8.88	4.01	5.00	97
Soluble Iron	9072	SPK	9.02	4.52	5.00	90
EPA (Fe) Std.	988	EPA	1.02	1.00	---	102
Total Potassium	9072	SPK *	33.4	13.8	20.0	98
Soluble Potassium	9072	SPK	34.0	14.0	20.0	100
IND (K) Std.	---	STD	10.4	10.0	---	104
Total Zinc	9072	SPK	1.34	0.34	1.00	100
Soluble Zinc	9072	SPK	1.28	0.26	1.00	102
EPA (Zn) Std.	989	EPA	0.46	0.50	---	92

* % Recovery=100 x ((Observed Conc. - "background" Original Conc.)/"Spike" Added Conc.)

* Spike performed on a sample dilution.

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: INORGANICS

Client: UNION CARBIDE A.E.S. Job Code CTC

(All results are in mg/l)

Analytical Parameter(s)	Method No.	Quant. Limits			
			AES Lab No. -	9110	9111
			Sample ID -	BW 3	BW 1
			Sample Date-	GRAB 09/21/90	GRAB 09/21/90
Total Iron (Fe)	236.1	0.30		3.35	4.03
Soluble Iron (Fe)	236.1	0.30		1.03	1.62
Total Potassium (K)	258.1	1.00		6.13	3.51
Soluble Potassium (K)	258.1	1.00		5.67	3.47
Total Zinc (Zn)	289.1	0.05		12.2	0.80
Soluble Zinc (Zn)	289.1	0.05		0.76	0.34

Gary L. Amato
Technical Supervisor

AES INORGANIC DEPARTMENT TRACEABILITY
JOB CODE: GTC

Technician Signature	AES Sample #	Method	Date of Analysi
Mark Morris	9003-05T,S	236.1	9-20-90
Mark Morris	"	289.1	9-24-90
Mark Morris	"	258.1	9-27-90

AES INORGANIC DEPARTMENT TRACEABILITY

JOB CODE: CTC

Technician Signature	AES Sample #	Method	Date of Analysis
Mark Morris	9032	236.1	9-20-91
Mark Morris	"	289.1	9-24-91
Mark Morris	"	258.1	9-27-91

AES INORGANIC DEPARTMENT TRACEABILITY
JOB CODE: CTC

Technician Signature	AES Sample #	Method	Date of Analysis
Mark Morris	9069-12T,S	236.1	9-25-90
Mark Morris	"	289.1	9-25-90
Mark Morris	"	258.1	9-27-90

AES INORGANIC DEPARTMENT TRACEABILITY

JOB CODE: CTC

Technician Signature	AES Sample #	Method	Date of Analysis
Mack Morris	9110 (T&S)	336.1	9-26-90
Mack Morris	9111 (T&S)	336.1	9-26-90
Mack Morris	9110 - 9111 T/S	289.1	9-26-90
Mack Morris	9110 - 9111 T/S	258.1	9-27-90

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: VOLATILES

Units of Measure: Micrograms/ liter or ppb
Client: UNION CARBIDE A.E.S. Job Code CTC

Analytical Parameter(s)	Method No.	Quant. Limits	AES Lab No.-	9002	9004	9005
			Sample ID -	TRIP BLANK	BW-4	BLIND DUP (BW-4)
			Sample Date-	GRAB 09/18/90	GRAB 09/18/90	GRAB 09/18/90
Chloromethane	8240	10		BQL *	BQL	BQL
- Vinyl Chloride	"	"		BQL	43	53
Chloroethane	"	"		BQL	BQL	BQL
Bromomethane	"	"		BQL	BQL	BQL
2-Chloroethylvinylether	"	"		BQL	BQL	BQL
Ethylbenzene	"	5.0		BQL	BQL	BQL
Methylene Chloride	"	"		BQL	BQL	BQL
Chlorobenzene	"	"		BQL	BQL	BQL
1,1-Dichloroethylene	"	"		BQL	BQL	BQL
1,1-Dichloroethane	"	"		BQL	BQL	BQL
trans-1,2-Dichloroethylene	"	"		BQL	BQL	BQL
- Chloroform	"	"		BQL	9.2	8.9
1,2-Dichloroethane	"	"		BQL	BQL	BQL
1,1,1-Trichloroethane	"	"		BQL	BQL	BQL
Carbon Tetrachloride	"	"		BQL	BQL	BQL
Bromodichloromethane	"	"		BQL	BQL	BQL
1,2-Dichloropropene	"	"		BQL	BQL	BQL
trans-1,3-Dichloropropene	"	"		BQL	BQL	BQL
- Trichloroethylene	"	"		BQL	400	380
Benzene	"	"		BQL	BQL	BQL
cis-1,3-Dichloropropene	"	"		BQL	BQL	BQL
1,1,2-Trichloroethane	"	"		BQL	BQL	BQL
Dibromochloromethane	"	"		BQL	BQL	BQL
Bromoform	"	"		BQL	BQL	BQL
- Tetrachloroethylene	"	"		BQL	380	340
1,1,2,2-Tetrachloroethane	"	"		BQL	BQL	BQL
Toluene	"	"		BQL	BQL	BQL

* Below Quantifiable Limits

Wayne J. Juda
Organics Supervisor

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: VOLATILES

Units of Measure: Micrograms/ liter or ppb
Client: UNION CARBIDE A.E.S. Job Code CTC

Analytical Parameter(s)	Method No.	Quant. Limits	AES Lab No.-	9002	9004	9005
			Sample ID -	TRIP BLANK	BW-4	BLIND DUP (BW-4)
			Sample Date-	GRAB 09/18/90	GRAB 09/18/90	GRAB 09/18/90
Acetone	8240	50		BQL *	BQL	BQL
Carbon Disulfide	"	5.0		BQL	BQL	BQL
2-Butanone	"	50		BQL	BQL	BQL
Vinyl Acetate	"	50		BQL	BQL	BQL
2-Hexanone	"	50		BQL	BQL	BQL
4-Methyl-2-Pentanone	"	50		BQL	BQL	BQL
Styrene	"	5.0		BQL	BQL	BQL
o-Xylene	"	5.0		BQL	BQL	BQL
m/p-Xylene	"	5.0		BQL	BQL	BQL

* Below Quantifiable Limits

Wayne J. Juda
Organics Supervisor

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: VOLATILES

Units of Measure: Micrograms/ liter or ppb
Client: UNION CARBIDE A.E.S. Job Code CTC

Analytical Parameter(s)	Method No.	Quant. Limits	AES Lab No.- 9072 / Sample ID - BW-6 / Sample Date- 09/20/90 GRAB
Chloromethane	8240	10	BQL *
Vinyl Chloride	"	"	BQL
Chloroethane	"	"	BQL
Bromomethane	"	"	BQL
2-Chloroethylvinylether	"	"	BQL
Ethylbenzene	"	5.0	BQL
Methylene Chloride	"	"	BQL
Chlorobenzene	"	"	BQL
1,1-Dichloroethylene	"	"	BQL
1,1-Dichloroethane	"	"	BQL
trans-1,2-Dichloroethylene	"	"	BQL
Chloroform	"	"	BQL
1,2-Dichloroethane	"	"	BQL
1,1,1-Trichloroethane	"	"	BQL
Carbon Tetrachloride	"	"	BQL
Bromodichloromethane	"	"	BQL
1,2-Dichloropropene	"	"	BQL
trans-1,3-Dichloropropene	"	"	BQL
Trichloroethylene	"	"	BQL
Benzene	"	"	BQL
cis-1,3-Dichloropropene	"	"	BQL
1,1,2-Trichloroethane	"	"	BQL
Dibromochloromethane	"	"	BQL
Bromoform	"	"	BQL
Tetrachloroethylene	"	"	BQL
1,1,2,2-Tetrachloroethane	"	"	BQL
Toluene	"	"	BQL

* Below Quantifiable Limits

Wayne J. Juda
Organics Supervisor

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: VOLATILES

Units of Measure: Micrograms/ liter or ppb
Client: UNION CARBIDE A.E.S. Job Code CTC

Analytical Parameter(s)	Method No.	Quant. Limits	AES Lab No.- 9072 Sample ID - BW-6 Sample Date- 09/20/90 GRAB
Acetone	8240	50	BQL *
Carbon Disulfide	"	5.0	BQL
2-Butanone	"	50	BQL
Vinyl Acetate	"	50	BQL
2-Hexanone	"	50	BQL
4-Methyl-2-Pentanone	"	50	BQL
Styrene	"	5.0	BQL
o-Xylene	"	5.0	BQL
m/p-Xylene	"	5.0	BQL

* Below Quantifiable Limits

Wayne J. Juda
Organics Supervisor

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: SEMI-VOLATILES

Units of Measure: Micrograms/ liter or ppb
Client: UNION CARBIDE A.E.S. Job Code CTC

Analytical Parameter(s)	Method No.	Quant. Limits	AES Lab No.-	9002	9004	9005
			Sample ID -	TRIP BLANK	BW-4	BLIND DUP (BW-4)
			Sample Date-	GRAB 09/18/90	GRAB 09/18/90	GRAB 09/18/90
N-Nitrosodimethylamine	8270	10		BQL *	BQL	BQL
Bis(2-Chloroethyl)Ether	"	"		BQL	BQL	BQL
1,3-Dichlorobenzene	"	"		BQL	BQL	BQL
1,4-Dichlorobenzene	"	"		BQL	BQL	BQL
1,2-Dichlorobenzene	"	"		BQL	BQL	BQL
Bis(2-Chloroisopropyl) Ether	"	"		BQL	BQL	BQL
Hexachloroethane	"	"		BQL	BQL	BQL
N-Nitrosodi-N-Propylamine	"	"		BQL	BQL	BQL
Nitrobenzene	"	"		BQL	BQL	BQL
Isophorone	"	"		BQL	BQL	BQL
Bis(2-Chloroethoxy)Methane	"	"		BQL	BQL	BQL
1,2,4-Trichlorobenzene	"	"		BQL	BQL	BQL
Naphthalene	"	"		BQL	BQL	BQL
Hexachlorobutadiene	"	"		BQL	85	62
Hexachlorocyclopentadiene	"	"		BQL	BQL	BQL
2-Chloronaphthalene	"	"		BQL	BQL	BQL
Dimethylphthalate	"	"		BQL	BQL	BQL
Acenaphthylene	"	"		BQL	BQL	BQL
2,6-Dinitrotoluene	"	"		BQL	BQL	BQL
Acenaphthene	"	"		BQL	BQL	BQL
2,4-Dinitrotoluene	"	"		BQL	BQL	BQL
Diethylphthalate	"	"		BQL	BQL	BQL

* Below Quantifiable Limits

Wayne J. Juda
Organics Supervisor

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: SEMI-VOLATILES

Units of Measure: Micrograms/ liter or ppb
Client: UNION CARBIDE A.E.S. Job Code CTC

Analytical Parameter(s)	Method No.	Quant. Limits	AES Lab No.-	9002	9004	9005
			Sample ID -	TRIP BLANK	BW-4	BLIND DUP (BW-4)
			Sample Date-	GRAB 09/18/90	GRAB 09/18/90	GRAB 09/18/90
Fluorene	8270	10		BQL *	BQL	BQL
4-Chlorophenylphenylether	"	"		BQL	BQL	BQL
N-Nitrosodiphenylamine	"	"		BQL	BQL	BQL
1,2-Diphenylhydrazine	"	"		BQL	BQL	BQL
4-Bromophenylphenylether	"	"		BQL	BQL	BQL
Hexachlorobenzene	"	"		BQL	BQL	BQL
Phenanthrene	"	"		BQL	BQL	BQL
Anthracene	"	"		BQL	BQL	BQL
Di-N-Butylphthalate	"	"		BQL	BQL	BQL
Fluoranthene	"	"		BQL	BQL	BQL
Benzidine	"	30		BQL	BQL	BQL
Pyrene	"	10		BQL	BQL	BQL
Butylbenzylphthalate	"	"		BQL	BQL	BQL
Benzo(a)Anthracene	"	"		BQL	BQL	BQL
3,3'-Dichlorobenzidine	"	20		BQL	BQL	BQL
Chrysene	"	10		BQL	BQL	BQL
Bis(2-Ethylhexyl)Phthalate	"	20		BQL	BQL	BQL
Di-N-Octylphthalate	"	10		BQL	BQL	BQL
Benzo(b)Fluoranthene	"	"		BQL	BQL	BQL
Benzo(k)Fluoranthene	"	"		BQL	BQL	BQL
Benzo(a)Pyrene	"	"		BQL	BQL	BQL
Indeno(1,2,3-cd)Pyrene	"	"		BQL	BQL	BQL
Dibenz(a,h)Anthracene	"	"		BQL	BQL	BQL
Benzo(g,h,i)Perylene	"	"		BQL	BQL	BQL

* Below Quantifiable Limits

Wayne J. Juda
Organics Supervisor

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: SEMI-VOLATILES

Units of Measure: Micrograms/ liter or ppb
Client: UNION CARBIDE A.E.S. Job Code CTC

Analytical Parameter(s)	Method No.	Quant. Limits	AES Lab No.- / Sample ID -	9002 TRIP BLANK	9004 BW-4	9005 BLIND DUP (BW-4)
			Sample Date-	GRAB 09/18/90	GRAB 09/18/90	GRAB 09/18/90
Phenol	8270	10		BQL *	BQL	BQL
2-Chlorophenol	"	"		BQL	BQL	BQL
2-Nitrophenol	"	"		BQL	BQL	BQL
2,4-Dimethylphenol	"	"		BQL	BQL	BQL
4-Chloro-3-Methylphenol	"	20		BQL	BQL	BQL
2,4,6-Trichlorophenol	"	10		BQL	BQL	BQL
2,4-Dinitrophenol	"	50		BQL	BQL	BQL
4-Nitrophenol	"	"		BQL	BQL	BQL
4,6-Dinitro-2-Methylphenol	"	"		BQL	BQL	BQL
Pentachlorophenol	"	"		BQL	BQL	BQL
2,4-Dichlorophenol	"	10		BQL	BQL	BQL
4-Methylphenol	"	"		BQL	BQL	BQL
Benzoic Acid	"	50		BQL	BQL	BQL
2,4,5-Trichlorophenol	"	10		BQL	BQL	BQL
3-Nitroaniline	"	50		BQL	BQL	BQL
Dibenzofuran	"	10		BQL	BQL	BQL
4-Nitroaniline	"	50		BQL	BQL	BQL
2-Methylphenol	"	10		BQL	BQL	BQL
2-Methylnaphthalene	"	"		BQL	BQL	BQL
Aniline	"	"		BQL	BQL	BQL
Benzyl Alcohol	"	20		BQL	BQL	BQL
4-Chloroaniline	"	"		BQL	BQL	BQL
2-Nitroaniline	"	50		BQL	BQL	BQL

* Below Quantifiable Limits

Wayne J. Juda
Organics Supervisor

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: SEMI-VOLATILES

Units of Measure: Micrograms/ liter or ppb
Client: UNION CARBIDE A.E.S. Job Code CTC

Analytical Parameter(s)	Method No.	Quant. Limits	AES Lab No.- 9072 / Sample ID - BW-6 / Sample Date- 09/20/90 GRAB
Fluorene	8270	10	BQL *
4-Chlorophenylphenylether	"	"	BQL
N-Nitrosodiphenylamine	"	"	BQL
1,2-Diphenylhydrazine	"	"	BQL
4-Bromophenylphenylether	"	"	BQL
Hexachlorobenzene	"	"	BQL
Phenanthrene	"	"	BQL
Anthracene	"	"	BQL
Di-N-Butylphthalate	"	"	BQL
Fluoranthene	"	"	BQL
Benzidine	"	30	BQL
Pyrene	"	10	BQL
Butylbenzylphthalate	"	"	BQL
Benzo(a)Anthracene	"	"	BQL
3,3'-Dichlorobenzidine	"	20	BQL
Chrysene	"	10	BQL
Bis(2-Ethylhexyl)Phthalate	"	20	BQL
Di-N-Octylphthalate	"	10	BQL
Benzo(b)Fluoranthene	"	"	BQL
Benzo(k)Fluoranthene	"	"	BQL
Benzo(a)Pyrene	"	"	BQL
Indeno(1,2,3-cd)Pyrene	"	"	BQL
Dibenz(a,h)Anthracene	"	"	BQL
Benzo(g,h,i)Perylene	"	"	BQL

* Below Quantifiable Limits

Wayne J. Juda
Organics Supervisor

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: SEMI-VOLATILES

Units of Measure: Micrograms/ liter or ppb
Client: UNION CARBIDE A.E.S. Job Code CTC

Analytical Parameter(s)	Method No.	Quant. Limits	AES Lab No.- 9072 Sample ID - BW-6 Sample Date- GRAB 09/20/90
N-Nitrosodimethylamine	8270	10	BQL *
Bis(2-Chloroethyl)Ether	"	"	BQL
1,3-Dichlorobenzene	"	"	BQL
1,4-Dichlorobenzene	"	"	BQL
1,2-Dichlorobenzene	"	"	BQL
Bis(2-Chloroisopropyl) Ether	"	"	BQL
Hexachloroethane	"	"	BQL
N-Nitrosodi-N-Propylamine	"	"	BQL
Nitrobenzene	"	"	BQL
Isophorone	"	"	BQL
Bis(2-Chloroethoxy)Methane	"	"	BQL
1,2,4-Trichlorobenzene	"	"	BQL
Naphthalene	"	"	BQL
Hexachlorobutadiene	"	"	BQL
Hexachlorocyclopentadiene	"	"	BQL
2-Chloronaphthalene	"	"	BQL
Dimethylphthalate	"	"	BQL
Acenaphthylene	"	"	BQL
2,6-Dinitrotoluene	"	"	BQL
Acenaphthene	"	"	BQL
2,4-Dinitrotoluene	"	"	BQL
Diethylphthalate	"	"	BQL

* Below Quantifiable Limits

Wayne J. Juda
Organics Supervisor

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: SEMI-VOLATILES

Units of Measure: Micrograms/ liter or ppb
Client: UNION CARBIDE A.E.S. Job Code CTC

Analytical Parameter(s)	Method No.	Quant. Limits	AES Lab No.- 9072 Sample ID - BW-6 Sample Date- 09/20/90 GRAB
Phenol	8270	10	BQL *
2-Chlorophenol	"	"	BQL
2-Nitrophenol	"	"	BQL
2,4-Dimethylphenol	"	"	BQL
4-Chloro-3-Methylphenol	"	20	BQL
2,4,6-Trichlorophenol	"	10	BQL
2,4-Dinitrophenol	"	50	BQL
4-Nitrophenol	"	"	BQL
4,6-Dinitro-2-Methylphenol	"	"	BQL
Pentachlorophenol	"	"	BQL
2,4-Dichlorophenol	"	10	BQL
4-Methylphenol	"	"	BQL
Benzoic Acid	"	50	BQL
Dibenzofuran	"	10	BQL
4-Nitroaniline	"	50	BQL
2-Methylphenol	"	10	BQL
2-Methylnaphthalene	"	"	BQL
Aniline	"	"	BQL
Benzyl Alcohol	"	20	BQL
4-Chloroaniline	"	"	BQL
2-Nitroaniline	"	50	BQL
2,4,5 - Trichlorophenol	"	10	BQL
3 - Nitroaniline	"	50	BQL

* Below Quantifiable Limits

Wayne J. Juda
Organics Supervisor

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT
QUALITY CONTROL - PRECISION

Type of Analysis: Duplicate Analysis
Units of Measure: Micrograms/ liter or ppb
Client: UNION CARBIDE A.E.S. Job Code:CTC

Analytical Parameters	Sample Code	Original Conc.	Duplicate Conc.	Average Conc.	Range	Rel. % Difference
Chloromethane	9072	<10	<10	<10	NONE	NONE
Vinyl Chloride	"	"	"	"	"	"
Chloroethane	"	"	"	"	"	"
Bromomethane	"	"	"	"	"	"
2-Chloroethylvinylether	"	"	"	"	"	"
Ethylbenzene	"	<5.0	<5.0	<5.0	NONE	NONE
Methylene Chloride	"	"	"	"	"	"
Chlorobenzene	"	"	"	"	"	"
1,1-Dichloroethylene	"	"	"	"	"	"
1,1-Dichloroethane	"	"	"	"	"	"
trans-1,2-Dichloroethylene	"	"	"	"	"	"
Chloroform	"	"	"	"	"	"
1,2-Dichloroethane	"	"	"	"	"	"
1,1,1-Trichloroethane	"	"	"	"	"	"
Carbon Tetrachloride	"	"	"	"	"	"
Bromodichloromethane	"	"	"	"	"	"
1,2-Dichloropropane	"	"	"	"	"	"
trans-1,3-Dichloropropene	"	"	"	"	"	"
Trichloroethylene	"	"	"	"	"	"
Benzene	"	"	"	"	"	"
cis-1,3-Dichloropropene	"	"	"	"	"	"
1,1,2-Trichloroethane	"	"	"	"	"	"
Dibromochloromethane	"	"	"	"	"	"
Bromoform	"	"	"	"	"	"
Tetrachloroethylene	"	"	"	"	"	"

Relative Percent Difference =
Range/Average X 100

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT
QUALITY CONTROL - PRECISION

Type of Analysis: Duplicate Analysis
Units of Measure: Micrograms/ liter or ppb
Client: UNION CARBIDE A.E.S. Job Code:CTC

Analytical Parameters	Sample Code	Original Conc.	Duplicate Conc.	Average Conc.	Range	Rel. % Difference
1,1,2,2-Tetrachloroethane	9072	<5.0	<5.0	<5.0	NONE	NONE
Toluene	"	"	"	"	"	"
Acetone	"	<50	<50	<50	"	"
Carbon Disulfide	"	<5.0	<5.0	<5.0	"	"
2-Butanone	"	<50	<50	<50	"	"
Vinyl Acetate	"	"	"	"	"	"
2-Hexanone	"	"	"	"	"	"
4-Methyl-2-Pentanone	"	"	"	"	"	"
Styrene	"	<5.0	<5.0	<5.0	"	"
O-Xylene	"	"	"	"	"	"
M/P-Xylene	"	"	"	"	"	"

Relative Percent Difference =
Range/Average X 100

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT
QUALITY CONTROL - PRECISION

Type of Analysis: Duplicate Analysis
Units of Measure: Microgram/Liter, or ppb
Client: UNION CARBIDE A.E.S. Job Code:CTC

Analytical Parameters	Sample Code	Original Conc.	Duplicate Conc.	Average Conc.	Range	Rel. % Difference
N-Nitrosodimethylamine	9072	<10	<10	<10	NONE	NONE
Bis(2-Chloroethyl)Ether	"	"	"	"	"	"
1,3-Dichlorobenzene	"	"	"	"	"	"
1,4-Dichlorobenzene	"	"	"	"	"	"
1,2-Dichlorobenzene	"	"	"	"	"	"
Bis(2-Chloroisopropyl)Ether	"	"	"	"	"	"
Hexachloroethane	"	"	"	"	"	"
N-Nitrosodi-N-Propylamine	"	"	"	"	"	"
Nitrobenzene	"	"	"	"	"	"
Isophorone	"	"	"	"	"	"
Bis(2_Chloroethoxy)Methane	"	"	"	"	"	"
1,2,4-Trichlorobenzene	"	"	"	"	"	"
Naphthalene	"	"	"	"	"	"
Hexachlorobutadiene	"	"	"	"	"	"
Hexachlorocyclopentadiene	"	"	"	"	"	"
2-Chloronaphthalene	"	"	"	"	"	"
Dimethylphthalate	"	"	"	"	"	"
Acenaphthylene	"	"	"	"	"	"
2,6-Dinitrotoluene	"	"	"	"	"	"
Acenaphthene	"	"	"	"	"	"
2,4-Dinitrotoluene	"	"	"	"	"	"
Diethylphthalate	"	"	"	"	"	"
Fluorene	"	"	"	"	"	"
4-Chlorophenyl Phenyl Ether	"	"	"	"	"	"
N-Nitrosodiphenylamine	"	"	"	"	"	"

Relative Percent Difference =
Range/Average X 100

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT
QUALITY CONTROL - PRECISION

Type of Analysis: Duplicate Analysis
Units of Measure: Microgram/Liter, or ppb
Client: Union Carbide A.E.S. Job Code:CTC

Analytical Parameters	Sample Code	Original Conc.	Duplicate Conc.	Average Conc.	Range	Rel. % Difference
1,2-Diphenylhydrazine	9072	<10	<10	<10	NONE	NONE
4-Bromophenylphenylether	"	"	"	"	"	"
Hexachlorobenzene	"	"	"	"	"	"
Phenanthrene	"	"	"	"	"	"
Anthracene	"	"	"	"	"	"
Di-N-Butylphthalate	"	"	"	"	"	"
Flouranthene	"	"	"	"	"	"
Benzidine	"	<50	<50	<50	"	"
Pyrene	"	<10	<10	<10	"	"
Butylbenzylphthalate	"	"	"	"	"	"
Benzo(a)Anthracene	"	"	"	"	"	"
3,3'-Dichlorobenzidine	"	<30	<30	>30	"	"
Chrysene	"	<10	<10	<10	"	"
Bis(2-Ethylhexyl)Phthalate	"	<20	<20	<20	"	"
Di-N-Octylphthalate	"	<10	<10	<10	"	"
Benzo(b)Fluoranthene	"	"	"	"	"	"
Benzo(k)Fluoranthene	"	"	"	"	"	"
Benzo(a)Pyrene	"	"	"	"	"	"
Indeno(1,2,3-cd)Pyrene	"	"	"	"	"	"
Dibenz(a,h)Anthracene	"	"	"	"	"	"
Benzo (g,h,i)Perylene	"	"	"	"	"	"
Phenol	"	"	"	"	"	"
2-Chlorophenol	"	"	"	"	"	"
2-Nitrophenol	"	"	"	"	"	"
2,4-Dimethylphenol	"	"	"	"	"	"

Relative Percent Difference =
Range/Average X 100

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT
QUALITY CONTROL - PRECISION

Type of Analysis: Duplicate Analysis
Units of Measure: Microgram/Liter, or ppb
Client: UNION CARBIDE A.E.S. Job Code:CTC

Analytical Parameters	Sample Code	Original Conc.	Duplicate Conc.	Average Conc.	Range	Rel. % Difference
4-Chloro-3-Methylphenol	9072	<20	<20	<20	NONE	NONE
2,4,6-Trichlorophenol	"	<10	<10	<10	"	"
2,4-Dinitrophenol	"	<50	<50	<50	"	"
4-Nitrophenol	"	"	"	"	"	"
4,6-Dinitro-2-Methylphenol	"	"	"	"	"	"
Pentachlorophenol	"	"	"	"	"	"
2,4-Dichlorophenol	"	<10	<10	<10	"	"
4-Methylphenol	"	"	"	"	"	"
2,4,5-Trichlorophenol	"	"	"	"	"	"
2-Methylphenol	"	"	"	"	"	"
Benzoic Acid	"	<50	<50	<50	"	"
Benzyl Alcohol	"	<20	<20	<20	"	"
Aniline	"	<10	<10	<10	"	"
2-Methylnaphthalene	"	"	"	"	"	"
2-Nitroaniline	"	<50	<50	<50	"	"
4-Nitroaniline	"	"	"	"	"	"
3-Nitroaniline	"	"	"	"	"	"
Dibenzofuran	"	<10	<10	<10	"	"
4-Chloroaniline	"	<20	<20	<20	"	"

Relative Percent Difference =
Range/Average X 100

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT
QUALITY CONTROL - ACCURACY

Type of Analysis: Matrix Spikes and E.P.A. Standards
Client: UNION CARBIDE A.E.S. Job Code: CTC

(Units: ug/l, or ppb)

Analytical Parameters	Sample No.	Type	Observed Conc.	Original Conc.	Added Conc.	Percent Recovery*
1,1-Dichloroethene	9072	SPK	18.9	<5.0	20.0	94
trans-1,2-Dichloroethene	"	"	21.1	"	"	106
1,1-Dichloroethane	"	"	20.2	"	"	101
Chloroform	"	"	20.4	"	"	102
Benzene	"	"	22.6	"	"	113
Trichloroethene	"	"	20.4	"	"	107
Toluene	"	"	20.7	"	"	104
Tetrachloroethene	"	"	20.6	"	"	103
Chlorobenzene	"	"	21.2	"	"	106
2-Chlorophenol	"	"	71	<10	100	71
1,3-Dichlorobenzene	"	"	68	"	"	68
N-Nitrosodipropylamine	"	"	71	"	"	71
1,2,4-Trichlorobenzene	"	"	67	"	"	67
4-Chloro-3-Methylphenol	"	"	75	"	"	75
Acenaphthene	"	"	70	"	"	70
2,4-Dinitrotoluene	"	"	68	"	"	68
Pyrene	"	"	111	"	"	111

* % Recovery=100 x ((Observed Conc. - "background" Original Conc.)/"Spike" Added Conc.)

AES ORGANIC DEPARTMENT TRACEABILITY
JOB CODE: CTC

Technician Signature	AES Sample #	Method	Date of Analysis
Jim Fugh	9002, 9004, 9005	8240	9/20/90
Jim Fugh	9002, 9004, 9005	8270	9/27/90

AES ORGANIC DEPARTMENT TRACEABILITY

JOB CODE: CTC

Technician Signature	AES Sample #	Method	Date of Analysis
Jim Tugh	9072	8240	9/25/90
Jim Tugh	9072	8270	9/27/90

APPENDIX A

CHAIN OF CUSTODY RECORDS

CHAIN OF CUSTODY RECORD

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

PROJECT NAME: Union Carbide Wells

SAMPLER'S SIGNATURE: [signature]

JOB CODE: CTC
Quarterly

DATE	TIME	SAMPLE IDENTIFICATION	GRAB	COMP	SAMPLE TYPE	CONTAINER CLASSIFICATION: UNPRESERVED	HNO3	H2SO4	HCl	NAOH	VIAL	TOTAL	PARAMETERS/REMARKS
9/18/90		Trip Blank	X		D.I. WATER	1					1	2	1-VOA, 1-Liter-Semi Volatiles, Haz Sub Volatiles
9/18/90		BW-5	X		Groundwater	1	2	1				4	3-500ml, 1-Liter-T. Metals Filtered Metals, Ammonia, TKN Nitrite
9/18/90		BW-4	X		"	2	2	1			3	8	3-500ml, 2-Liter's, 3-VOA T. Metals, Filtered Metals, TKN, Ammonia, Nitrite, Semi-Volatiles, Volatiles
9/18/90		Blind Duplicate	X		"	2	2	1			3	8	Same Parameter's as previous sample
					TOTAL NUMBER OF CONTAINERS							22	

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]	9/18/90	3:30 pm	[signature] 4:20
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, NY 14304 • (716) 283-3120

PROJECT NAME: UNION CARBIDE

JOB CODE: CTC
Quarterly

SAMPLER'S SIGNATURE: Scott MacGuire, Jodi Abel

DATE	TIME	SAMPLE IDENTIFICATION	GRAB	COMP	SAMPLE TYPE	CONTAINER CLASSIFICATION: UNPRESERVED	HNO_3	H_2SO_4	HCl	NAOH	VIAL	TOTAL	PARAMETERS/REMARKS
9/19/90	1250 pm	B-W-2	✓		WATER	1	2	1				4	Ammonia/TKN, METALS, NITRATE

TOTAL NUMBER OF CONTAINERS 4

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: Scott MacGuire	9/19/90	4:00 pm	
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, NY 14304 • (716) 283-3120

PROJECT NAME: Union Carbide Wells

JOB CODE: CTC
Quarterly

SAMPLER'S SIGNATURE: Scott Clark

DATE	TIME	SAMPLE IDENTIFICATION	GRAB	COMP	SAMPLE TYPE	CONTAINER CLASSIFICATION: UNPRESERVED	HNO3	H2SO4	HCl	NAOH	VIAL w/HCl	TOTAL	PARAMETERS/REMARKS
9/20/90		MW-1	X		Groundwater	1	2					3	Total and Filtered Metals, Nitrite
		MW-2	X				2					2	Total and Filtered Metals
		MW-3	X			1	2	1				4	Total and Filtered Metals, Ammonia, TKN, Nitrite
		BW-6	X			4	2	1			4	11	Total and Filtered Metals Ammonia, TKN, Nitrite, Semi Volatile Volatile organics

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

TOTAL NUMBER OF CONTAINERS 20

	DATE	TIME	RECEIVED BY:
1. RELINQUISHED BY: Scott Clark	9/20/90	4:30	
2. RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
3. RELINQUISHED BY:	DATE	TIME	RECEIVED BY:

CHAIN OF CUSTODY RECORD

...L SERVICES, INC.
...BERTY DRIVE
NIAGARA FALLS, NY 14304 • (716) 283-3120

PROJECT NAME: Union Carbide

JOB CODE: CTC

SAMPLER'S SIGNATURE: [signature]

DATE	TIME	SAMPLE IDENTIFICATION	GRAB	COMP	SAMPLE TYPE	CONTAINER CLASSIFICATION: UNPRESERVED	HNO₃	H₂SO₄	HCl	NAOH	VIAL	TOTAL	PARAMETERS/REMARKS
9/21/90	9 30 AM	MW-1	X		water			1				1	Ammonia, TKN
"	1 30 PM	MW-2	X		"	1						1	Nitrite
"	12 45 PM	BW-3	X		"	1	2	1				4	Ammonia, TKN, Nitrite, Total and Soluble metals
"	9 30 AM	BW-1	X		"	1	2	1				4	Ammonia, TKN, Nitrite, Total and Soluble metals

TOTAL NUMBER OF CONTAINERS 10

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]	9/21/90	3 30 PM	[signature]
2. RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
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