UNION CARBIDE

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

January 29, 1991

Mr. Robert J. Mitrey
Associate Sanitary Engineer
New York State Department of Environmental Conservation
600 Delaware St.
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 eleventh 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 positive organic parameters:

Contaminate	11th Qtr. ppb
Vinyl Chloride	55
Trichloroethylene	130
Tetrachloroethylene	72
Methylene Chloride	12
Hexachlorobutadiene	28

We do not feel that this contamination at BW-4-86 is related to the Republic Solid 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 Devold, 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 COMPANY INC.

Dawn T. Marasco
Customer Service Representative

Paul T. McMahon
Quality Control Officer

January 24, 1991
AES Report CTC

COMMITMENT
TO
HONESTY - QUALITY - SERVICE

Advanced Environmental Services, Inc.

Quarterly Monitoring Well Information
Union Carbide Company
Niagara Falls, New York

AES Code: CTC

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	12/31/90	610.72	4	14.15	596.57	28.60	9.43	32.0	C
BW-2	12/27/90	608.43	4	13.25	595.18	26.20	8.45	25.0	S
BW-3	12/27/90	604.72	4	8.45	596.27	24.70	10.61	35.0	S
BW-4	12/26/90	607.08	4	8.87	598.21	22.50	8.90	30.0	C
BW-5	12/26/90	603.33	4	6.30	597.03	25.70	12.66	35.0	C
BW-6 *	12/27/90	607.04	4	15.85	591.19	24.55	5.68	16.0	S
MW-1	12/27/90	609.43	2	11.80	597.63	21.00	1.50	1.5 (Dry)	S
MW-2	12/27/90	607.54	2	22.35	585.19	23.35	0.16	0.17	S
MW-3	12/27/90	601.61	4	Bailer frozen approximately 1.5 ft. below outer casing.					
OW-1 SOUTH	12/31/90	608.81	4	5.20	603.61	N/A	N/A	N/A	N/A
OW-2 NORTH	12/31/90	607.06	4	4.98	602.08	N/A	N/A	N/A	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.

* Blind Duplicate Site

Dennis J. Hoyt 1-24-91
Technician Date

Advanced Environmental Services, Inc.

Quarterly Monitoring Field Information
Union Carbide Company
Niagara Falls, New York

AES Code: CTC

Monitoring Well I.D.	Date	Sampling Time	Water Level (ft.)	Filter Time	Comments
BW-1	12/31/90	3:00 PM	14.35	3:30 PM	Sample was clear
BW-2	12/27/90	3:50 PM	13.25	4:40 PM	Sample was clear w/ sulfur odor.
BW-3	12/27/90	2:47 PM	8.45	4:30 PM	Clear w/ slight organic odor.
BW-4	12/26/90	3:15 PM	9.30	4:15 PM	Lightly turbid with a strong odor.
BW-5	12/26/90	2:30 PM	6.35	4:25 PM	Lightly turbid with particulates.
BW-6 *	12/27/90	12:00 PM	18.32	4:50 PM	Turbid with a carbon odor.
MW-1	12/28/90	3:00 PM	16.45	4:00 PM	Sample was clear w/ no odor.
MW-2	12/31/90	2:35 PM	22.60	3:40 PM	Sample was black w/ a strong odor.
MW-3	No sample due to frozen conditions.				******
OW-1 SOUTH	N/A	N/A	N/A	N/A	N/A
OW-2 NORTH	N/A	N/A	N/A	N/A	N/A
BLIND DUP	12/27/90	12:00 PM	18.32	5:00 PM	Turbid with a carbon odor.

* Blind Duplicate Site

Dennis J. Hoyt 1-24-91
Technician Date

Advanced Environmental Services, Inc.

Quarterly Monitoring Well Information
Union Carbide Company
Niagara Falls, New York

AES Code: CTC

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									
BW-2									
BW-3									
BW-4	1/4/90	607.08	4	7.67	599.41	22.50	9.68	30.0	C
BW-5									
BW-6									
MW-1									
MW-2									
MW-3									
OW-1 SOUTH									
OW-2 NORTH									

Resampling conducted for Semi-Volatiles.

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.

Dennis J. Hoyt — Technician

1-24-91 — Date

Advanced Environmental Services, Inc.

Quarterly Monitoring Field Information
Union Carbide Company
Niagara Falls, New York

AES Code: CTC

Monitoring Well I.D.	Date	Sampling Time	Water Level (ft.)	Filter Time	Comments
BW-1					
BW-2					
BW-3					
BW-4	1/4/91	12:00 PM	8.15	NR	Clear w/ particulates, strong odor.
BW-5					
BW-6					
MW-1					
MW-2					
MW-3					
OW-1 SOUTH					
OW-2 NORTH					
BLIND DUP					

Resampling conducted for Semi-Volatiles.
NR = Not Required

Dennis J. Hoyt 1-24-91
Technician Date

COMMENT:

Due to laboratory error, well BW-4 and the trip blank were resampled for semivolatiles (8270) on 1/04/91. The original samples taken 12/26/90 expired prior to extraction in the laboratory.

Due to technician error, a spike and a duplicate spike was performed for the volatile analysis (8240) of the QC site (BW-6). The project requires a duplicate and a spike. At the request of Mr. Al Ogg of Union Carbide, Paul McMahon of AES contacted Mary McIntosh of the NYSDEC on January 17, 1991 to discuss if this situation would cause any problems with the report. It was decided that the QC performed would be acceptable.

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. -	12203	12204
			Sample ID -	BW-5 GRAB	BW-4 GRAB
			Sample Date-	12/26/90	12/26/90
Ammonia (as N) (mg/l)	350.1	0.02		0.10	3.70
Nitrite (mg/l)	353.2	0.01		BQL *	BQL
Total Kjeldahl Nitrogen(mg/l)	351.2	0.1		0.4	4.2

* Below Quantifiable Limits

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. -	12237	12238	12239	12240
			Sample ID -	BW-6 GRAB	BLIND DUP GRAB (BW-6)	BW-3 GRAB	BW-2 GRAB
			Sample Date-	12/27/90	12/27/90	12/27/90	12/27/90
Ammonia (as N) (mg/l)	350.1	0.02		0.26	0.26	0.64	0.90
Nitrite (mg/l)	353.2	0.01		BQL *	BQL	BQL	BQL
Total Kjeldahl Nitrogen(mg/l)	351.2	0.1		0.4	0.4	0.7	1.2

* Below Quantifiable Limits

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 Kjeldahl Nitrogen	12237	0.4	0.5	0.4	0.1	25
Nitrite	12227	BQL *	BQL	BQL	N/A **	N/A
Ammonia (As N)	12237	0.26	0.27	0.26	0.01	3.8

Relative Percent Difference =
Range/Average X 100
* Below Quantifiable Limits

** Not Available

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 Kjeldahl Nitrogen	12237	SPK	5.0	0.4	5.0	92
"	---	EPA	5.1	5.0	---	102
Nitrite	12237	SPK	0.26	BQL **	0.25	104
Ammonia (as N)	12237	SPK	0.76	0.26	0.50	100
"	---	INDSTD	52.0	50.0	---	104

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

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. - 12277 Sample ID - MW-1 GRAB Sample Date- 12/31/90
Ammonia (as N) (mg/l)	350.1	0.02	9.60
Nitrite (mg/l)	353.2	0.01	BQL *
Total Kjeldahl Nitrogen(mg/l)	351.2	0.1	11

* Below Quantifiable Limits

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. -	12280	12281
			Sample ID -	BW-1 GRAB	MW-2 GRAB
			Sample Date-	12/31/90	12/31/90
Ammonia (as N) (mg/l)	350.1	0.02		0.22	0.62
Nitrite (mg/l)	353.2	0.01		BQL *	0.06
Total Kjeldahl Nitrogen(mg/l)	351.2	0.1		0.3	0.7

* Below Quantifiable Limits

Gary L. Amato
Technical Supervisor

AES INORGANIC DEPARTMENT TRACEABILITY
JOB CODE: CTC

Technician Signature	AES Sample #	Method	Date of Analysis
[signature]	12203-04	351.2	1-4-91
[signature]	12203-04	353.2	1/3/91
[signature]	12203-04	350.1	1-8-91

AES INORGANIC DEPARTMENT TRACEABILITY

JOB CODE: CIC

Technician Signature	AES Sample #	Method	Date of Analysis
Darryl Cruz	12237-40	351.2	1-4-90
Richard Chyle	12237-40	353.2	1/3/90
T. Stone	12237-40	350.1	1-8-91

JOS CODE: CTC

Technician Signature	AES Sample #	Method	Date of Analysis
Dary Uyemoto	12277	351.2	1-4-91
Robert Chaya	12277	353.2	1/3/91
T. Akau	12277	350.1	1-8-91

AES INORGANIC DEPARTMENT TRACEABILITY
JOB CODE: CTC

Technician Signature	AES Sample #	Method	Date of Analysis
[signature]	~~351.2~~ 12280-81	351.2	1-4-91
[signature]	12280-81	353.2	1/3/91
[signature]	12280-81	350.1	1-8-91

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-	12237 BW-6 GRAB 12/27/90	12238 BLIND DUP GRAB (BW-6) 12/27/90	12239 BW-3 GRAB 12/27/90	12240 BW-2 GRAB 12/27/90
Total Iron (Fe)	236.1	0.30		30.0	14.1	2.63	2.95
Soluble Iron (Fe)	236.1	0.30		4.84	4.58	1.06	2.44
Total Potassium (K)	258.1	1.00		10.9	7.75	5.01	9.00
Soluble Potassium (K)	258.1	1.00		7.87	4.29	4.96	8.92
Total Zinc (Zn)	289.1	0.05		0.11	0.08	0.63	1.44
Soluble Zinc (Zn)	289.1	0.05		BQL *	BQL	0.46	0.14

* Below Quantifiable Limits

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. -	12203	12204
			Sample ID -	BW-5 GRAB	BW-4 GRAB
			Sample Date-	12/16/90	12/16/90
Total Iron (Fe)	236.1	0.30		10.1	4.43
Soluble Iron (Fe)	236.1	0.30		1.54	2.08
Total Potassium (K)	258.1	1.00		3.19	17.9
Soluble Potassium (K)	258.1	1.00		3.08	17.2
Total Zinc (Zn)	289.1	0.05		0.30	0.65
Soluble Zinc (Zn)	289.1	0.05		0.14	0.18

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
Soluble Zinc	12237S	BQL *	BQL	BQL	NA **	NA
Soluble Iron	12237"	4.84	4.85	4.84	0.01	0.2
Soluble Potassium	12237"	7.84	7.90	7.87	0.06	0.8

Relative Percent Difference =
Range/Average X 100
* Below Quantifiable Limits

** Not Available

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*
Soluble Zinc	12237	SPK	1.00	BQL **	1.00	100
EPA (Zn) STD	989	EPA	0.52	0.50	---	104
Soluble Iron	12237	SPK	9.80	4.84	5.00	99
EPA (Fd) STD	988	EPA	1.10	1.00	---	110
Soluble Potassium	12237	SPK	27.0	7.87	20.0	96
EPA (K) STD	CHKSTD	EPA	10.3	10.0	---	103

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

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. - 12277 Sample ID - MW-1 GRAB Sample Date- 12/31/90
Total Iron (Fe)	236.1	0.30	5.15
Soluble Iron (Fe)	236.1	0.30	BQL *
Total Potassium (K)	258.1	1.00	57.5
Soluble Potassium (K)	258.1	1.00	53.5
Total Zinc (Zn)	289.1	0.05	0.51
Soluble Zinc (Zn)	289.1	0.05	BQL

* Below Quantifiable Limits

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. - 12280	AES Lab No. - 12281
			Sample ID -	BW-1 GRAB	MW-2 GRAB
			Sample Date-	12/31/90	12/31/90
Total Iron (Fe)	236.1	0.30		1.48	442
Soluble Iron (Fe)	236.1	0.30		1.30	6.42
Total Potassium (K)	258.1	1.00		3.53	7.86
Soluble Potassium (K)	258.1	1.00		3.34	6.66
Total Zinc (Zn)	289.1	0.05		0.08	2.73
Soluble Zinc (Zn)	289.1	0.05		0.05	BQL *

* Below Quantifiable Limits

Gary L. Amato
Technical Supervisor

AES INORGANIC DEPARTMENT TRACEABILITY
JOB CODE: _____

Technician Signature	AES Sample #	Method	Date of Analysis
MWilson	12203-04T,S	258.1	12-29-90
MWilson	"	289.1	1-4-91
MWilson	"	236.1	1-6-91

AES INORGANIC DEPARTMENT TRACEABILITY

JOB CODE: CTC

Technician Signature	AES Sample #	Method	Date of Analysis
LMWilson	12237-40	289.1	1-4-90
LMWilson	"	236.1	1-6-90
Dawn J McDonald	"	258.1	1-8-91

AES INORGANIC DEPARTMENT TRACEABILITY
JOB CODE: CTC

Technician Signature	AES Sample #	Method	Date of Analysis
M Wilson	12277	230.1	1-6-91
Dawn f McDougall	12277	258.1	1-8-~~91~~ 91
Dawn f McDougall	12277	289.1	1-8-~~91~~ 91

AES INORGANIC DEPARTMENT TRACEABILITY

JOB CODE: _____

Technician Signature	AES Sample #	Method	Date of Analysis
M D Ivey	12280-81 T,S	289.1	1-4-90
M Wilson	"	236.1	1-6-90
Dawn J McDougall	"	258.1	1-8-90

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.-	12202	12204
			Sample ID -	TRIP BLANK	BW-4
			Sample Date-	GRAB 12/26/90	GRAB 12/26/90
Chloromethane	8240	10		BQL *	BQL
Vinyl Chloride	"	"		"	55
Chloroethane	"	"		"	BQL
Bromomethane	"	"		"	"
2-Chloroethylvinylether	"	"		"	"
Ethylbenzene	"	5.0		"	"
Methylene Chloride	"	10		"	"
Chlorobenzene	"	5.0		"	"
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	"	"		"	130
Benzene	"	"		"	BQL
cis-1,3-Dichloropropene	"	"		"	"
1,1,2-Trichloroethane	"	"		"	"
Dibromochloromethane	"	"		"	"

* Below Quantifiable Limits

Denise R. Tuhovak
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.-	12202	12203
			Sample ID -	TRIP BLANK	BW-4
			Sample Date-	GRAB 12/26/90	GRAB 12/26/90
Bromoform	8240	5.0		BQL *	BQL
Tetrachloroethylene	"	"		"	72
1,1,2,2-Tetrachloroethane	"	"		"	BQL
Toluene	"	"		"	"
Acetone	"	50		"	"
Carbon Disulfide	"	5.0		"	"
2-Butanone	"	50		"	"
Vinyl Acetate	"	"		"	"
2-Hexanone	"	"		"	"
4-Methyl-2-Pentanone	"	"		"	"
Styrene	"	5.0		"	"
o-Xylene	"	"		"	"
m/p-Xylene	"	"		"	"

* Below Quantifiable Limits

Denise R. Tuhovak
Denise R. Tuhovak
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.-	12237	12238
			Sample ID -	BW-6 (BLIND DUP)	BLIND DUPLICATE
			Sample Date-	GRAB 12/27/90	GRAB 12/27/90
Chloromethane	8240	10		BQL *	BQL
Vinyl Chloride	"	"		"	"
Chloroethane	"	"		"	"
Bromomethane	"	"		"	"
2-Chloroethylvinylether	"	"		"	"
Ethylbenzene	"	5.0		"	"
Methylene Chloride	"	10		"	12
Chlorobenzene	"	"		"	BQL
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	"	"		"	"

* Below Quantifiable Limits

Denise R. Tuhovak
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.- / Sample ID - / Sample Date-	12237 BW-6 GRAB 12/27/90	12238 BLIND DUPLICATE GRAB 12/27/90
Bromoform	8240	5.0		BQL *	BQL
Tetrachloroethylene	"	"		"	"
1,1,2,2-Tetrachloroethane	"	"		"	"
Toluene	"	"		"	"
Acetone	"	50		"	"
Carbon Disulfide	"	5.0		"	"
2-Butanone	"	50		"	"
Vinyl Acetate	"	"		"	"
2-Hexanone	"	"		"	"
4-Methyl-2-Pentanone	"	"		"	"
Styrene	"	5.0		"	"
o-Xylene	"	"		"	"
m/p-Xylene	"	"		"	"

* Below Quantifiable Limits

Denise R. Tuhovak
Denise R. Tuhovak
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.-	12237	12238
			Sample ID -	BW-6	BLIND DUPLICATE (BW-6)
			Sample Date-	GRAB 12/27/90	GRAB 12/27/90
N-Nitrosodimethylamine	8270	10		BQL *	BQL
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	"	"		"	"

* Below Quantifiable Limits

Denise R. Tuhovak
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.-	12237	12238
			Sample ID -	BW-6	BLIND DUPLICATE (BW-6)
			Sample Date-	GRAB 12/27/90	GRAB 12/27/90
Fluorene	8270	10		BQL *	BQL
4-Chlorophenylphenylether	"	"		"	"
N-Nitrosodiphenylamine	"	"		"	"
1,2-Diphenylhydrazine	"	"		"	"
4-Bromophenylphenylether	"	"		"	"
Hexachlorobenzene	"	"		"	"
Phenanthrene	"	"		"	"
Anthracene	"	"		"	"
Di-N-Butylphthalate	"	"		"	"
Fluoranthene	"	"		"	"
Benzidine	"	30		"	"
Pyrene	"	10		"	"
Butylbenzylphthalate	"	"		"	"
Benzo(a)Anthracene	"	"		"	"
3,3'-Dichlorobenzidine	"	20		"	"
Chrysene	"	10		"	"
Bis(2-Ethylhexyl)Phthalate	"	20		"	"
Di-N-Octylphthalate	"	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	"	"		"	"

* Below Quantifiable Limits

Denise R. Tuhovak
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.-	12237	12238
			Sample ID -	BW-6	BLIND DUPLICATE(BW-6)
			Sample Date-	GRAB 12/27/90	GRAB 12/27/90
Phenol	8270	10		BQL *	BQL
2-Chlorophenol	"	"		"	"
2-Nitrophenol	"	"		"	"
2,4-Dimethylphenol	"	"		"	"
4-Chloro-3-Methylphenol	"	"		"	"
2,4,6-Trichlorophenol	"	"		"	"
2,4-Dinitrophenol	"	50		"	"
4-Nitrophenol	"	"		"	"
4,6-Dinitro-2-Methylphenol	"	"		"	"
Pentachlorophenol	"	"		"	"
2,4-Dichlorophenol	"	10		"	"

* Below Quantifiable Limits

Denise R. Tuhovak
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
Nitrosodimethylamine	12237	<10	<10	<10	NA *	NA
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	"	"	"	"	"	"
Hexachhorocyclopentadiene	"	"	"	"	"	"
2-Chloronaphthalene	"	"	"	"	"	"
Dimethylphthalate	"	"	"	"	"	"
Acenaphthylene	"	"	"	"	"	"
2,6-Dinitrotoluene	"	"	"	"	"	"
Acenaphthene	"	"	"	"	"	"
2,4-Dinitrotoluene	"	"	"	"	"	"

Relative Percent Difference =
Range/Average X 100
* Not Available

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
Diethylphthalate	12237	<10	<10	<10	NA *	NA
Fluorene	"	"	"	"	"	"
4-Chlorophenylphenylether	"	"	"	"	"	"
N-Nitrosodiphenylamine	"	"	"	"	"	"
1,2-Diphenylhydrazine	"	"	"	"	"	"
4-Bromophenylphenylether	"	"	"	"	"	"
Hexachlorobenzene	"	"	"	"	"	"
Phenanthrene	"	"	"	"	"	"
Anthracene	"	"	"	"	"	"
Di-N-Butylphthalate	"	"	"	"	"	"
Fluoranthene	"	"	"	"	"	"
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	"	"	"	"	"	"

Relative Percent Difference =
Range/Average X 100
* Not Available

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
Indeno(1,2,3-cd)Pyrene	12237	<10	<10	<10	NA *	NA
Dibenz(a,h)Anthracene	"	"	"	"	"	"
Benzo(g,h,i) Perylene	"	"	"	"	"	"
Phenol	"	"	"	"	"	"
2-Chlorophenol	"	"	"	"	"	"
2-Nitrophenol	"	"	"	"	"	"
2,4-Dimethylphenol	"	"	"	"	"	"
4-Chloro-3-Methylphenol	"	"	"	"	"	"
2,4,6-Trichlorophenol	"	"	"	"	"	"
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	"	<30	<30	<30	"	"
Benzyl Alcohol	"	<20	<20	<20	"	"
Aniline	"	<10	<10	<10	"	"
2-Methylnaphthalene	"	"	"	"	"	"

Relative Percent Difference =
Range/Average X 100
* Not Available

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
2-Nitroaniline	12237	<50	<50	<50	NA *	NA
4-Nitroaniline	"	"	"	"	"	"
3-Nitroaniline	"	"	"	"	"	"
Dibenzofuran	"	<10	<10	<10	"	"
4-Chloroaniline	"	<20	<20	<20	"	"

Relative Percent Difference =
Range/Average X 100
* Not Available

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	12237	SPK	19.4	<5.0	20	97
"	"	DUPSPK	19.2	"	"	96
Trichloroethene	"	SPK	19.4	"	"	97
"	"	DUPSPK	19.0	"	"	95
Benzene	"	SPK	21.1	"	"	106
"	"	DUPSPK	20.4	"	"	102
Toluene	"	SPK	16.7	"	"	84
"	"	DUPSPK	16.2	"	"	81
Chlorobenzene	"	SPK	20.1	"	"	100
"	"	DUPSPK	19.2	"	"	96
Phenol	"	SPK	36.7	<10	80	46
2-Chlorophenol	"	"	56.6	"	"	71
1,4-Dichlorobenzene	"	"	29.1	"	40	73
N-Nitrosodipropylamine	"	"	34.9	"	"	87
1,2,4-Trichlorobenzene	"	"	34.6	"	"	86
4-Chloro-3-Methylphenol	"	"	74.2	"	80	93
Acenaphthene	"	"	27.3	"	40	68
2,4-Dinitrotoluene	"	"	32.9	"	"	82
4-Nitrophenol	"	"	29.6	<50	80	37
Pentachlorophenol	"	"	62.6	"	"	78
Pyrene	"	"	31.9	<10	40	80

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

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.-	45	46
			Sample ID -	TRIP BLANK	BW-4
			Sample Date-	GRAB 1/4/91	GRAB 1/4/91
N-Nitrosodimethylamine	8270	10		BQL *	BQL
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	"	"		"	28
Hexachlorocyclopentadiene	"	"		"	BQL
2-Chloronaphthalene	"	"		"	"
Dimethylphthalate	"	"		"	"
Acenaphthylene	"	"		"	"
2,6-Dinitrotoluene	"	"		"	"
Acenaphthene	"	"		"	"
2,4-Dinitrotoluene	"	"		"	"
Diethylphthalate	"	"		"	"

* Below Quantifiable Limits

Denise R. Tuhovak
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.-	45	46
			Sample ID -	TRIP BLANK	BW-4
			Sample Date-	GRAB 1/4/91	GRAB 1/4/91
Fluorene	8270	10		BQL *	BQL
4-Chlorophenylphenylether	"	"		"	"
N-Nitrosodiphenylamine	"	"		"	"
1,2-Diphenylhydrazine	"	"		"	"
4-Bromophenylphenylether	"	"		"	"
Hexachlorobenzene	"	"		"	"
Phenanthrene	"	"		"	"
Anthracene	"	"		"	"
Di-N-Butylphthalate	"	"		"	"
Fluoranthene	"	"		"	"
Benzidine	"	30		"	"
Pyrene	"	10		"	"
Butylbenzylphthalate	"	"		"	"
Benzo(a)Anthracene	"	"		"	"
3,3'-Dichlorobenzidine	"	20		"	"
Chrysene	"	10		"	"
Bis(2-Ethylhexyl)Phthalate	"	20		"	"
Di-N-Octylphthalate	"	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	"	"		"	"

* Below Quantifiable Limits

Denise R. Tuhovak
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 - / Sample Date-	45 TRIP BLANK GRAB 1/4/91	46 BW-4 GRAB 1/4/91
Phenol	8270	10		BQL *	BQL
2-Chlorophenol	"	"		"	"
2-Nitrophenol	"	"		"	"
2,4-Dimethylphenol	"	"		"	"
4-Chloro-3-Methylphenol	"	"		"	"
2,4,6-Trichlorophenol	"	"		"	"
2,4-Dinitrophenol	"	50		"	"
4-Nitrophenol	"	"		"	"
4,6-Dinitro-2-Methylphenol	"	"		"	"
Pentachlorophenol	"	"		"	"
2,4-Dichlorophenol	"	10		"	"
4-Methylphenol	"	"		"	"
Benzioc Acid	"	50		"	"
2,4,5-Trichlorophenol	"	10		"	"
3-Nitroaniline	"	50		"	"
Dibenzofuran	"	10		"	"
4-Nitroaniline	"	50		"	"
2-Methylphenol	"	10		"	"
2-Methynaphthalene	"	"		"	"
Aniline	"	"		"	"
Benzyl Alcohol	"	20		"	"
4-Chloroaniline	"	"		"	"
2-Nitroaniline	"	50		"	"

* Below Quantifiable Limits

Denise R. Tuhovak
Organics Supervisor

Technician Signature	AES Sample #	Method	Date c Analys
Jim Tuyl	12202, 12204	8240	1/3/90

JOB CODE: CTC

Technician Signature	AES Sample #	Method	Date of Analysis
Jim Fish	12237, 12238	8240	12/31/90
Jim Fish	12237, 12238	8270	1/7/91

ADVANCED ENVIRONMENTAL SEVICES, Inc.
EXTRACTION TRACEABILITY REPORT
INORGANICS REPORT

A.E.S. Job Code: CTC A.E.S. Job Number: 901770

TECHNICIAN	ANALYTICAL METHOD	SAMPLE CODE(S)	DATE OF EXTRACTION
Tina Thull	8270	12237, 12238	12/30/90

AES ORGANIC DEPARTMENT TRACEABILITY
JOB CODE: CTC

Technician Signature	AES Sample #	Method	Date of Analysis
Jim Fugle	45, 46	8270	1/14/91

CHAIN OF CUSTODY RECORD

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

PROJECT NAME: Union Carbide

JOB CODE: CTC

SAMPLER'S SIGNATURE: Mike Champ

DATE	TIME	SAMPLE IDENTIFICATION	GRAB	COMP	SAMPLE TYPE	CONTAINER CLASSIFICATION: UNPRESERVED	HNO₃	H₂SO₄	HCl	NAOH	VIAL	TOTAL	PARAMETERS/REMARKS
1-4-90	12 00 PM	BW-4	✓		Water	1						1	8270
1-4-90	9 00 AM	Trip Blank	✓		DI Water	1						1	8270

TOTAL NUMBER OF CONTAINERS: 2

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:
Mike Champ	1-4-90	12 35 PM	Dennis Hoyle
2. RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
3. RELINQUISHED BY:	DATE	TIME	RECEIVED BY:

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

CHAIN OF CUSTODY RECORD

PROJECT NAME: Union Carbide

JOB CODE: CTC

SAMPLER'S SIGNATURE: Mike Champ

3275

DATE	TIME	SAMPLE IDENTIFICATION	GRAB	COMP	SAMPLE TYPE	CONTAINER CLASSIFICATION: UNPRESERVED	HNO_3	H_2SO_4	HCl	NAOH	VIAL	TOTAL	PARAMETERS/REMARKS
12-31-90	2:35 PM	MW-2	✓		Water		2	1				3	Ammo., TKN, Nitrite, Total & Sol. Metals
12-31-90	3:00 PM	BW-1	✓		Water		2	1				3	" " "

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: 6

	DATE	TIME	RECEIVED BY:
1. RELINQUISHED BY:	12/31/90	4:30 pm	Christine Stanek
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

JOB CODE: CTC.

SAMPLER'S SIGNATURE: Mike Clump,

DATE	TIME	SAMPLE IDENTIFICATION	GRAB	COMP	SAMPLE TYPE	CONTAINER CLASSIFICATION: UNPRESERVED	HNO3	H2SO4	HCl	NaOH	VIAL	TOTAL	PARAMETERS/REMARKS
12-28-90	3:09 PM	MW-1	✓		Water		2	1				3	Ammo., TKN, Nitrite, Total & Sol. Metals

TOTAL NUMBER OF CONTAINERS 3

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: Mike Clump	12-28-90	4:25 PM	Marcia L. Lemley
2. RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
3. RELINQUISHED BY:	DATE	TIME	RECEIVED BY:

CHAIN OF CUSTODY RECORD

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

PROJECT NAME: Union Carbide

JOB CODE: CTC

SAMPLER'S SIGNATURE:

DATE	TIME	SAMPLE IDENTIFICATION	GRAB	COMP	SAMPLE TYPE	CONTAINER CLASSIFICATION: UNPRESERVED	HNO3	H2SO4	HCl	NAOH	VIAL w/ HCl	TOTAL	PARAMETERS/REMARKS
12/27/90	12 00 pm	BW-6	X		Groundwater	4	2	1			3	10	TCL, TCLSU, Nitrite, Ammonia, TKN
	12 00 pm	Blind Duplicate	X			1	2	1			3	7	Total & Soluble metals
	1447	BW-3	X				2	1				3	Same as above except
	15:30	BW-2	X				2	1				3	without TCL & TCLSU

TOTAL NUMBER OF CONTAINERS 23

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:	12/27/90	5 00 pm	Marcia L Lewley
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

SAMPLER'S SIGNATURE: [signature]

JOB CODE: CTC
Quarterly

DATE	TIME	SAMPLE IDENTIFICATION	GRAB	COMP	SAMPLE TYPE	CONTAINER CLASSIFICATION: UNPRESERVED	HNO3	H2SO4	HCl	NAOH	VIAL w/ Hcl	TOTAL	PARAMETERS/REMARKS
12/24/90	11:00 am	Trip Blank	X		D.I. water	1					3	4	TCLSV, TCL volatiles,
	14:30	BW-5			Groundwater		2	1				3	T. & Sol metals, TKN, Nitrite, Ammonia
	15:15	BW-4				1	2	1			3	7	TCLSV, TCL volatiles, T. & Sol metals, TKN, Nitrite, Ammonia

TOTAL NUMBER OF CONTAINERS 14

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]	12/26/90	16:40	Christine Stanish
2. RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
3. RELINQUISHED BY:	DATE	TIME	RECEIVED BY: