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

August 19, 1991

Mr. Robert J. Mitrey
Associate Sanitary Engineer
New York State Department of Environmental Conservation
600 Delware 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 thirteenth quarter's groundwater sampling analysis from the closed Republic Solid Waste Management Facility. Bedrock well, BW-4, continues to demonstrate some slight volatile organic contamination in the less than one part per million range.

The following will summarize the positive organic parameters:

Contaminate	13th Qtr. ppb	Mean Conc. ppb	Range ppb
Trichloroethene	270	331.8	30-740
Tetrachloroethene	360	277	72-380
Vinyl Chloride	49	100.5	29-300
Chloroform	5.3	6.6	0-9

We do not feel that this contamination at B4-86 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

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.

QUARTERLY REPUBLIC WASTE MANAGEMENT FACILITY POST CLOSURE MONITORING PROGRAM

Report Prepared For

UNION CARBIDE CORP.

July 18, 1991

AES Report CTC

COMMITMENT
TO
HONESTY - QUALITY - SERVICE

QA/QC Verification

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.

Denise R. Tuhovak
Organics Supervisor

Gary L. Amato
Technical Supervisor

Paul T. McMahon
Quality Control Officer

Maura S. Cattarin
Customer Service Representative

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	6/24/91	610.72	4	17.45	593.27	28.60	7.28	26.0	C
BW-2	6/25/91	608.43	4	15.03	593.40	26.10	7.23	23.0	C
BW-3	6/24/91	604.72	4	13.51	591.21	24.70	7.30	22.0	C
BW-4	6/24/91	607.08	4	13.28	593.80	22.50	6.02	19.0	C
BW-5	6/25/91	603.33	4	11.98	591.35	25.70	8.96	26.0	C
BW-6	6/25/91	607.04	4	14.59	592.45	24.65	6.57	20.0	R
MW-1	6/24/91	609.43	2	12.27	597.16	21.10	1.44	2.0(DRY)	S
MW-2	6/25/91	607.54	2	18.50	589.04	24.40	0.96	2.0(DRY)	R
MW-3	6/24/91	601.61	2	11.26	590.35	16.20	0.81	1.5(DRY)	S
OW-1 SOUTH	6/24/91	608.81	4	7.45	601.36	N/A	N/A	N/A	N/A
OW-2 NORTH	6/24/91	607.06	4	8.14	598.92	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.

Dennis J. Hoyt — Technician

7-1-91 — 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	6/24/91	3:00 PM	17.45	5:12 PM	Clear with a slight sulfur odor.
BW-2	6/25/91	11:40 AM	15.15	2:15 PM	Turbid, black particulates, strong sulfur odor.
BW-3	6/24/91	4:20 PM	13.52	5:05 PM	Clear to turbid, strong sulfur odor.
BW-4	6/24/91	4:00 PM	13.52	5:20 PM	Clear to rust color, strong sulfur odor.
BW-5	6/25/91	12:50 PM	12.02	1:35 PM	Clear w/black suspended solids, no odor.
BW-6	6/25/91	11:45 AM	16.91	2:00 PM	Clear to turbid, noticeable sulfur odor.
MW-1	6/25/91	12:23 PM	12.52	1:45 PM	Turbid tan with slight sulfur odor.
MW-2	6/25/91	8:15 AM	24.50	9:00 AM	Yellowish tan w/settled solids.
MW-3	6/25/91	12:10 PM	12.49	2:20 PM	Turbid brown with slight sulfur odor.
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	6/24/91	4:00 PM	13.52	5:27 PM	Clear to rust color, strong sulfur odor.

The blind duplicate site was BW-4 and the quality control site was BW-6.

Dennis J. Hoyt — 7-1-91

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	6/24/91	3:00 PM	17.45	5:12 PM	Clear with a slight sulfur odor.
BW-2	6/25/91	11:40 AM	15.15	2:15 PM	Turbid, black particulates, strong sulfur odor.
BW-3	6/24/91	4:20 PM	13.52	5:05 PM	Clear to turbid, strong sulfur odor.
BW-4	6/24/91	4:00 PM	13.52	5:20 PM	Clear to rust color, strong sulfur odor.
BW-5	6/25/91	12:50 PM	12.02	1:35 PM	Clear w/black suspended solids, no odor.
BW-6	6/25/91	11:45 AM	16.91	2:00 PM	Clear to turbid, noticeable sulfur odor.
MW-1	6/25/91	12:23 PM	12.52	1:45 PM	Turbid tan with slight sulfur odor.
MW-2	6/25/91	8:15 AM	24.50	9:00 AM	Yellowish tan w/settled solids.
MW-3	6/25/91	12:10 PM	12.49	2:20 PM	Turbid brown with slight sulfur odor.
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	6/24/91	4:00 PM	13.52	5:27 PM	Clear to rust color, strong sulfur odor.

The blind duplicate site was BW-4 and the quality control site was BW-6.

Dennis J. Hoyt — Technician

7-1-91 — 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	6/24/91	610.72	4	17.45	593.27	28.60	7.28	26.0	C
BW-2	6/25/91	608.43	4	15.03	593.40	26.10	7.23	23.0	C
BW-3	6/24/91	604.72	4	13.51	591.21	24.70	7.30	22.0	C
BW-4	6/24/91	607.08	4	13.28	593.80	22.50	6.02	19.0	C
BW-5	6/25/91	603.33	4	11.98	591.35	25.70	8.96	26.0	C
BW-6	6/25/91	607.04	4	14.59	592.45	24.65	6.57	20.0	R
MW-1	6/24/91	609.43	2	12.27	597.16	21.10	1.44	2.0(DRY)	S
MW-2	6/25/91	607.54	2	18.50	589.04	24.40	0.96	2.0(DRY)	R
MW-3	6/24/91	601.61	2	11.26	590.35	16.20	0.81	1.5(DRY)	S
OW-1 SOUTH	6/24/91	608.81	4	7.45	601.36	N/A	N/A	N/A	N/A
OW-2 NORTH	6/24/91	607.06	4	8.14	598.92	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.

Dennis J. Hoyt
Technician

7-1-91
Date

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT
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JOB# 912104

Type of Analysis: INORGANICS
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: MG/L

Analytical Parameter(s)	Method No.	Practical Quantifiable Limit	A.E.S. Lab No..... 5341 Customer ID..... MW-2 6/26/91 GRAB			
Iron, Total (on flame)	EPA 236.1	0.30	75.0			
Iron, Soluble (on flame)	EPA 236.1	0.30	BQL *			
Potassium, Total (on flame)	EPA 258.1	1.00	6.45			
Potassium, Soluble (on flame)	EPA 258.1	1.00	6.15			
Zinc, Total (on flame)	EPA 289.1	0.05	0.66			
Zinc, Soluble (on flame)	EPA 289.1	0.05	BQL			
Ammonia	EPA 350.1	0.02	1.08			
Nitrite	EPA 353.2	0.01	BQL			
Total Kjeldahl Nitrogen	EPA 351.2	0.1	1.1			

FOOTNOTES

* Below Quantifiable Limits.

ADVANCED ENVIRO...NTAL SERVICES, INC.
LABORATORY REPORT
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JOB# 912093

Type of Analysis: INORGANICS
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: MG/L

Analytical Parameter(s)	Method No.	Practical Quantifiable Limit	A.E.S. Lab No..... 5320 Customer ID..... MW-1 6/25/91 GRAB	5321 MW-3 6/25/91 GRAB	5322 BW-2 6/25/91 GRAB	5323 BW-5 6/25/91 GRAB
Iron, Total (on flame)	EPA 236.1	0.30	20.5	12.8	6.55	19.5
Iron, Soluble (on flame)	EPA 236.1	0.30	BQL *	0.32	2.32	1.26
Potassium, Total (on flame)	EPA 258.1	1.00	53.5	4.09	8.02	3.69
Potassium, Soluble (on flame)	EPA 258.1	1.00	43.5	1.51	7.58	3.11
Zinc, Total (on flame)	EPA 289.1	0.05	0.41	1.00	39.5	3.15
Zinc, Soluble (on flame)	EPA 289.1	0.05	BQL	BQL	0.23	0.11
Ammonia	EPA 350.1	0.02	7.75	0.04	1.00	0.21
Nitrite	EPA 353.2	0.01	0.01	BQL	0.01	0.01
Total Kjeldahl Nitrogen	EPA 351.2	0.1	7.6	BQL	1.7	1.1

FOOTNOTES

* Below Quantifiable Limits.

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT
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JOB# 912093

Type of Analysis: INORGANICS
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: MG/L

Analytical Parameter(s)	Method No.	Practical Quantifiable Limit	A.E.S. Lab No.....: 5324 Customer ID.....: BW-6 6/25/91 GRAB			
Iron, Total (on flame)	EPA 236.1	0.30	28.8			
Iron, Soluble (on flame)	EPA 236.1	0.30	3.84			
Potassium, Total (on flame)	EPA 258.1	1.00	4.52			
Potassium, Soluble (on flame)	EPA 258.1	1.00	1.64			
Zinc, Total (on flame)	EPA 289.1	0.05	BQL *			
Zinc, Soluble (on flame)	EPA 289.1	0.05	BQL			
Ammonia	EPA 350.1	0.02	0.13			
Nitrite	EPA 353.2	0.01	BQL			
Total Kjeldahl Nitrogen	EPA 351.2	0.1	0.5			

FOOTNOTES

* Below Quantifiable Limits.

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT
==========

JOB# 912093

Type of Analysis: ORGANICS
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: ug/l,ppb

Analytical Parameter(s)	Method No.	Practical Quantifiable Limit	A.E.S. Lab No..... 5324 Customer ID..... BW-6 6/25/91 GRAB			
TCL SEMI-VOLATILES	SW 846 8270					
N-Nitrosodimethylamine	SW 846 8270	10	BQL *			
Aniline	SW 846 8270	10	"			
Phenol	SW 846 8270	10	"			
Bis(2-chloroethyl) ether	SW 846 8270	10	"			
2-Chlorophenol	SW 846 8270	10	"			
1,3-Dichlorobenzene	SW 846 8270	10	"			
1,4-Dichlorobenzene	SW 846 8270	10	"			
Benzyl Alcohol	SW 846 8270	10	"			
1,2-Dichlorobenzene	SW 846 8270	10	"			
2-Methylphenol	SW 846 8270	10	"			
bis(2-Chloroisopropyl) ether	SW 846 8270	10	"			
4-Methylphenol	SW 846 8270	10	"			
N-Nitrosodinpropylamine	SW 846 8270	10	"			
Hexachloroethane	SW 846 8270	10	"			

Type of Analysis: ORGANICS
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: ug/l,ppb

Analytical Parameter(s)	Method No.	Practical Quantifiable Limit	A.E.S. Lab No..... 5324 Customer ID..... BW-6 6/25/91 GRAB			
Nitrobenzene	SW 846 8270	10	BQL *			
Isophorone	SW 846 8270	10	"			
2-Nitrophenol	SW 846 8270	10	"			
2,4-Dimethylphenol	SW 846 8270	10	"			
Bis(2-chloroethoxy) methane	SW 846 8270	10	"			
Benzoic Acid	SW 846 8270	10	"			
2,4-Dichlorophenol	SW 846 8270	10	"			
1,2,4-Trichlorobenzene	SW 846 8270	10	"			
Naphthalene	SW 846 8270	10	"			
4-Chloroaniline	SW 846 8270	10	"			
Hexachlorobutadiene	SW 846 8270	10	"			
Hexachlorobenzene	SW 846 8270	10	"			
Pentachlorophenol	SW 846 8270	40	"			
Phenanthrene	SW 846 8270	10	"			
Anthracene	SW 846 8270	10	"			
Di-n-Butylphthalate	SW 846 8270	10	"			

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT
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JOB# 912093

Type of Analysis: ORGANICS
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: ug/l,ppb

Analytical Parameter(s)	Method No.	Practical Quantifiable Limit	A.E.S. Lab No..... 5324 Customer ID..... BW-6 6/25/91 GRAB			
Fluoranthene	SW 846 8270	10	BQL *			
Benzidine	SW 846 8270	40	"			
Pyrene	SW 846 8270	10	"			
Butylbenzylphthalate	SW 846 8270	10	"			
3,3-Dichlorobenzidine	SW 846 8270	40	"			
Benzo (a) Anthracene	SW 846 8270	10	"			
bis(2-ethylhexyl)Phthalate	SW 846 8270	10	"			
Chrysene	SW 846 8270	10	"			
Di-n-octylphthalate	SW 846 8270	10	"			
Benzo (b) fluoranthene	SW 846 8270	10	"			
Benzo (k) fluoranthene	SW 846 8270	10	"			
Benzo (a) pyrene	SW 846 8270	10	"			
Indeno (1,2,3-cd)pyrene	SW 846 8270	10	"			
Dibenzo (a,h) anthracene	SW 846 8270	10	"			
Benzo (g,h,i) perylene	SW 846 8270	10	"			
4-Chloro-3-Methylphenol	SW 846 8270	10	"			

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

JOB# 912093

Type of Analysis: ORGANICS
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: ug/l,ppb

Analytical Parameter(s)	Method No.	Practical Quantifiable Limit	A.E.S. Lab No..... 5324 Customer ID..... BW-6 6/25/91 GRAB			
2-Methylnaphthalene	SW 846 8270	10	BQL *			
Hexachlorocyclopentadiene	SW 846 8270	10	"			
2,4,6-Trichlorophenol	SW 846 8270	10	"			
2,4,5-Trichlorophenol	SW 846 8270	10	"			
2-Chloronaphthalene	SW 846 8270	10	"			
2-Nitroaniline	SW 846 8270	10	"			
Dimethylphthalate	SW 846 8270	10	"			
2,6-Dinitrotoluene	SW 846 8270	10	"			
Acenaphthylene	SW 846 8270	10	"			
3-Nitroaniline	SW 846 8270	10	"			
Acenaphthene	SW 846 8270	10	"			
2,4-Dinitrophenol	SW 846 8270	40	"			
Dibenzofuran	SW 846 8270	10	"			
2,4-Dinitrotoluene	SW 846 8270	10	"			
4-Nitrophenol	SW 846 8270	40	"			
Diethylphthalate	SW 846 8270	10	"			

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT
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JOB# 912093

Type of Analysis: ORGANICS
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: ug/l,ppb

Analytical Parameter(s)	Method No.	Practical Quantifiable Limit	A.E.S. Lab No..... 5324 Customer ID..... BW-6 6/25/91 GRAB			
4-Chlorophenyl-phenylether	SW 846 8270	10	BQL *			
Fluorene	SW 846 8270	10	"			
4-Nitroaniline	SW 846 8270	10	"			
4,6-Dinitro-2-methylphenol	SW 846 8270	40	"			
N-Nitrosodiphenylamine	SW 846 8270	10	"			
1,2-Diphenylhydrazine	SW 846 8270	10	"			
4-Bromophenyl-phenylether	SW 846 8270	10	"			

FOOTNOTES

* Below Quantifiable Limits.

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

JOB# 912093

Type of Analysis: ORGANICS
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: ug/l,ppb

Analytical Parameter(s)	Method No.	Practical Quantifiable Limit	A.E.S. Lab No..... 5324 Customer ID..... BW-6 6/25/91 GRAB			
TCL VOLATILES						
Chloromethane	SW 846 8240	5.0	BQL *			
Vinyl Chloride	SW 846 8240	5.0	"			
Chloroethane	SW 846 8240	5.0	"			
Bromomethane	SW 846 8240	5.0	"			
Acetone	SW 846 8240	50	"			
1,1-Dichloroethene	SW 846 8240	5.0	"			
Carbon Disulfide	SW 846 8240	5.0	"			
Methylene Chloride	SW 846 8240	10	"			
trans-1,2-Dichloroethene	SW 846 8240	5.0	"			
1,1-Dichloroethane	SW 846 8240	5.0	"			
Vinyl Acetate	SW 846 8240	5.0	"			
2-Butanone	SW 846 8240	50	"			
Chloroform	SW 846 8240	5.0	"			
1,1,1-Trichloroethane	SW 846 8240	5.0	"			

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT
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JOB# 912093

Type of Analysis: ORGANICS
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: ug/l,ppb

Analytical Parameter(s)	Method No.	Practical Quantifiable Limit	A.E.S. Lab No..... 5324 Customer ID..... BW-6 6/25/91 GRAB			
Carbon Tetrachloride	SW 846 8240	5.0	BQL *			
Benzene	SW 846 8240	5.0	"			
1,2-Dichloroethane	SW 846 8240	5.0	"			
Trichloroethene	SW 846 8240	5.0	"			
1,2-Dichloropropane	SW 846 8240	5.0	"			
Bromodichloromethane	SW 846 8240	5.0	"			
2-Chloroethyl vinyl ether	SW 846 8240	5.0	"			
4-Methyl-2-pentanone	SW 846 8240	50	"			
cis-1,3-Dichloropropene	SW 846 8240	5.0	"			
Toluene	SW 846 8240	5.0	"			
trans-1,3-Dichloropropene	SW 846 8240	5.0	"			
1,1,2-Trichloroethane	SW 846 8240	5.0	"			
Tetrachloroethene	SW 846 8240	5.0	"			
Chlorodibromomethane	SW 846 8240	5.0	"			
Chlorobenzene	SW 846 8240	5.0	"			
Ethylbenzene	SW 846 8240	5.0	"			

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT
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JOB# 912093

Type of Analysis: ORGANICS
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: ug/l,ppb

Analytical Parameter(s)	Method No.	Practical Quantifiable Limit	A.E.S. Lab No..... 5324 Customer ID..... BW-6 6/25/91 GRAB			
Bromoform	SW 846 8240	5.0	BQL *			
1,1,2,2-Tetrachloroethane	SW 846 8240	5.0	"			
2-Hexanone	SW 846 8240	50	"			
m/p-Xylene	SW 846 8240	5.0	"			
o-Xylene	SW 846 8240	5.0	"			
Styrene	SW 846 8240	5.0	"			

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT
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JOB# 912084

Type of Analysis: INORGANICS
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: MG/L

Analytical Parameter(s)	Method No.	Practical Quantifiable Limit	A.E.S. Lab No..... 5304 Customer ID..... FIELD BLANK 6/24/91 GRAB			
Iron, Total (on flame)	EPA 236.1	0.30	BQL *			
Potassium, Total (on flame)	EPA 258.1	1.00	"			
Zinc, Total (on flame)	EPA 289.1	0.05	"			
Ammonia	EPA 350.1	0.02	"			
Nitrite	EPA 353.2	0.01	"			
Total Kjeldahl Nitrogen	EPA 351.2	0.1	"			

FOOTNOTES

* Below Quantifiable Limits.

ADVANCED ENVIRON...TAL SERVICES, INC.
LABORATORY REPORT
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JOB# 912084

Type of Analysis: INORGANICS
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: MG/L

Analytical Parameter(s)	Method No.	Practical Quantifiable Limit	A.E.S. Lab No..... 5299 Customer ID..... BW-1 6/24/91 GRAB	5300 BW-3 6/24/91 GRAB	5301 BW-4 6/24/91 GRAB	5302 BLIND DUPLICATE (BW-4) 6/24/91 GRAB
Iron, Total (on flame)	EPA 236.1	0.30	7.60	6.66	440	281
Iron, Soluble (on flame)	EPA 236.1	0.30	1.05	1.11	3.12	2.59
Potassium, Total (on flame)	EPA 258.1	1.00	3.53	8.88	29.3	29.4
Potassium, Soluble (on flame)	EPA 258.1	1.00	3.37	8.45	29.1	26.9
Zinc, Total (on flame)	EPA 289.1	0.05	13.2	0.97	10.1	9.4
Zinc, Soluble (on flame)	EPA 289.1	0.05	5.20	0.11	0.05	BQL
Ammonia	EPA 350.1	0.02	0.46	1.50	5.75	6.0
Nitrite	EPA 353.2	0.01	BQL *	BQL	BQL	BQL
Total Kjeldahl Nitrogen	EPA 351.2	0.1	1.6	1.8	7.0	7.4

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT
==========

JOB# 912084

Type of Analysis: ORGANICS
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: ug/l, ppb

Analytical Parameter(s)	Method No.	Practical Quantifiable Limit	A.E.S. Lab No..... 5301 Customer ID..... BW-4 6/24/91 GRAB	5302 BLIND DUPLICATE (BW-4) 6/24/91 GRAB	5303 TRIP BLANK 06/24/91 GRAB	5304 FIELD BLANK 6/24/91 GRAB
TCL VOLATILES	SW 846 8240					
Chloromethane	SW 846 8240	5.0	BQL *	BQL *	BQL *	
Vinyl Chloride	SW 846 8240	5.0	49	50	"	
Chloroethane	SW 846 8240	5.0	BQL	BQL	"	
Bromomethane	SW 846 8240	5.0	"	"	"	
Acetone	SW 846 8240	50	"	"	"	
1,1-Dichloroethene	SW 846 8240	5.0	"	"	"	
Carbon Disulfide	SW 846 8240	5.0	"	"	"	
Methylene Chloride	SW 846 8240	10	"	"	"	
trans-1,2-Dichloroethene	SW 846 8240	5.0	"	"	"	
1,1-Dichloroethane	SW 846 8240	5.0	"	"	"	
Vinyl Acetate	SW 846 8240	5.0	"	"	"	
2-Butanone	SW 846 8240	50	"	"	"	
Chloroform	SW 846 8240	5.0	5.3	5.6	"	
1,1,1-Trichloroethane	SW 846 8240	5.0	BQL	BQL	"	

ADVANCED ENVIRON AL SERVICES, INC.
LABORATORY REPORT
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JOB# 912084

Type of Analysis: ORGANICS
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: ug/l, ppb

Analytical Parameter(s)	Method No.	Practical Quantifiable Limit	A.E.S. Lab No..... 5301 Customer ID..... BW-4 6/24/91 GRAB	5302 BLIND DUPLICATE (BW-4) 6/24/91 GRAB	5303 TRIP BLANK 06/24/91 GRAB	5304 FIELD BLANK 6/24/91 GRAB
Carbon Tetrachloride	SW 846 8240	5.0	BQL *	BQL *	BQL *	
Benzene	SW 846 8240	5.0	"	"	"	
1,2-Dichloroethane	SW 846 8240	5.0	"	"	"	
Trichloroethene	SW 846 8240	5.0	270	"	280	
1,2-Dichloropropane	SW 846 8240	5.0	BQL	"	"	
Bromodichloromethane	SW 846 8240	5.0	"	"	"	
2-Chloroethyl vinyl ether	SW 846 8240	5.0	"	"	"	
4-Methyl-2-pentanone	SW 846 8240	50	"	"	"	
cis-1,3-Dichloropropene	SW 846 8240	5.0	"	"	"	
Toluene	SW 846 8240	5.0	"	"	"	
trans-1,3-Dichloropropene	SW 846 8240	5.0	"	"	"	
1,1,2-Trichloroethane	SW 846 8240	5.0	"	"	"	
Tetrachloroethene	SW 846 8240	5.0	360	350	"	
Chlorodibromomethane	SW 846 8240	5.0	BQL	BQL	"	
Chlorobenzene	SW 846 8240	5.0	"	"	"	
Ethylbenzene	SW 846 8240	5.0	"	"	"	

ADVANCED ENVIRONM. .AL SERVICES, INC.
LABORATORY REPORT
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JOB# 912084

Type of Analysis: ORGANICS
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: ug/l, ppb

Analytical Parameter(s)	Method No.	Practical Quantifiable Limit	A.E.S. Lab No..... 5301 Customer ID..... BW-4 6/24/91 GRAB	5302 BLIND DUPLICATE (BW-4) 6/24/91 GRAB	5303 TRIP BLANK 06/24/91 GRAB	5304 FIELD BLANK 6/24/91 GRAB
Bromoform	SW 846 8240	5.0	BQL *	BQL *	BQL *	
1,1,2,2-Tetrachloroethane	SW 846 8240	5.0	"	"	"	
2-Hexanone	SW 846 8240	50	"	"	"	
m/p-Xylene	SW 846 8240	5.0	"	"	"	
o-Xylene	SW 846 8240	5.0	"	"	"	
Styrene	SW 846 8240	5.0	"	"	""	

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

JOB# 912084

Type of Analysis: ORGANICS
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: ug/l, ppb

Analytical Parameter(s)	Method No.	Practical Quantifiable Limit	A.E.S. Lab No..... 5301 Customer ID..... BW-4 6/24/91 GRAB	5302 BLIND DUPLICATE (BW-4) 6/24/91 GRAB	5303 TRIP BLANK 06/24/91 GRAB	5304 FIELD BLANK 6/24/91 GRAB
TCL SEMI-VOLATILES	SW 846 8270					
N-Nitrosodimethylamine	SW 846 8270	10	BQL *	BQL *		BQL *
Aniline	SW 846 8270	10	"	"		"
Phenol	SW 846 8270	10	"	"		"
Bis(2-chloroethyl) ether	SW 846 8270	10	"	"		"
2-Chlorophenol	SW 846 8270	10	"	"		"
1,3-Dichlorobenzene	SW 846 8270	10	"	"		"
1,4-Dichlorobenzene	SW 846 8270	10	"	"		"
Benzyl Alcohol	SW 846 8270	10	"	"		"
1,2-Dichlorobenzene	SW 846 8270	10	"	"		"
2-Methylphenol	SW 846 8270	10	"	"		"
bis(2-Chlorisopropyl) ether	SW 846 8270	10	"	"		"
4-Methylphenol	SW 846 8270	10	"	"		"
N-Niotrosodinpropylamine	SW 846 8270	10	"	"		"
Hexachloroethane	SW 846 8270	10	"	"		"

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

JOB# 912084

Type of Analysis: ORGANICS
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: ug/l, ppb

Analytical Parameter(s)	Method No.	Practical Quantifiable Limit	A.E.S. Lab No..... 5301 Customer ID..... BW-4 6/24/91 GRAB	5302 BLIND DUPLICATE (BW-4) 6/24/91 GRAB	5303 TRIP BLANK 06/24/91 GRAB	5304 FIELD BLANK 6/24/91 GRAB
Nitrobenzene	SW 846 8270	10	BQL *	BQL *		BQL *
Isophorone	SW 846 8270	10	"	"		"
2-Nitrophenol	SW 846 8270	10	"	"		"
2,4-Dimethylphenol	SW 846 8270	10	"	"		"
Bis(2-chloroethoxy) methane	SW 846 8270	10	"	"		"
Benzoic Acid	SW 846 8270	10	"	"		"
2,4-Dichlorophenol	SW 846 8270	10	"	"		"
1,2,4-Trichlorobenzene	SW 846 8270	10	"	"		"
Naphthalene	SW 846 8270	10	"	"		"
4-Chloroaniline	SW 846 8270	10	"	"		"
Hexachlorobutadiene	SW 846 8270	10	"	"		"
Hexachlorobenzene	SW 846 8270	10	"	"		"
Pentachlorophenol	SW 846 8270	40	"	"		"
Phenanthrene	SW 846 8270	10	"	"		"
Anthracene	SW 846 8270	10	"	"		"
Di-n-Butylphthalate	SW 846 8270	10	"	"		"

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT
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JOB# 912084

Type of Analysis: ORGANICS
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: ug/l, ppb

Analytical Parameter(s)	Method No.	Practical Quantifiable Limit	A.E.S. Lab No..... 5301 / Customer ID..... BW-4 6/24/91 GRAB	5302 BLIND DUPLICATE (BW-4) 6/24/91 GRAB	5303 TRIP BLANK 06/24/91 GRAB	5304 FIELD BLANK 6/24/91 GRAB
Fluoranthene	SW 846 8270	10	BQL *	BQL *		BQL *
Benzidine	SW 846 8270	40	"	"		"
Pyrene	SW 846 8270	10	"	"		"
Butylbenzylphthalate	SW 846 8270	10	"	"		"
3,3-Dichlorobenzidine	SW 846 8270	40	"	"		"
Benzo (a) Anthracene	SW 846 8270	10	"	"		"
bis(2-ethylhexyl)Phthalate	SW 846 8270	10	"	"		"
Chrysene	SW 846 8270	10	"	"		"
Di-n-octylphthalate	SW 846 8270	10	"	"		"
Benzo (b) fluoranthene	SW 846 8270	10	"	"		"
Benzo (k) fluoranthene	SW 846 8270	10	"	"		"
Benzo (a) pyrene	SW 846 8270	10	"	"		"
Indeno (1,2,3-cd)pyrene	SW 846 8270	10	"	"		"
Dibenzo (a,h) anthracene	SW 846 8270	10	"	"		"
Benzo (g,h,i) perylene	SW 846 8270	10	"	"		"
4-Chloro-3-Methylphenol	SW 846 8270	10	"	"		"

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

JOB# 912084

Type of Analysis: ORGANICS
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: ug/l, ppb

Analytical Parameter(s)	Method No.	Practical Quantifiable Limit	A.E.S. Lab No..... 5301 Customer ID..... BW-4 6/24/91 GRAB	5302 BLIND DUPLICATE (BW-4) 6/24/91 GRAB	5303 TRIP BLANK 06/24/91 GRAB	5304 FIELD BLANK 6/24/91 GRAB
2-Methylnaphthalene	SW 846 8270	10	BQL *	BQL *		BQL *
Hexachlorocyclopentadiene	SW 846 8270	10	"	"		"
2,4,6-Trichlorophenol	SW 846 8270	10	"	"		"
2,4,5-Trichlorophenol	SW 846 8270	10	"	"		"
2-Chloronaphthalene	SW 846 8270	10	"	"		"
2-Nitroaniline	SW 846 8270	10	"	"		"
Dimethylphthalate	SW 846 8270	10	"	"		"
2,6-Dinitrotoluene	SW 846 8270	10	"	"		"
Acenaphthylene	SW 846 8270	10	"	"		"
3-Nitroaniline	SW 846 8270	10	"	"		"
Acenaphthene	SW 846 8270	10	"	"		"
2,4-Dinitrophenol	SW 846 8270	40	"	"		"
Dibenzofuran	SW 846 8270	10	"	"		"
2,4-Dinitrotoluene	SW 846 8270	10	"	"		"
4-Nitrophenol	SW 846 8270	40	"	"		"
Diethylphthalate	SW 846 8270	10	"	"		"

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

JOB# 912084

Type of Analysis: ORGANICS
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: ug/l, ppb

Analytical Parameter(s)	Method No.	Practical Quantifiable Limit	A.E.S. Lab No..... 5301 Customer ID..... BW-4 6/24/91 GRAB	5302 BLIND DUPLICATE (BW-4) 6/24/91 GRAB	5303 TRIP BLANK 06/24/91 GRAB	5304 FIELD BLANK 6/24/91 GRAB
4-Chlorophenyl-phenylether	SW 846 8270	10	BQL *	BQL *		BQL *
Fluorene	SW 846 8270	10	"	"		"
4-Nitroaniline	SW 846 8270	10	"	"		"
4,6-Dinitro-2-methylphenol	SW 846 8270	40	"	"		"
N-Nitrosodiphenylamine	SW 846 8270	10	"	"		"
1,2-Diphenylhydrazine	SW 846 8270	10	"	"		"
4-Bromophenyl-phenylether	SW 846 8270	10	"	"		"

FOOTNOTES

* Below Quantifiable Limits.

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

JOB# 912093

Type of Analysis: ORGANICS
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: ug/l,ppb

Analytical Parameter(s)	Method No.	Practical Quantifiable Limit	A.E.S. Lab No..... 5324 Customer ID..... BW-6 6/25/91 GRAB			
TCL VOLATILES						
Chloromethane	SW 846 8240	5.0	BQL *			
Vinyl Chloride	SW 846 8240	5.0	"			
Chloroethane	SW 846 8240	5.0	"			
Bromomethane	SW 846 8240	5.0	"			
Acetone	SW 846 8240	50	"			
1,1-Dichloroethene	SW 846 8240	5.0	"			
Carbon Disulfide	SW 846 8240	5.0	"			
Methylene Chloride	SW 846 8240	10	"			
trans-1,2-Dichloroethene	SW 846 8240	5.0	"			
1,1-Dichloroethane	SW 846 8240	5.0	"			
Vinyl Acetate	SW 846 8240	5.0	"			
2-Butanone	SW 846 8240	50	"			
Chloroform	SW 846 8240	5.0	"			
1,1,1-Trichloroethane	SW 846 8240	5.0	"			

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT
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JOB# 912093

Type of Analysis: ORGANICS
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: ug/l,ppb

Analytical Parameter(s)	Method No.	Practical Quantifiable Limit	A.E.S. Lab No..... 5324 Customer ID..... BW-6 6/25/91 GRAB			
Carbon Tetrachloride	SW 846 8240	5.0	BQL *			
Benzene	SW 846 8240	5.0	"			
1,2-Dichloroethane	SW 846 8240	5.0	"			
Trichloroethene	SW 846 8240	5.0	"			
1,2-Dichloropropane	SW 846 8240	5.0	"			
Bromodichloromethane	SW 846 8240	5.0	"			
2-Chloroethyl vinyl ether	SW 846 8240	5.0	"			
4-Methyl-2-pentanone	SW 846 8240	50	"			
cis-1,3-Dichloropropene	SW 846 8240	5.0	"			
Toluene	SW 846 8240	5.0	"			
trans-1,3-Dichloropropene	SW 846 8240	5.0	"			
1,1,2-Trichloroethane	SW 846 8240	5.0	"			
Tetrachloroethene	SW 846 8240	5.0	"			
Chlorodibromomethane	SW 846 8240	5.0	"			
Chlorobenzene	SW 846 8240	5.0	"			
Ethylbenzene	SW 846 8240	5.0	"			

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

JOB# 912093

Type of Analysis: ORGANICS
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: ug/l,ppb

Analytical Parameter(s)	Method No.	Practical Quantifiable Limit	A.E.S. Lab No..... 5324 Customer ID..... BW-6 6/25/91 GRAB			
Bromoform	SW 846 8240	5.0	BQL *			
1,1,2,2-Tetrachloroethane	SW 846 8240	5.0	"			
2-Hexanone	SW 846 8240	50	"			
m/p-Xylene	SW 846 8240	5.0	"			
o-Xylene	SW 846 8240	5.0	"			
Styrene	SW 846 8240	5.0	"			

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

Type of Analysis: Duplicate Analysis
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: Milligrams/Liter

Analytical Parameters	Sample No.	Original Concentration	Duplicate Concentration	Average Concentration	Range	Relative % Difference
Zinc, Total	5324	BQL **	BQL	BQL	NA **	NA
Zinc, Soluble	5324	"	"	"	NA	NA
Iron, Total	5324	29.2	28.4	28.8	0.8	3
Iron, Soluble	5324	3.84	3.84	3.84	0	0
Potassium, Total	5324	4.56	4.47	4.52	0.09	2.0
Potassium, Soluble	5324	1.61	1.66	1.64	0.05	3.0
Nitrite	5324	BQL	BQL	BQL	NA	NA
Ammonia	5324	0.14	0.12	0.13	0.02	15
Total Kjeldahl Nitrogen	5324	0.5	0.5	0.5	0	0

* Relative Percent Difference = (Range/Average) X 100

FOOTNOTES

* Below Quantifiable Limits.
** Not Available.

LABORATORY REPORT
QUALITY CONTROL - PRECISION

Type of Analysis: Duplicate Analysis
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: ug/l or ppb

Analytical Parameters	Sample No.	Original Concentration	Duplicate Concentration	Average Concentration	Range	Relative % Difference
All Analytes (8240)	5324	BQL **	BQL	BQL	NA ***	NA
All Analytes (8270)	5324	BQL	BQL	BQL	NA	NA

* Relative Percent Difference = (Range/Average) X 100

FOOTNOTES

** Below Quantifiable Limits.
*** Not Available.

ADVANCED ENVIR...ENTAL SERVICES, INC.
LABORATORY CONTROL
QUALITY CONTROL - ACCURACY

Type of Analysis: Matrix Spikes and E.P.A. Standards
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: mg/l

Analytical Parameters	Sample No.	Type	Observed Concentration	Original Concentration	Added Concentration	Percent Recovery*
Zinc, Total	5324	SPK	0.52	BQL **	0.50	104
Zinc, Soluble	5324	SPK	0.49	"	0.50	98
IND. (Zn) Std.	Spex 1	STD	0.50	0.50	NONE	100
Iron, Total	5324	SPK ***	6.90	2.88	5.00	80
Iron, Soluble	5324	SPK	8.32	3.84	4.00	112
IND. (Fe) Std.	Spex 2	STD	3.84	4.00	NONE	96
Potassium, Total	5324	SPK	25.4	4.52	20.0	104
Potassium, Soluble	5324	SPK	22.5	1.64	20.0	104
IND. (K) Std.	686	EPA	10.2	10.0	NONE	102

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

* If Added=NONE: % Recovery = 100 x (Observed Concentration / "background" Original Concentration)

FOOTNOTES

** Below Quantifiable Limits.
*** Spike performed on a sample dilution.

LABORATORY CONTROL
QUALITY CONTROL - ACCURACY

Type of Analysis: Matrix Spikes and E.P.A. Standards
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: mg/l

Analytical Parameters	Sample No.	Type	Observed Concentration	Original Concentration	Added Concentration	Percent Recovery*
Nitrite	5324	SPK	0.22	BQL **	0.25	88
Ammonia	---	IND STD	51	50	NONE	102
Ammonia	5324	SPK	0.60	0.13	0.50	94
Total Kjeldahl Nitrogen	5324	SPK	5.6	0.5	5.0	102
Total Kjeldahl Nitrogen	---	EPA	5.2	5.0	NONE	104

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

* If Added=NONE: % Recovery = 100 x (Observed Concentration / "background" Original Concentration)

FOOTNOTES

** Below Quantifiable Limits.

LABORATORY CONTROL
QUALITY CONTROL - ACCURACY

Type of Analysis: Matrix Spikes and E.P.A. Standards
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: mg/l

Analytical Parameters	Sample No.	Type	Observed Concentration	Original Concentration	Added Concentration	Percent Recovery*
Zinc, Total	5324	SPK	0.52	BQL **	0.50	104
Zinc, Soluble	5324	SPK	0.49	"	0.50	98
IND. (Zn) Std.	Spex 1	STD	0.50	0.50	NONE	100
Iron, Total	5324	SPK ***	6.90	2.88	5.00	80
Iron, Soluble	5324	SPK	8.32	3.84	4.00	112
IND. (Fe) Std.	Spex 2	STD	3.84	4.00	NONE	96
Potassium, Total	5324	SPK	25.4	4.52	20.0	104
Potassium, Soluble	5324	SPK	22.5	1.64	20.0	104
IND. (K) Std.	686	EPA	10.2	10.0	NONE	102

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

* If Added=NONE: % Recovery = 100 x (Observed Concentration / "background" Original Concentration)

FOOTNOTES

** Below Quantifiable Limits.
*** Spike performed on a sample dilution.

LABORATORY CONTROL
QUALITY CONTROL - ACCURACY

Type of Analysis: Matrix Spikes and E.P.A. Standards
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: ug/l or ppb

Analytical Parameters	Sample No.	Type	Observed Concentration	Original Concentration	Added Concentration	Percent Recovery*
1,1-Dichloroethene	5324	SPK	18.5	BQL **	20.0	92
Benzene	5324	SPK	19.3	"	20.0	96
Trichloroethene	5324	SPK	18.9	"	20.0	94
Toluene	5324	SPK	19.4	"	20.0	97
Chlorobenzene	5324	SPK	19.0	"	20.0	95
Phenol	5324	SPK	34.8	"	80.0	43
2-chlorophenol	5324	SPK	54.2	"	80.0	68
1,4-Dichlorobenzene	5324	SPK	31.8	"	40.0	79

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

* If Added=NONE: % Recovery = 100 x (Observed Concentration / "background" Original Concentration)

FOOTNOTES

** Below Quantifiable Limits.

LABORATORY CONTROL
QUALITY CONTROL - ACCURACY

Type of Analysis: Matrix Spikes and E.P.A. Standards
Client: UNION CARBIDE CORP.

A.E.S. Job Code: CTC
Units: ug/l or ppb

Analytical Parameters	Sample No.	Type	Observed Concentration	Original Concentration	Added Concentration	Percent Recovery*
N-Nitrosodipropylamine	5324	SPK	29.8	BQL *	40.0	75
1,2,4-Trichlorobenzene	5324	SPK	41.6	"	40.0	104
4-Chloro-3-Methylphenol	5324	SPK	66.2	"	80.0	83
Acenaphthene	5324	SPK	30.8	"	40.0	77
4-Nitrophenol	5324	SPK	34.6	"	80.0	43
2,4-Dinitrotoluene	5324	SPK	48.0	"	40.0	120
Pentachlorophenol	5324	SPK	64.6	"	80.0	81
Pyrene	5324	SPK	32.6	"	40.0	82

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

* If Added=NONE: % Recovery = 100 x (Observed Concentration / "background" Original Concentration)

FOOTNOTES

** Below Quantifiable Limits.

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

CHAIN OF CUSTODY RECORD

PROJECT NAME: Union Carbide

SAMPLER'S SIGNATURE: Dennis Hoyt / Mike Champ

JOB CODE: CTC

IDENTIFICATION OF BLIND FIELD DUPLICATE SITE: BW-4

DATE	TIME	SAMPLE IDENTIFICATION	GRAB	COMP	SAMPLE TYPE	CONTAINER CLASSIFICATION: UNPRESERVED	HNO3	H2SO4	HCL	NAOH	VIAL (PRES.)	VIAL (UNPRES.)	TOTAL	PARAMETERS/REMARKS
6/24/91	3.00 pm	BW-1	X		Groundwater	Ø	2	1			Ø		3	Ammo, Nitrate, TKN, Tot & Sol Metals.
"	4:00pm	BW-4	X		"	1	2	1			2		6	Ammo, Nitrate, TKN, Tot & Sol Metals, Semi Vol; Volatiles
"	4:00pm	Blind Dup	X		"	1	2	1			2		6	" " " " " " "
"	4:20pm	BW-3	X		"	0	2	1			Ø		3	Ammo, Nitrate, TKN, Tot & Sol Metals
"	8:45am	FIELD BLANK	X		DI WATER	1	1	1			Ø		3	Ammo, Nitrate, TKN, Semi-Vol, Tot Metals
"	8:00am	TRIP BLANK	X		BAKER WATER	Ø	Ø	Ø			2		2	Volatiles

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: Dennis Hoyt	6/24/91	1734	Tal - Craig
2. RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
3. RELINQUISHED BY:	DATE	TIME	RECEIVED BY:

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

CHAIN OF CUSTODY RECORD

PROJECT NAME: Union Carbide

SAMPLER'S SIGNATURE: Dennis Hoyt

JOB CODE: CTC

IDENTIFICATION OF BLIND FIELD DUPLICATE SITE: —

DATE	TIME	SAMPLE IDENTIFICATION	GRAB	COMP	SAMPLE TYPE	CONTAINER CLASSIFICATION: UNPRESERVED	HNO_3	H_2SO_4	HCL	NAOH	VIAL (PRES.)	VIAL (UNPRES.)	TOTAL	PARAMETERS/REMARKS
6/25/91	12 50 PM	BW-5	X		GROUNDWATER		2	1					3	TKN, AMMO, Nitrate, Tot & Sol METALS
6/25/91	12 23 PM	MW-1	X		"		2	1					3	" " " " " "
6-25-91	11 45 AM	BW-6	X		"	3	2	2			2		9	TKN, Ammo, Nitrate, Tot & Sol Metals, Vol, Semi Vo
6-25-91	11 40 AM	BW-2	X		"		2	1					3	TKN, Ammo, Nitrate, Tot & Sol Metals
6/25/91	12 10 PM	MW-3	X		"		2	1					3	" " " " " "
														QC site: BW-6 (m)

TOTAL NUMBER OF CONTAINERS (21)

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:
Dennis J. Hoyt	6/25/91	2:40	Marcia Lawley
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

SAMPLER'S SIGNATURE: [signature]

JOB CODE: CTC

IDENTIFICATION OF BLIND FIELD DUPLICATE SITE: ________

DATE	TIME	SAMPLE IDENTIFICATION	GRAB	COMP	SAMPLE TYPE	UNPRESERVED	HNO_3	H_2SO_4	HCL	NAOH	VIAL (PRES.)	VIAL (UNPRES.)	TOTAL	PARAMETERS/REMARKS
6/26/91	8:15	MW 2	X		WATER		2	1						FE1, K, ZN1, AMMO, N/ITE, TKN, FLS1, KS, ZNS1

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.

RELINQUISHED BY	DATE	TIME	RECEIVED BY
1. [signature]	6/26/91	9:30 AM	Marcia Bentley
2.			
3.			

ADVANCED ENVIRONMENTAL SEVICES, Inc.
EXTRACTION TRACEABILITY REPORT
INORGANICS REPORT

A.E.S. Job Code: CTC A.E.S. Job Number: 912084

TECHNICIAN	ANALYTICAL METHOD	SAMPLE CODE(S)	DATE OF EXTRACTION
[illegible]	8270	5301, 5302, 5304	6/26/91

ADVANCED ENVIRONMENTAL SEVICES, Inc.
EXTRACTION TRACEABILITY REPORT
INORGANICS REPORT

A.E.S. Job Code: CTC A.E.S. Job Number: 912093

TECHNICIAN	ANALYTICAL METHOD	SAMPLE CODE(S)	DATE OF EXTRACTION
[illegible]	8270	5324	6-28-91

AES ORGANIC DEPARTMENT TRACEABLITY

JOB CODE: CTC

Technician Signature	AES Sample #'s	Method	Date of Analysis
Jim Fugh	5324	8240	7/1/91
Jim Fugh	5324	8270	7/1/91

AES ORGANIC DEPARTMENT TRACEABLITY

JOB CODE: CTC

Technician Signature	AES Sample #'s	Method	Date of Analysis
Jim Tigh	5301, 5302, 5304	8270	6/28/91
Jim Tigh	5301-5303	8240	7/1/91

AES Inorganics Department Traceability

Job Code: [illegible]

Technician Signature	AES Sample #	Method	Date of Analysis
Dawn J McDougall	5277-02 & 5204-5	289.1	6-27-91
Dawn J McDougall	"	258.1	7-10-91
Dawn J McDougall	"	236.1	7-9-91

AES Inorganics Department Traceability

Job Code: OTC

echnician ignature	AES Sample #	Method	Date of Analysis
[illegible]	5341	353.2	6/27/91
[illegible]	5341	350.1	6-28-91
[illegible]	5341	351.2	6/27/91

AES Inorganics Department Traceability

Job Code: LTC

Technician Signature	AES Sample #	Method	Date of Analysis
Dawn L McDougall	5341	279.1	7-9-91
Dawn L McDougall	"	236.1	7-9-91
Dawn L McDougall	"	258.1	7-10-91

AES Inorganics Department Traceability

Job Code: CTC

Technician Signature	AES Sample #	Method	Date of Analysis
[signature]	5299-5304	353.2	6/27/91
[signature]	5299-5304	350.1	6-28-91
[signature]	5299-04	351.2	6/27/91
[signature]	5301-02	350.1	7-11-91
GABC INPANTIÑO (GNA)	5301-02	351.2	7-9-91

AES Inorganics Department Traceability

Job Code: CTC

Technician Signature	AES Sample #	Method	Date of Analysis
[signature]	5320-24	353.2	6/27/91
[signature]	5320-24	350.1	6-28-91
[signature]	5320-24	351.2	6/27/91

AES Inorganics Department Traceability

Job Code: CT

Technician Signature	AES Sample #	Method	Date of Analysis
Lauren J McDougall	5320-24 T/S	287.1	6-27-91
Lauren J McDougall	"	236.1	7-9-91
Lauren J McDougall	"	258.1	7-10-91