- FINAL -
RESOURCE CONSERVATION AND RECOVERY ACT FACILITY INVESTIGATION REPORT FEDERATED METALS CORPORATION HAMMOND, INDIANA

VOLUME III
APPENDICES I - O

July 3, 1997

Prepared for

Bridgeview Management Company
1160 State Street
Perth Amboy, New Jersey 08861

Prepared by

Geraghty & Miller, Inc.
251 East Ohio St., Suite 800
Indianapolis, Indiana 46204
(317) 231-6500

GERAGHTY & MILLER, INC.
Environmental Services
a heidemij company

-FINAL -
RESOURCE CONSERVATION AND RECOVERY ACT FACILITY INVESTIGATION REPORT FEDERATED METALS CORPORATION HAMMOND, INDIANA

VOLUME III
APPENDICES I - O

July 3, 1997

GERAGHTY & MILLER, INC.

- DRAFT -
RESOURCE CONSERVATION AND RECOVERY ACT
FACILITY INVESTIGATION REPORT
FEDERATED METALS CORPORATION
HAMMOND, INDIANA

VOLUME III
APPENDICES I - O

I. Indiana Department of Environmental Management (IDEM) Summary of Tier II Cleanup Goals and Indiana Acute and Chronic Aquatic Criteria.

J. Near Surface Soil Sampling Boring Logs.

K. Monitoring Wells/Piezometers/TSP Elevation Survey Data.

L. Groundwater Sampling Logs.

M. Groundwater Laboratory Analytical Results and Data Validation Summary Reports.

N. Low-Flow Groundwater Sampling Analytical Results and Data Validation Summary Reports.

O. Off-site Groundwater Analytical Reports.

RECEIVED
DEC 24 1996
Enforcement & Compliance Assurance Branch
Waste, Pesticides & Toxics Division
U.S. EPA – REGION 5

APPENDIX I

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (IDEM) SUMMARY OF TIER II CLEANUP GOALS AND INDIANA ACUTE AND CHRONIC AQUATIC CRITERIA

RECEIVED
DEC 24 1996
Enforcement & Compliance Assurance Branch
Waste, Pesticides & Toxics Division
U.S. EPA – REGION 5

Table 2

Acute (AAC) and chronic (CAC) aquatic criteria for certain metals at selected hardness values as calculated from equations in Table 1 (metals concentrations in micrograms per liter; hardness in milligrams per liter $CaCO_3$).

	Cadmium		Chromium III		Copper		Lead		Nickel		Silver		Zinc	
Hardness	AAC	CAC	AAC	CAC	AAC	CAC	AAC	CAC	AAC	CAC	AAC	CAC	AAC	CAC
50	2	0.7	984	117	9	6	34	1	789	88	0.6	_	65	59
100	4	1.1	1737	207	18	12	82	3	1418	158	2.	_	117	106
150	6	1.6	2420	289	26	17	137	5	1999	222	4	_	165	149
200	9	2.0	3064	365	34	21	197	8	2549	283	7	_	210	191
250	11	2.3	3679	438	42	26	262	10	3079	342	10	_	254	230
300	14	2.7	4270	509	50	30	331	13	3592	400	13	_	297	269
350	16	3.0	4845	577	58	34	402	16	4093	455	18	_	338	306
400	19	3.4	5405	644	65	39	477	19	4582	509	22	_	379	343
450	21	3.7	5952	709	73	43	554	22	5063	563	27	_	419	379
500	24	4.0	6488	773	81	47	634	25	5535	615	32	_	458	415

TABLE 14

REV: 11/01/93

SUMMARY OF TIER II CLEANUP GOALS FOR THE NON-RESIDENTIAL SCENARIO

Chemical Name	Compound is Bioaccumulatable[a] (yes/no)	Surface Soils (mg/Kg)	Subsurface Soils (mg/Kg)	Groundwater (mg/L)
naphthalene	no	10,000.00	10,000.00	4.09E+00
acenaphthylene	no	NA	NA	NA
acenaphthene	no	10,000.00	10,000.00	6.13E+00
fluorene	no	10,000.00	10,000.00	4.09E+00
phenanthrene	no	NA	NA	NA
anthracene	no	10,000.00	10,000.00	3.07E+01
fluoranthene	yes	10,000.00	10,000.00	8.18E-01
pyrene	no	10,000.00	10,000.00	3.07E+00
benzo(a)anthracene	yes	79.45	103.88	1.00E-02
chrysene	yes	7,945.21	10,000.00	3.92E-01
benzo(b)fluoranthene	yes	79.45	354.98	1.00E-02
benzo(k)fluoranthene	yes	794.52	3,759.12	3.92E-02
benzo(a)pyrene	yes	7.94	69.85	1.00E-02
indeno(1,2,3-cd)pyrene	yes	79.45	629.17	1.00E-02
dibenzo(a,h)anthracene	yes	7.95	69.86	1.00E-02
benzo(g,h,i)perylene	yes	NA	NA	NA
3,3'-dichlorobenzidine	no	128.89	12.86	2.00E-02
n-nitroso-di-n-propylamine	no	8.29	0.06	1.00E-02
bis(2-chloroisopropyl)ether	no	93.12	1.32	4.09E-02
4-chloroaniline	no	8,160.00	1,117.69	4.09E-01
2-chloronaphthalene	no	10,000.00	10,000.00	8.18E+00
2,4-dinitrotoluene	no	4,080.00	39.07	2.04E-01
hexachlorobutadiene	yes	1.78	31.18	3.67E-02
hexachloroethane	yes	408.00	3.31	2.04E-02
isophorone	no	10,000.00	256.03	3.01E+00
benzyl alcohol	no	10,000.00	4,356.75	3.07E+01
bis(2-chloroethyl)ether	no	4.06	0.06	1.00E-02
nitrobenzene	no	1,020.00	1.73	5.11E-02
1,2-dichlorobenzene	no	10,000.00	10,000.00	9.20E+00
1,3-dichlorobenzene	no	NA	NA	NA
1,4-dichlorobenzene	no	2,416.67	34.67	1.19E-01
1,2,4-trichlorobenzene	no	10,000.00	1,405.37	1.02E+00
hexachlorobenzene	no	6.87	101.56	1.00E-02
hexachlorocyclopentadiene	no	2.02	2.89	7.15E-01
n-nitrosodiphenylamine	no	10,000.00	567.80	5.84E-01
benzoic acid	no	10,000.00	10,000.00	4.09E+02
2-nitroaniline	no	42.90	2.08	5.00E-02
phenol	yes	10,000.00	658.78	1.23E+01
2-methylphenol	no	10,000.00	375.93	5.11E+00
3-methylphenol	no	NA	NA	NA
4-methylphenol	no	10,000.00	427.24	5.11E+00
2-chlorophenol	no	10,000.00	11.63	5.11E-01
2,4-dichlorophenol	no	6,120.00	15.12	3.07E-01
2,4,5-trichlorophenol	no	10,000.00	5,507.44	1.02E+01
2,4,6-trichlorophenol	no	1,922.89	30.65	2.60E-01
pentachlorophenol	no	483.33	24.95	5.00E-02
2,4-dinitrophenol	no	4,080.00	7.37	2.04E-01
bis(2-ethylhexyl)phthalate	yes	4,142.86	1,406.25	2.04E-01
butylbenzylphthalate	no	10,000.00	10,000.00	2.04E+01
di-n-butylphthalate	yes	10,000.00	6,188.56	2.04E+00
diethylphthalate	no	10,000.00	10,000.00	8.18E+01
di methyl phthalate	no	10,000.00	10,000.00	1.02E+03
di-n-octyl phthalate	no	10,000.00	10,000.00	2.04E+00

TABLE 14 (con't)

REV: 11/01/93

SUMMARY OF TIER II CLEANUP GOALS FOR THE NON-RESIDENTIAL SCENARIO

Chemical Name	Compound is Bioaccumulatable[a] (yes/no)	Surface Soils (mg/Kg)	Subsurface Soils (mg/Kg)	Groundwater (mg/L)
benzene	no	16.63	4.77*	9.86E-02
toluene	no	1,000.00	1,000.00	2.04E+01
ethylbenzene	no	1,000.00	1,000.00	1.02E+01
xylenes	no	1,000.00	1,000.00	2.04E+02
vinyl chloride	no	0.02	0.13	1.00E-02
chloroethane	no	1,000.00	1,000.00	NA
1,1-dichloroethylene	no	0.15	0.08	7.00E-03
1,1-dichloroethane	no	973.47	1,000.00	1.02E+01
1,2-dichloroethylene (cis)	no	1,000.00	102.49	1.02E+00
1,2-dichloroethane	no	5.27	0.37	3.14E-02
trichloroethylene	no	24.97	25.73	2.60E-01
1,1,1-trichloroethane	no	1,000.00	1,000.00	9.20E+00
1,1,2-trichloroethane	no	22.74	1.05	5.02E-02
tetrachloroethylene	no	101.23	8.01	5.61E-02
1,1,1,2-tetrachloroethane	no	75.91	7.24	1.10E-01
1,1,2,2-tetrachloroethane	no	75.41	0.21	1.43E-02
chloroform	no	5.28	20.33	4.69E-01
acetone	no	1,000.00	136.29	1.02E+01
4-methyl-2-pentanone	no	1,000.00	407.48	5.11E+00
methyl ethyl ketone	no	1,000.00	146.24	5.11E+00
Aldrin	yes	0.27	0.06	1.68E-04
gamma-BHC (Lindane)	yes	44.62	0.34	2.20E-03
chlordane	yes	24.48	4.51	2.00E-03
DDD	yes	241.67	48.34	1.19E-02
DDE	yes	170.59	80.49	8.41E-03
DDT	yes	153.01	141.83	8.41E-03
dieldrin	yes	3.62	0.06	1.79E-04
endosulfan sulfate	no	102.00	12.00	5.11E-03
endrin	yes	122.40	10.12	6.13E-03
heptachlor	yes	4.16	0.44	6.36E-04
heptachlor epoxide	no	6.37	0.45	8.30E-04
PCBs	yes	7.53	4.23	6.50E-04
lead	no	NA	NA	NA
cadmium	no	1,020.00	10,000.00	5.11E-02
silver	no	10,000.00	10,000.00	5.11E-01
mercury	yes	122.40	87.60	6.13E-03
chromium vi	no	10,000.00	10,000.00	5.11E-01
chromium iii	no	10,000.00	10,000.00	1.02E+02
barium	no	10,000.00	10,000.00	7.15E+00
arsenic	no	612.00	10,000.00	5.00E-02
antimony	no	816.00	10,000.00	6.00E-02
beryllium	no	13.49	118.60	5.00E-03
cyanide	no	1,000.00	1,000.00	2.04E+00
nickel	no	10,000.00	10,000.00	2.04E+00
selenium	no	10,000.00	10,000.00	5.11E-01
vanadium	no	10,000.00	10,000.00	7.15E-01
zinc	no	10,000.00	10,000.00	3.07E+01

NOTES: a – Compounds that are assumed to be bioaccumulative have an acceptable hazard index of 0.2 versus 1. as determined based on Indiana Register. 16:7. April 1. 1993.

b – Practical quantitation limits based EPA SW-846. 1986 for GC/MS. PQLs will change according to the specific analytical method used.

* – Assumes TEF approach.

NA – Data not available or not applicable.

APPENDIX J

NEAR SURFACE SOIL SAMPLING BORING LOGS

SOIL BC NG LOG

Boring # SB-1 Project/# Federated Metals/IN0144.107

Site Location Hammond, Indiana Drilling Started 3/24/95 9:30am DrillingCompleted 3/24/95 10:00am

Total Depth Drilled 5 feet Hole Diameter 8 inches Type of Sample/Coring Device 2'x2" Split Spoon Sampler

Land Surface Elevation NA feet ___ Surveyed ___ Estimated Sample Interval Continuous

Drilling Fluid Used NA Drilling Method 4 1/4 I.D. HSA

Drilling Contractor Rock and Soil Drilling Driller Mike Helper Eric

Logged by Jamie Yater, Geraghty & Miller, Inc. Hammer Weight 140lb Hammer Drop 30 inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classifica-tion
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Martix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-3 Blank drill through gravel and cobble size slag fill material	Fill
1/SS	3-5	1.5	3	4	4,5, 4,6										Same as above	
			4	4.5		10YR 5/4					70% f-c. sand	30		W	Mod sorted, subangular to subround, loose, approximately 50% m.gr.qtz sand, 50% other.	Gravelly sand
						yellowish brown										
			4.5	5		2.5Y 5/2 grayish brown					100% f.sand			W	V.well sorted, round to subround, mostly qtz sand (90%), black silty organic accumulations common.	
									E.O.B. at 5'						Soil sample: FMSONS1 / 4.5-5	

SOIL BO IG LOG

Boring # SB-2 Project/# Federated Metals/IN0144.107

Site Location Hammond, Indiana Drilling Started 3/24/95 8:30am DrillingCompleted 3/24/95 9:15a

Total Depth Drilled 7 feet Hole Diameter 8 inches Type of Sample/Coring Device 2'x2" Split Spoon Sampler

Land Surface Elevation NA feet ___ Surveyed ___ Estimated Sample Interval Continuous

Drilling Fluid Used NA Drilling Method 4 1/4 I.D. HSA

Drilling Contractor Rock and Soil Drilling Driller Mike Helper Eric

Logged by Jamie Yater, Geraghty & Miller, Inc. Hammer Weight 140lb Hammer Drop 30 inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classifica-tion
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Martix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-3' Blank drill through slag fill material, some gravel & cobble size	Fill
1/SS	3-5	1.5	3	4.5	4,12, 5,8									W	Same as above, but wet, loose	
			4.5	5		10YR 4/3 brown					100% f-m.sand			W	Well sorted, round to subround, with abundant black organic material (silty) and roots in horizontal layers (1-3cm thick), m.dense	Sand
2/SS	5-7	2.0	5	7	2,9, 8,12	Same					80% f-m.sand	10	10	W	Mod sorted, subangular to subround, mostly qtz sand, organic accumulations as above, m.dense	Gravelly sand
									E.O.B. at 7'						Soil sample: FMSONS2 / 5-7	

SOIL BC NG LOG

Boring # SB-3 Project/# Federated Metals/IN0144.107

Site Location Hammond, Indiana Drilling Started 6/15/95 11:20am DrillingCompleted 6/15/95 12:30pm

Total Depth Drilled 6 feet Hole Diameter 8 inches Type of Sample/Coring Device 2'x2" Split Spoon Sampler

Land Surface Elevation NA feet Surveyed Estimated Sample Interval Continuous

Drilling Fluid Used NA Drilling Method 4 1/4 I.D. HSA

Drilling Contractor Top Flight Drilling Driller Doug Helper Chris

Logged by Jamie Yater, Geraghty & Miller, Inc. Hammer Weight 140lb Hammer Drop 30 Inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classifica-tion
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Martix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
1/SS	0-2	1.0	0	2	4,6, 20,17	Gray & dark brown					10% silt 70% f-c sand	10	10	M	Crushed limestone mixed with dark brown f-m.qtz sand, and sand and gravel size slag fragments, poorly sorted, angular to subround, m.dense, granular to crumblike	Fill
2/SS	2-4	2.0	2	4	10,16 17,12	Same					Same	10	10	M	Fill material as above, also some yellow frags (possibly brick material)	
3/SS	4-6	0.5	4	4.5	4,8, 5,7	10YR 4/2 dark grayish brown					10% silt 90% f-m.sand			W	Well sorted, round to subround, mostly qtz sand, black silty organic accumulations common in horizontal layers approximately 1/4" thick	Sand
									E.O.B. at 6'						Soil sample: FMSOSB3 / 4-4.5	

SOIL BC NG LOG

Boring # SB-4 Project/# Federated Metals/IN0144.107

Site Location Hammond, Indiana Drilling Started 6/15/95 9:35am DrillingCompleted 6/15/95 11:00am

Total Depth Drilled 7 feet Hole Diameter 8 inches Type of Sample/Coring Device 2'x2" Split Spoon Sampler

Land Surface Elevation NA feet ___ Surveyed ___ Estimated Sample Interval Continuous

Drilling Fluid Used NA Drilling Method 4 1/4 I.D. HSA

Drilling Contractor Top Flight Drilling Driller Doug Helper Chris

Logged by Jamie Yater, Geraghty & Miller, Inc. Hammer Weight 140lb Hammer Drop 30 Inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classifica-tion
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Martix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-8" Concrete	Concrete
1/SS	1-3	2	1	3	1,2, 1,-	10YR 5/4 yellowish brown, 2/1 black					10% silt 80% f-c.sand	5	5	W	Poorly sorted, subround to subangular, mostly qtz sand, slight hydrocarbon-like odor, loose, HNu=90ppm	Sand
2/SS	3-5	2	3	5	1,0, 2,3	Same					Same	5	5	W	Same as above, abundant roots, dark brown sheen on soil and sampling tools, hydrocarbon-like odor HNu=90ppm	
3/SS	5-7	2	5	7	6,6, 6,6	10YR 5/2 grayish brown					Same	5	5	W	Same as above, except no sheen or odor, HNu=4.6ppm	
									E.O.B. at 7'						Soil samples: FMSOSB4 / 3-5	
															FMSOSB4 / 5-7	

SOIL BORING LOG

Boring #	SB-5	Project/#	Federated Metals/IN0144.107		
Site Location	Hammond, Indiana	Drilling Started	6/15/95 8:30am	DrillingCompleted	6/15/95 9:30am
Total Depth Drilled	7 feet	Hole Diameter	8 inches	Type of Sample/Coring Device	2'x2" Split Spoon Sampler
Land Surface Elevation	NA feet	Surveyed	Estimated	Sample Interval	Continuous
Drilling Fluid Used	NA			Drilling Method	4 1/4 I.D. HSA
Drilling Contractor	Top Flight Drilling	Driller	Doug	Helper	Chris
Logged by	Jamie Yater, Geraghty & Miller, Inc.	Hammer Weight	140lb	Hammer Drop	30 inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classification
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Martix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-8" Concrete	Concrete
1/SS	1-3	2	1	1.5	2,2, 1,3	10YR 6/3 pale brown					10% silt 80% f-msnd	10		M	Mod sorted, round to subround, mostly qtz sand, loose, crumblike	Sand
															HNu=2.8 ppm	
			1.5	3		10YR 2/1 black					Same	10		M	Same as above	
2/SS	3-5	2	3	5	3,5, 6,7	10YR 5/2 grayish brown					Same	10		W	Same as above, HNu=3.6ppm	
3/SS	5-7	2	5	7	4,5, 4,9	Same					Same	10		W	Same as above, some organic accumulations with roots (black), HNu=5.4ppm	
															E.O.B. at 7'	
															Soil samples: FMSOSB5 / 1-3	
															FMSOSB5 / 5-7	

SOIL BC NG LOG

Boring # SB-6 Project/# Federated Metals/IN0144.107

Site Location Hammond, Indiana Drilling Started 4/19/95 3:00pm DrillingCompleted 4/19/95 4:00pm

Total Depth Drilled 9 feet Hole Diameter 8 inches Type of Sample/Coring Device 2'x2" Split Spoon Sampler

Land Surface Elevation NA feet ___ Surveyed ___ Estimated Sample Interval Continuous

Drilling Fluid Used NA Drilling Method 4 1/4 I.D. HSA

Drilling Contractor Rock & Soil Drilling Driller Mike Helper Eric

Logged by Jamie Yater, Geraghty & Miller, Inc. Hammer Weight 140lb Hammer Drop 30 inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classifica-tion
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Martix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-1' Blank drill through concrete	Concrete
1/SS	1-3	2	1	3	2,2, 2,4	10YR 5/3 brown					80% f-m.sand	10	10	W	Mod well sorted, round to subround, mostly qtz sand, loose, white shell frags common,	Gravelly Sand
						3/1 v. dk. gray									color alternates in 2" layers throughout. HNu=0ppm	
2/SS	3-5	2	3	4	1,1, 3,6	10YR 3/1 v. dk gray					Same	10	10	W	Same as above	
			4	5		10YR 5/3 brown					Same	10	10	W	Same as above HNu=0ppm	
3/SS	5-7	2	5	7	2,2, 4,7	Same					Same	10	10	W	Same as above HNu=0ppm	
4/SS	7-9	1	7	9	3,2, 2,1	Same					Same	10	10	W	Same as above	
								E.O.B. at 9'							Soil samples: FMSOSB6 / 3-5	
															FMSOSB6 / 5-7	

SOIL BC NG LOG

Boring # SB-7 Project/# Federated Metals/IN0144.107

Site Location Hammond, Indiana Drilling Started 4/19/95 2:10pm DrillingCompleted 4/19/95 2:45pm

Total Depth Drilled 7 feet Hole Diameter 8 inches Type of Sample/Coring Device 2'x2" Split Spoon Sampler

Land Surface Elevation NA feet Surveyed Estimated Sample Interval Continuous

Drilling Fluid Used NA Drilling Method 4 1/4 I.D. HSA

Drilling Contractor Rock & Soil Drilling Driller Mike Helper Eric

Logged by Jamie Yater, Geraghty & Miller, Inc. Hammer Weight 140lb Hammer Drop 30 Inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classifica-tion
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Matrix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-1' Blank drill through concrete	Concrete
1/SS	1-3	2	1	3	2,2, 4,4	10YR 5/4 yellowish brn, 10YR 4/1 dark gray					80% f-m.sand	15	5	W	Well sorted, round to subround qtz sand, abundant white shell frags, m dense, Gravel is subround, HNu=1ppm	Gravelly Sand
2/SS	3-5	2	3	5	5,10, 15,20	10YR 5/4 yellowish brn	10YR 4/4	Few	Small	Faint	Same	10	10	W	Same as above, HNu=5ppm	
						dk yell brn										
3/SS	5-7	2	5	7	2,5, 10,11	Same	Same	Same	Same	Same	Same	10	10	W	Same as above HNu=7ppm	
								E.O.B. at 7'							Soil sample: FMSOSB7 / 5-7	

SOIL BORING LOG

Boring # SB-8 Project/# Federated Metals/IN0144.107

Site Location Hammond, Indiana Drilling Started 4/19/95 9:50am DrillingCompleted 4/19/95 10:20am

Total Depth Drilled 9 feet Hole Diameter 8 inches Type of Sample/Coring Device 2'x2" Split Spoon Sampler

Land Surface Elevation NA feet Surveyed Estimated Sample Interval Continuous

Drilling Fluid Used NA Drilling Method 4 1/4 I.D. HSA

Drilling Contractor Rock & Soil Drilling Driller Mike Helper Eric

Logged by Jamie Yater, Geraghty & Miller, Inc. Hammer Weight 140lb Hammer Drop 30 inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classification
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Martix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-1' Blank drill through concrete	Concrete
1/SS	1-3	2	1	3	5,9, 11,6	10YR 6/1, 7/1 gray, lt. gray					20% f-c.snd	40	40	W	Crushed limestone fill, angular frags, loose, HNu=5ppm	Fill
2/SS	3-5	2	3	4	11,10, 5,6	Same					Same	40	40	W	Same as above	
			4	5		10 YR 6/1, gray 3/1 v. dk gray					90% f-m.sand	5	5	W	V. well sorted, round to subround, mostly qtz sand, m dense, few white calcareous	Sand
															shell frags, gravel is subround to subangular, HNu=68ppm	
3/SS	5-7	2	5	7	4,1, 2,7	10YR 4/4 dark yellowish brn					Same	5	5	W	Same as above, abundant shell frags, HNu=12ppm	
						5/2 grayish brn										
4/SS	7-9	2	7	9	NR	Same					Same	5	5	W	Same as above, HNu=12ppm	
								E.O.B. at 9'							Soil samples: FMSOSB8 / 5-7	
								NR - Not Recorded							FMSOSB8 / 7-8	

SOIL BO IG LOG

Boring # SB-9 Project/# Federated Metals/IN0144.107

Site Location Hammond, Indiana Drilling Started 4/19/95 12:30pm DrillingCompleted 4/19/95 1:00pm

Total Depth Drilled 6 feet Hole Diameter 8 Inches Type of Sample/Coring Device 2'x2" Split Spoon Sampler

Land Surface Elevation NA feet ___ Surveyed ___ Estimated Sample Interval Continuous

Drilling Fluid Used NA Drilling Method 4 1/4 I.D. HSA

Drilling Contractor Rock & Soil Drilling Driller Mike Helper Eric

Logged by Jamie Yater, Geraghty & Miller, Inc. Hammer Weight 140lb Hammer Drop 30 Inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classifica-tion
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Martix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-2' Blank drill through 1' concrete and 1' crushed limestone fill, saturated	Concrete Fill
1/SS	2-4	2.0	2	4	2,2, - -	10YR 3/1, dark gray					90% f-m.sand	5	5	W	Well sorted (mostly fine), round to subround qtz sand, loose to m. dense, few white shell frags, hydrocarbon-like odor, HNu=226 ppm	Sand
2/SS	4-6	2.0	4	6	2,1, 1,4	Same					Same	5	5	W	Same as above, HNu=200ppm	
															Soil samples: FMSOSB9 / 4-6	
									E.O.B. at 6'						FMSOSB55 / 4-6 (DUP)	

SOIL BO NG LOG

Boring # SB-10 | Project/# Federated Metals/IN0144.107

Site Location: Hammond, Indiana | Drilling Started: 4/18/95 9:50am | DrillingCompleted: 4/18/95 10:25am

Total Depth Drilled: 6 feet | Hole Diameter: 8 inches | Type of Sample/Coring Device: 2'x2" Split Spoon Sampler

Land Surface Elevation: NA feet ___ Surveyed ___ Estimated | Sample Interval: Continuous

Drilling Fluid Used: NA | Drilling Method: 4 1/4 I.D. HSA

Drilling Contractor: Rock & Soil Drilling | Driller: Mike | Helper: Eric

Logged by: Jamie Yater, Geraghty & Miller, Inc. | Hammer Weight: 140lb | Hammer Drop: 30 inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classifica-tion
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Martix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-2' Blank drill through gray pumice-like gravelly slag.	
1/SS	2-4	2.0	2	4	14,17, 12,9	2.5YR 3/2 v. dk grayish brn					80% f-m.sand	10	10	W	Gravel is poorly sorted, angular to subround, sand is mod sorted, subround to subangular,	Gravelly Sand
						5/4 light olive brown									~80% qtz, m. dense, slome slag frags throught (gray to black-pumice like)	
2/SS	4-6	2.0	4	6	*	10YR 3/1 v. dk gray					Same	10	10	W	Same as above, except no slag	
									E.O.B. at 6'						Soil samples: FMSONS10 / 4-6	
															FMSONS53 / 4-6 (DUP)	
						* Blow counts were not recorded										

SOIL BC NG LOG

Boring # SB-11 Project/# Federated Metals/IN0144.107

Site Location Hammond, Indiana Drilling Started 3/23/95 3:15pm DrillingCompleted 3/23/95 3:45pm

Total Depth Drilled 7 feet Hole Diameter 8 Inches Type of Sample/Coring Device 2'x2" Split Spoon Sampler

Land Surface Elevation NA feet Surveyed Estimated Sample Interval Continuous

Drilling Fluid Used NA Drilling Method 4 1/4 I.D. HSA

Drilling Contractor Rock & Soil Drilling Driller Mike Helper Eric

Logged by Jamie Yater, Geraghty & Miller, Inc. Hammer Weight 140lb Hammer Drop 30 Inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classifica-tion
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Martix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness, pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-0.5 Concrete Floor	Concrete
														Dry	0.5-3 Blank drill, slag gravel fill, gray pumice-like texture, loose	Fill
					Attempt split spoon from 3-5 - could only push spoon 1'										Same as above	
1/SS	5-7	2.0	5	7	16,14 24,14	2.5Y 4/1 dk gray					100% f-m. sand			W	Well sorted, round to subangular, approximately 50% qtz sand, 50% other,	Sand
						3/1 v. dk gray									m. dense to dense w/ depth	
									E.O.B. at 7'						Soil sample: FMSONS11 / 5.5-6	

SOIL BORING LOG

Boring #	SB-12	Project/#	Federated Metals/IN0144.107		
Site Location	Hammond, Indiana	Drilling Started	3/23/95 10:50am	DrillingCompleted	3/23/95 11:15am
Total Depth Drilled	5 feet	Hole Diameter	8 inches	Type of Sample/Coring Device	2'x2" Split Spoon Sampler
Land Surface Elevation	NA feet	Surveyed	Estimated	Sample Interval	Continuous
Drilling Fluid Used	NA			Drilling Method	4 1/4 I.D. HSA
Drilling Contractor	Rock & Soil Drilling	Driller	Mike	Helper	Eric
Logged by	Jamie Yater, Geraghty & Miller, Inc.	Hammer Weight	140lb	Hammer Drop	30 inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classifica-tion
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Martix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-0.5 Concrete Floor	Concrete
														Dry	0.5-3 Blank drill, slag gravel fill, gray pumice-like texture, loose	Fill
1/SS	3-5	2.0	3	4	14,23 27,17									Dry	Same as above	
			4	5		2.5Y 4/3 lt. olive brown					100% f-m.sand			M	Well sorted, subangular to subround, mostly qtz sand (80%), with abundant black organic silty accumulations and roots (peat-like material), horizontal layers up to 1" thick, m. dense	Sand
															E.O.B. at 5'	
															Soil sample: FMSONS12 / 4.5-5	

SOIL B(NG LOG

Boring # SB-13 Project/# Federated Metals/IN0144.107

Site Location Hammond, Indiana Drilling Started 3/23/95 4:00pm DrillingCompleted 3/23/95 4:30pm

Total Depth Drilled 7 feet Hole Diameter 8 Inches Type of Sample/Coring Device 2'x2" Split Spoon Sampler

Land Surface Elevation NA feet ___ Surveyed ___ Estimated Sample Interval Continuous

Drilling Fluid Used NA Drilling Method 4 1/4 I.D. HSA

Drilling Contractor Rock & Soil Drilling Driller Mike Helper Eric

Logged by Jamie Yater, Geraghty & Miller, Inc. Hammer Weight 140lb Hammer Drop 30 Inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classifica-tion
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Matrix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-0.5 Concrete Floor	Concrete
														Dry	0.5-3 Blank drill, slag gravel fill, gray pumice-like texture, loose	Fill
1/SS	3-5	1.5	3	4	20,14 13,11									Dry	Same as above	
			4	5		10YR 2/1 black					20% f.sand 20% cly 60% silt			M	Low plasticity, sand size slag frags throughout (some metallic or glassy),	Silt Loam
															soft, abrupt boundary with above	
2/SS	5-7	NR	5	7	4,3 15,24	2.5Y 4/1 dk gray 2.5Y 5/3 lt. olive brown					100% f-m.sand			W	Well sorted, round to subangular, 80% qtz sand, 20% other, color change	Sand
															gradual with depth, very few sm. gravel, few roots, silty black	
															accumulations in horizontal lamina approximately 1cm thick	
															at 6.5' and 6.8', m. dense	
									E.O.B. at 7'						Soil sample: FMSONS13 / 5.5-6	
									NR - Not Recorded							

SOIL B(NG LOG

Boring # SB-14 Project/# Federated Metals/IN0144.107

Site Location Hammond, Indiana Drilling Started 3/23/95 9:20am DrillingCompleted 3/23/95 10:00am

Total Depth Drilled 7 feet Hole Diameter 8 inches Type of Sample/Coring Device 2'x2" Split Spoon Sampler

Land Surface Elevation NA feet ___ Surveyed ___ Estimated Sample Interval Continuous

Drilling Fluid Used NA Drilling Method 4 1/4 I.D. HSA

Drilling Contractor Rock & Soil Drilling Driller Mike Helper Eric

Logged by Jamie Yater, Geraghty & Miller, Inc. Hammer Weight 140lb Hammer Drop 30 inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classifica-tion
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Matrix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-0.5 Concrete Floor	Concrete
														Dry	0.5-3 Blank drill, slag gravel fill, gray pumice-like texture, loose	Fill
1/SS	3-5	1.0	3	4	22,45 29,25									Dry	Same as above	
			4	5		2.5Y 5/3 lt. olive brown and black					100% f-m.sand			M	Well sorted, round to subround, 80%qtz sand with few horizontal black silty organic	Sand
															accumulations with abundant roots (peat-like material ~20%	
															of sample), m. dense	
2/SS	5-7	1.0	5	7	12,17 19,21	2.5Y 3/3 dk olive brown					100% f-m.sand			W	Same as above, but wet	
									E.O.B. at 7'						Soil samples: FMSONS14 / 4.5-5	
															FMSONS52 / 4.5-5 (Dup)	
															FMSONS14 / 5-7	
															FMSONS52 / 5-7 (Dup)	

SOIL BC NG LOG

Boring # SB-15 Project/# Federated Metals/IN0144.107

Site Location Hammond, Indiana Drilling Started 3/23/95 2:15pm DrillingCompleted 3/23/95 2:45pm

Total Depth Drilled 7 feet Hole Diameter 8 Inches Type of Sample/Coring Device 2'x2" Split Spoon Sampler

Land Surface Elevation NA feet ___ Surveyed ___ Estimated Sample Interval Continuous

Drilling Fluid Used NA Drilling Method 4 1/4 I.D. HSA

Drilling Contractor Rock & Soil Drilling Driller Mike Helper Eric

Logged by Jamie Yater, Geraghty & Miller, Inc. Hammer Weight 140lb Hammer Drop 30 Inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classifica-tion
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Martix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-0.5 Concrete Floor	Concrete
														Dry	0.5-3 Blank drill, slag gravel fill, gray pumice-like texture, loose	Fill
1/SS	3-5	2.0	3	4.5	12,39 50,14									M	Fill as above but also some crushed limestone frags	
			4.5	5		10YR 2/1 black					30% f-c.sand 50% silt	10	10	M	Poorly sorted, sand and gravel size slag frags mixed w/ black silt, v. angular, m. dense	
2/SS	5-7		5	5.5	8,5 14,20	Same					Same	10	10	W	Same as above	
			5.5	7		2.5Y 4/2 dk. grayish brown					100% f-m.sand			W	Well sorted, subangular to round 80% qtz sand, few roots, m. dense	Sand
									E.O.B. at 7'						Soil sample: FMSONS15 / 6-7	

SOIL BO NG LOG

Boring # SB-16 Project/# Federated Metals/IN0144.107

Site Location Hammond, Indiana Drilling Started 3/23/95 8:00am DrillingCompleted 3/23/95 9:00am

Total Depth Drilled 9 feet Hole Diameter 8 inches Type of Sample/Coring Device 2'x2" Split Spoon Sampler

Land Surface Elevation NA feet Surveyed Estimated Sample Interval Continuous

Drilling Fluid Used NA Drilling Method 4 1/4 I.D. HSA

Drilling Contractor Rock & Soil Drilling Driller Mike Helper Eric

Logged by Jamie Yater, Geraghty & Miller, Inc. Hammer Weight 140lb Hammer Drop 30 inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classifica-tion
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Martix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-0.5' Concrete Floor	Concrete
														Dry	0.5-3 Blank drill, slag gravel fill, gray pumice-like texture, loose	Fill
1/SS	3-5	0.5	3	5	17,22 23,10									W	Slag fill as above, loose to m. dense with depth	
2/SS	5-7	1.0	5	6	5,5 7,20	10YR 2/1 black					40% silt 50% vf-sand	10			Well sorted, roots abundant, cohesive, m. dense, organic peat like material	Sandy Loam
			6	7		2.5Y 5/3 lt. olive brown					10% silt 80% f-m.sand		10		Well sorted, round to subround, mostly fine qtz sand, gradual boundary with above,	Loamy Sand
															m. dense, few large gravel	
3/SS	7-9	2.0	7	7.5	14,22 29,32	Same					50% f-c.sand	25	25	W	Poorly sorted, subangular to subround, m. dense, sand is 50% qtz, 50% other	Sandy Gravel
			7.5	9		Same					100% f-m.sand			W	V. well sorted, subround to round qtz sand, m. dense to dense with depth,	Sand
															clear boundary with above.	
									E.O.B. at 9'						Soil samples: FMSONS16 / 6.5-7	
															FMSONS16 / 7-9	

SOIL BC NG LOG

Boring # SB-17 | Project/# Federated Metals/IN0144.107

Site Location: Hammond, Indiana | Drilling Started: 4/18/95 12:30pm | DrillingCompleted: 4/18/95 12:50pm

Total Depth Drilled: 5 feet | Hole Diameter: 8 inches | Type of Sample/Coring Device: 2'x2" Split Spoon Sampler

Land Surface Elevation: NA feet | Surveyed: | Estimated | Sample Interval: Continuous

Drilling Fluid Used: NA | Drilling Method: 4 1/4 I.D. HSA

Drilling Contractor: Rock & Soil Drilling | Driller: Mike | Helper: Eric

Logged by: Jamie Yater, Geraghty & Miller, Inc. | Hammer Weight: 140lb | Hammer Drop: 30 inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classifica-tion
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Martix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-1' Blank drill through gravel road	Fill
1/SS	1-3	2.0	1	3	18,25 23,17	10YR 3/1 v. dk gray to black					100% m-vc.sand			M	Poorly sorted, angular, sand size glassy & metallic slag frags mixed with 50% m-c qtz sand (mod sorted), m. dense	Sand
2/SS	3-5	2.0	3	5	2,15 18,18	10YR 4/1 dk. gray to black					80% f-m.sand	10	10	W	Well sorted (mostly fine qtz sand), round to subround, gravel is subround to subangular, few sm white whole shells, m. dense	Gravelly Sand
										E.O.B. at 5'						
															Soil sample: FMSONS17 / 3-5	

SOIL B(NG LOG

Boring # SB-18 Project/# Federated Metals/IN0144.107

Site Location Hammond, Indiana Drilling Started 3/22/95 9:00am DrillingCompleted 3/22/95 10:00am

Total Depth Drilled 7.5 feet Hole Diameter 8 inches Type of Sample/Coring Device 2'x2" Split Spoon Sampler

Land Surface Elevation NA feet ___ Surveyed ___ Estimated Sample Interval Continuous

Drilling Fluid Used NA Drilling Method 4 1/4 I.D. HSA

Drilling Contractor Rock & Soil Drilling Driller Mike Helper Eric

Logged by Jamie Yater, Geraghty & Miller, Inc. Hammer Weight 140lb Hammer Drop 30 inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classifica-tion
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Matrix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-0.5 Concrete Floor	Concrete
														Dry	0.5-3.5 slag gravel fill - gray, pumice-like texture, loose	Fill
1/SS	3.5-5.5	2.0	3.5	5.5	9,9 12,9	10YR 2/1 black 3/1 v. dk gray					30% f-vc.sand 70% silt			M	Poorly sorted, very anglar sand size slag fragments (some appear glassy or metallic), mixed with few wood frags and black, m. dense silt	Silt Loam
2/SS	5.5-7.5	1.0	5.5	7.5	18,17 19,25	2.5Y 4/3 olive brown 4/2 dk. grayish brn					80% f-vc.sand	10	10	W	Poorly sorted, subround to angular, m. dense, fine sand is mostly qtz (50% total qtz sand)	Gravelly Sand
									E.O.B. at 7.5'							
															Soil samples: FMSONS18 / 5.5-7.5	
															FMSONS50 / 5.5-7.5 (Dup)	

SOIL BC NG LOG

Boring # SB-19 Project/# Federated Metals/IN0144.107

Site Location Hammond, Indiana Drilling Started 3/22/95 10:20am DrillingCompleted 3/22/95 11:00am

Total Depth Drilled 7 feet Hole Diameter 8 inches Type of Sample/Coring Device 2'x2" Split Spoon Sampler

Land Surface Elevation NA feet ___ Surveyed ___ Estimated Sample Interval Continuous

Drilling Fluid Used NA Drilling Method 4 1/4 I.D. HSA

Drilling Contractor Rock & Soil Drilling Driller Mike Helper Eric

Logged by Jamie Yater, Geraghty & Miller, Inc. Hammer Weight 140lb Hammer Drop 30 inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classifica-tion
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Martix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-0.5 Concrete Floor	Concrete
															0.5-3 Blank drill, gray pumice-like slag gravel fill, loose	Fill
1/SS	3-5	2.0	3	3.5	47,32 27,21	2.5Y 6/3 lt. yellowish brn						10	90	Dry	Mod sorted, loose, v. coarse angular slag gravel fill	
			3.5	4		2.5Y 5/2 grayish brn							100	M	Gray slag fill as 0.5-3, loose	
			4	5		2.5Y 3/1 v. dark gray					20% silt 80% f-vc.sand			M	Poorly sorted, angular to subround, sand size slag frags common (some	Loamy Sand
															appear glassy or metallic), some fine qtz sand, loose	
2/SS	5-7	1.0	5	7		2.5Y 4/2 dk. grayish brn					10% silt 90% f-m.sand			W	Mod well sorted, round to subround mostly qtz sand (~90%), mostly fine grained, few	Sand
															small white shell (calcareous) frags, also some 2.5Y 4/1 dark gray to black	
															organic material with roots (peat-like) in very thin (few cm) horizontal	
															accumulations, m. dense	
									E.O.B. at 7'						Soil sample: FMSONS19 / 5-7	

SOIL BO NG LOG

Boring # SB-
Project/# Federated Metals/IN0144.107
Site Location Hammond, Indiana
Drilling Started 4/18/95 1:20pm
DrillingCompleted 4/18/95 1:45pm
Total Depth Drilled 5 feet
Hole Diameter 8 inches
Type of Sample/Coring Device 2'x2" Split Spoon Sampler
Land Surface Elevation NA feet
Surveyed
Estimated
Sample Interval Continuous
Drilling Fluid Used NA
Drilling Method 4 1/4 I.D. HSA
Drilling Contractor Rock & Soil Drilling
Driller Mike
Helper Eric
Logged by Jamie Yater, Geraghty & Miller, Inc.
Hammer Weight 140lb
Hammer Drop 30 inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classifica-tion
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Martix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-1' Blank drill through gravel road	Fill
1/SS	1-3	2.0	1	2	28,45 18,17	white						20	80	M	Gravel fill as above - crushed limestone	
			2	3		10YR 2/1 black					20% f-m.sand 80% silt			M	f-m.sand is poorly sorted, angular slag frags mixed with black, m. dense silt, few roots	Silt
						3/2 v. dk grayish brn										
2/SS	3-5	2.0	3	5	13,20 25,23	10YR 5/3 brown					90% f-m.sand	10		W	Mod sorted, subround to round ~80% qtz sand, abundant sand size white shell	Sand
															frags throughout, few sm gravel concentrated at 4.5', m. dense	
									E.O.B. at 5'						Soil samples: FMSONS20 / 3-5	
															FMSONS54 / 3-5 (Dup)	

SOIL BORING LOG

Boring # SB-21 | Project/# Federated Metals/IN0144.107

Site Location: Hammond, Indiana | Drilling Started: 3/24/95 10:00am | DrillingCompleted: 3/24/95 10:20am

Total Depth Drilled: 7 feet | Hole Diameter: 8 inches | Type of Sample/Coring Device: 2'x2" Split Spoon Sampler

Land Surface Elevation: NA feet ___ Surveyed ___ Estimated | Sample Interval: Continuous

Drilling Fluid Used: NA | Drilling Method: 4 1/4 I.D. HSA

Drilling Contractor: Rock & Soil Drilling | Driller: Mike | Helper: Eric

Logged by: Jamie Yater, Geraghty & Miller, Inc. | Hammer Weight: 140lb | Hammer Drop: 30 inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classification
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Matrix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-3' Blank drill through gravel road and cobble size slag fill material	Fill
					Attempt split spoon sample from 3-5 ft - Refusal										Same as above	
1/SS	5-7	1.5	5	7	8,13 18,23	10YR 3/1 v. dk gray	2.5Y 5/6 lt olive brown	Few	Small	Distinct	100% f-m.sand				V. well sorted, subangular to subround qtz sand, m. dense, wet	Sand
									E.O.B. at 7'						Soil sample: FMSONS21 / 5.5-6	

SOIL BO NG LOG

Boring # SB-22 Project/# Federated Metals/IN0144.107

Site Location Hammond, Indiana Drilling Started 3/23/95 4:30pm DrillingCompleted 3/23/95 5:10pm

Total Depth Drilled 7 feet Hole Diameter 8 inches Type of Sample/Coring Device 2'x2" Split Spoon Sampler

Land Surface Elevation NA feet ___ Surveyed ___ Estimated Sample Interval Continuous

Drilling Fluid Used NA Drilling Method 4 1/4 I.D. HSA

Drilling Contractor Rock & Soil Drilling Driller Mike Helper Eric

Logged by Jamie Yater, Geraghty & Miller, Inc. Hammer Weight 140lb Hammer Drop 30 Inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classifica-tion
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Martix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-0.5 Concrete Floor	Concrete
															0.5-3 Blank drill, slag gravel fill, gray, pumice-like texture, loose	Fill
				Attempt split spoon from 3-5', refusal at 4' with wood frags in tip											Same as above	
1/SS	5-7		5	6	16,18 19,20	10YR 2/1 black					100% vf.sand			W	V. well sorted, round to subround qtz sand, diffuse boundary (coarsens downward)	Sand
						3/3 dk brown										
			6	7		Same					80% f-c.sand	10	10	W	Mod sorted, mostly f-m grained qtz sand, subangular to subround, few roots, m. dense	Gravelly Sand
									E.O.B. at 7'						Soil sample: FMSONS22 / 5.5-6	

SOIL BO NG LOG

Boring # SB-23 Project/# Federated Metals/IN0144.107

Site Location Hammond, Indiana Drilling Started 4/18/95 1:45pm DrillingCompleted 4/18/95 2:00pm

Total Depth Drilled 3 feet Hole Diameter 8 inches Type of Sample/Coring Device 2'x2" Split Spoon Sampler

Land Surface Elevation NA feet ___ Surveyed ___ Estimated Sample Interval Continuous

Drilling Fluid Used NA Drilling Method 4 1/4 I.D. HSA

Drilling Contractor Rock & Soil Drilling Driller Mike Helper Eric

Logged by Jamie Yater, Geraghty & Miller, Inc. Hammer Weight 140lb Hammer Drop 30 Inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classifica-tion
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Martix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-1' Blank drill through gravel road	
1/SS	1-3	2.0	1	3	10,12 15,20	10YR 3/2 v. dk grayish brn					80% vf-m.sand	10	10	M	Well sorted (mostly f. grained), round to subround qtz sand, m. dense	Gravelly Sand
									E.O.B. at 3'						Soil sample: FMSONS23 / 1-3	

SOIL BC NG LOG

Boring # SB-_ Project/# Federated Metals/IN0144.107

Site Location Hammond, Indiana Drilling Started 4/18/95 2:30pm DrillingCompleted 4/18/95 2:45pm

Total Depth Drilled 3 feet Hole Diameter 8 inches Type of Sample/Coring Device 2'x2" Split Spoon Sampler

Land Surface Elevation NA feet Surveyed Estimated Sample Interval Continuous

Drilling Fluid Used NA Drilling Method 4 1/4 I.D. HSA

Drilling Contractor Rock & Soil Drilling Driller Mike Helper Eric

Logged by Jamie Yater, Geraghty & Miller, Inc. Hammer Weight 140lb Hammer Drop 30 Inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classifica-tion
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Martix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-1' Blank drill through gravel road	Fill
1/SS	1-3	2.0	1	3	14,18 32,30	10YR 6/1 gray 5/1 gray					90% f-m.sand	5	5	M	Well sorted, round to subround qtz sand, gravel is subround, m. dense, few white sand size shell fragments	Sand
										E.O.B. at 3'					Soil sample: FMSONS24 / 1-3	

SOIL BC NG LOG

Boring # SB-25 Project/# Federated Metals/IN0144.107

Site Location Hammond, Indiana Drilling Started 3/24/95 1:50pm DrillingCompleted 3/24/95 2:15pm

Total Depth Drilled 3 feet Hole Diameter 8 inches Type of Sample/Coring Device 2'x2" Split Spoon Sampler

Land Surface Elevation NA feet Surveyed Estimated Sample Interval Continuous

Drilling Fluid Used NA Drilling Method 4 1/4 I.D. HSA

Drilling Contractor Rock & Soil Drilling Driller Mike Helper Eric

Logged by Jamie Yater, Geraghty & Miller, Inc. Hammer Weight 140lb Hammer Drop 30 inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classifica-tion
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Matrix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-1' Blank drill through gravel fill	Fill
1/SS	1-3	2.0	1	3	5,10 13,11	10YR 3/3 dk brown 5/3 brown					90% f-m.sand	10			Mod. sorted, subangular to subround, m. dense, mostly qtz sand (60% qtz, 40% other)	Sand
									E.O.B. at 3'						Soil sample: FMSONS25 / 1.5-2	

SOIL BORING LOG

Boring # SB
Project/# Federated Metals/IN0144.107
Site Location Hammond, Indiana
Drilling Started 3/24/95 1:30pm
DrillingCompleted 3/24/95 1:45pm
Total Depth Drilled 3 feet
Hole Diameter 8 inches
Type of Sample/Coring Device 2'x2" Split Spoon Sampler
Land Surface Elevation NA feet
Surveyed
Estimated
Sample Interval Continuous
Drilling Fluid Used NA
Drilling Method 4 1/4 I.D. HSA
Drilling Contractor Rock & Soil Drilling
Driller Mike
Helper Eric
Logged by Jamie Yater, Geraghty & Miller, Inc.
Hammer Weight 140lb
Hammer Drop 30 inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classifica-tion
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Martix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-1' Blank drill through gravel fill	Fill
1/SS	1-3	2.0	1	3	11,11 12,12	10YR 5/2 grayish brn					80% f-c.sand	10	10	W	Poorly sorted, subround to angular sand, sand is 60% qtz, 40% other m. dense	Gravelly Sand
									E.O.B. at 3'						Soil sample: FMSONS26 / 1-3	

SOIL BC IG LOG

Boring # SB-31 Project/# Federated Metals/IN0144.107

Site Location Hammond, Indiana Drilling Started 4/18/95 3:25pm DrillingCompleted 4/18/95 3:45pm

Total Depth Drilled 3 feet Hole Diameter 8 inches Type of Sample/Coring Device 2'x2" Split Spoon Sampler

Land Surface Elevation NA feet ___ Surveyed ___ Estimated Sample Interval Continuous

Drilling Fluid Used NA Drilling Method 4 1/4 I.D. HSA

Drilling Contractor Rock & Soil Drilling Driller Mike Helper Eric

Logged by Jamie Yater, Geraghty & Miller, Inc. Hammer Weight 140lb Hammer Drop 30 inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classifica-tion
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Martix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-1' Blank drill through asphalt and gravel fill	Fill
1/SS	1-3	2.0	1	3	7,10 16,22	10YR 5/3 brown					60% f-c.sand	20	20	W	Poorly sorted, subround gravel, angular to subround sand, 50% qtz, 50% other, loose	Gravelly Sand
									E.O.B. at 3'						Soil sample: FMSONS31 / 1-3	

SOIL BORING LOG

Boring # SB-32 | Project/# Federated Metals/IN0144.107

Site Location: Hammond, Indiana | Drilling Started: 3/24/95 1:10pm | DrillingCompleted: 3/24/95 1:30pm

Total Depth Drilled: 3 feet | Hole Diameter: 8 inches | Type of Sample/Coring Device: 2'x2" Split Spoon Sampler

Land Surface Elevation: NA feet | Surveyed: | Estimated: | Sample Interval: Continuous

Drilling Fluid Used: NA | Drilling Method: 4 1/4 I.D. HSA

Drilling Contractor: Rock & Soil Drilling | Driller: Mike | Helper: Eric

Logged by: Jamie Yater, Geraghty & Miller, Inc. | Hammer Weight: 140lb | Hammer Drop: 30 Inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classification
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Martix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-1' Blank drill through asphalt and gravel fill	Fill
1/SS	1-3	2.0	1	3	7,9 14,17	10YR 5/2 grayish brn					50% f-vc.sand	25	25	W	Poorly sorted, subangular to subround, approximately 50% qtz sand, 50% other,	Gravelly Sand
						10YR 5/6 yellowish brn									m. dense, few white calcareous shell frags, color change is gradual w/ depth	
															Soil sample: FMSONS32 / 1.5-2	

SOIL BC NG LOG

Boring # SB-33 Project/# Federated Metals/IN0144.107

Site Location Hammond, Indiana Drilling Started 3/24/95 12:45pm DrillingCompleted 3/24/95 1:05pm

Total Depth Drilled 3 feet Hole Diameter 8 inches Type of Sample/Coring Device 2'x2" Split Spoon Sampler

Land Surface Elevation NA feet ___ Surveyed ___ Estimated Sample Interval Continuous

Drilling Fluid Used NA Drilling Method 4 1/4 I.D. HSA

Drilling Contractor Rock & Soil Drilling Driller Mike Helper Eric

Logged by Jamie Yater, Geraghty & Miller, Inc. Hammer Weight 140lb Hammer Drop 30 Inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classifica-tion
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Martix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-1' Blank drill through asphalt and gravel fill	Fill
1/SS	1-3	2.0	1	2.5	11,14 12,11	10YR 4/3 brown					60% m-c.sand	20	20	W	Poorly sorted, subangular to subround, loose to m. dense with depth	Gravelly Sand
			2.5	3		10YR 2/1 black								W	Same as above	
										E.O.B. at 3'					Soil sample: FMSONS33 / 2-2.5	

SOIL BC NG LOG

Boring # SB-34 Project/# Federated Metals/IN0144.107

Site Location Hammond, Indiana Drilling Started 3/24/95 12:15pm DrillingCompleted 3/24/95 12:40pm

Total Depth Drilled 3 feet Hole Diameter 8 inches Type of Sample/Coring Device 2'x2" Split Spoon Sampler

Land Surface Elevation NA feet ___ Surveyed ___ Estimated Sample Interval Continuous

Drilling Fluid Used NA Drilling Method 4 1/4 I.D. HSA

Drilling Contractor Rock & Soil Drilling Driller Mike Helper Eric

Logged by Jamie Yater, Geraghty & Miller, Inc. Hammer Weight 140lb Hammer Drop 30 inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classifica-tion
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Martix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-1' Blank drill through asphalt and gravel fill	Fill
1/SS	1-3	2.0	1	3	9,9 5,5	10YR 5/6 yellowish brn					80% m-c.sand	10	10	W	Well sorted (mostly m. grained), subangular to subround qtz sand, many white calcareous shell fragments throughout, loose	Gravelly Sand
										E.O.B. at 3'					Soil sample: FMSONS34 / 2-2.5	

SOIL BO NG LOG

Boring # SB-
Project/# Federated Metals/IN0144.107
Site Location Hammond, Indiana
Drilling Started 4/18/95 3:15pm
DrillingCompleted 4/18/95 3:25pm
Total Depth Drilled 3 feet
Hole Diameter 8 inches
Type of Sample/Coring Device 2'x2" Split Spoon Sampler
Land Surface Elevation NA feet
Surveyed
Estimated
Sample Interval Continuous
Drilling Fluid Used NA
Drilling Method 4 1/4 I.D. HSA
Drilling Contractor Rock & Soil Drilling
Driller Mike
Helper Eric
Logged by Jamie Yater, Geraghty & Miller, Inc.
Hammer Weight 140lb
Hammer Drop 30 inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classification
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Martix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedinrentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-1' Blank drill through gravel fill	Fill
1/SS	1-3	2.0	1	3	7,10 15,24	10YR 5/3 brown					60% f-c.sand	20	20	W	Poorly sorted, subround gravel, angular to subround sand, 50% qtz, 50% other, loose	Gravelly Sand
										E.O.B. at 3'					Soil sample: FMSONS35 / 1-3	

SOIL BORING LOG

Boring # SB-36 | Project/# Federated Metals/IN0144.107

Site Location: Hammond, Indiana | Drilling Started: 4/18/95 2:50pm | Drilling Completed: 4/18/95 3:15pm

Total Depth Drilled: 3 feet | Hole Diameter: 8 inches | Type of Sample/Coring Device: 2'x2" Split Spoon Sampler

Land Surface Elevation: NA feet | Surveyed: | Estimated: | Sample Interval: Continuous

Drilling Fluid Used: NA | Drilling Method: 4 1/4 I.D. HSA

Drilling Contractor: Rock & Soil Drilling | Driller: Mike | Helper: Eric

Logged by: Jamie Yater, Geraghty & Miller, Inc. | Hammer Weight: 140lb | Hammer Drop: 30 inches

GENERAL SAMPLE INFORMATION						SAMPLE COLOR					SAMPLE TEXTURE			Moist-ure	NARRATIVE DESCRIPTION	USDA Textural Classification
			Depth (ft) to Contacts				Mottles					Coarse Frag %				
Number and Type	Sample Interval (ft)	Length Rcvrd (ft)	Upper	Lower	Blow Counts	Martix Color	Color	Abun-dance	Size	Con-trast	Fine Fraction	Granular	Pebbles		Sorting roundness; pedologic/sedimentary structure; coatings/stains; concentrations/accumulations; HCl Rxn; consistenency; cementation; engineering description, if applicable; contact thickness; other sample information; pH or other soil tests, if applicable.	
															0-1' Blank drill through gravel road	
1/SS	1-3	2.0	1	3	4,7 18,22	10YR 4/3 brown					60% f-c.sand	20	20	W	Poorly sorted, subround gravel, angular to subround sand, 50% qtz, 50% other (feldspars, etc.), loose	Gravelly Sand
										E.O.B. at 3'					Soil sample: FMSONS36 / 1-3	

APPENDIX K

MONITORING WELLS/PIEZOMETERS/TSP ELEVATION SURVEY DATA

Plumb
Tuckett
& Associates

February 9, 1996

ATTN: MR. TIM NORTHAM
GERAGHTY AND MILLER, INC.
251 EAST OHIO ST. SUITE 1010
INDIANAPOLIS, INDIANA 46204

RE: FEDERATED METALS SITE

Dear Mr. Northam,

Please find enclosed our results of surveying the Horizontal Coordinates and Vertical elevations of the (20) Monitoring Wells located within the Federated Metals Site, 2230 Indianapolis Blvd., Whiting, Indiana.

Thank you for contracting our services and if you have any questions or a future need, please contact us at your convenience

Respectfully Submitted,

PLUMB, TUCKETT & ASSOCIATES, INC.
"OUR 40 YEAR"

RECEIVED
FEB 12 1996
GERAGHTY & MILLER, INC.
INDIANAPOLIS, INDIANA

Kenneth Gembala, P.L.S.

KG:bt

D:\ADOC\96LET\S95753

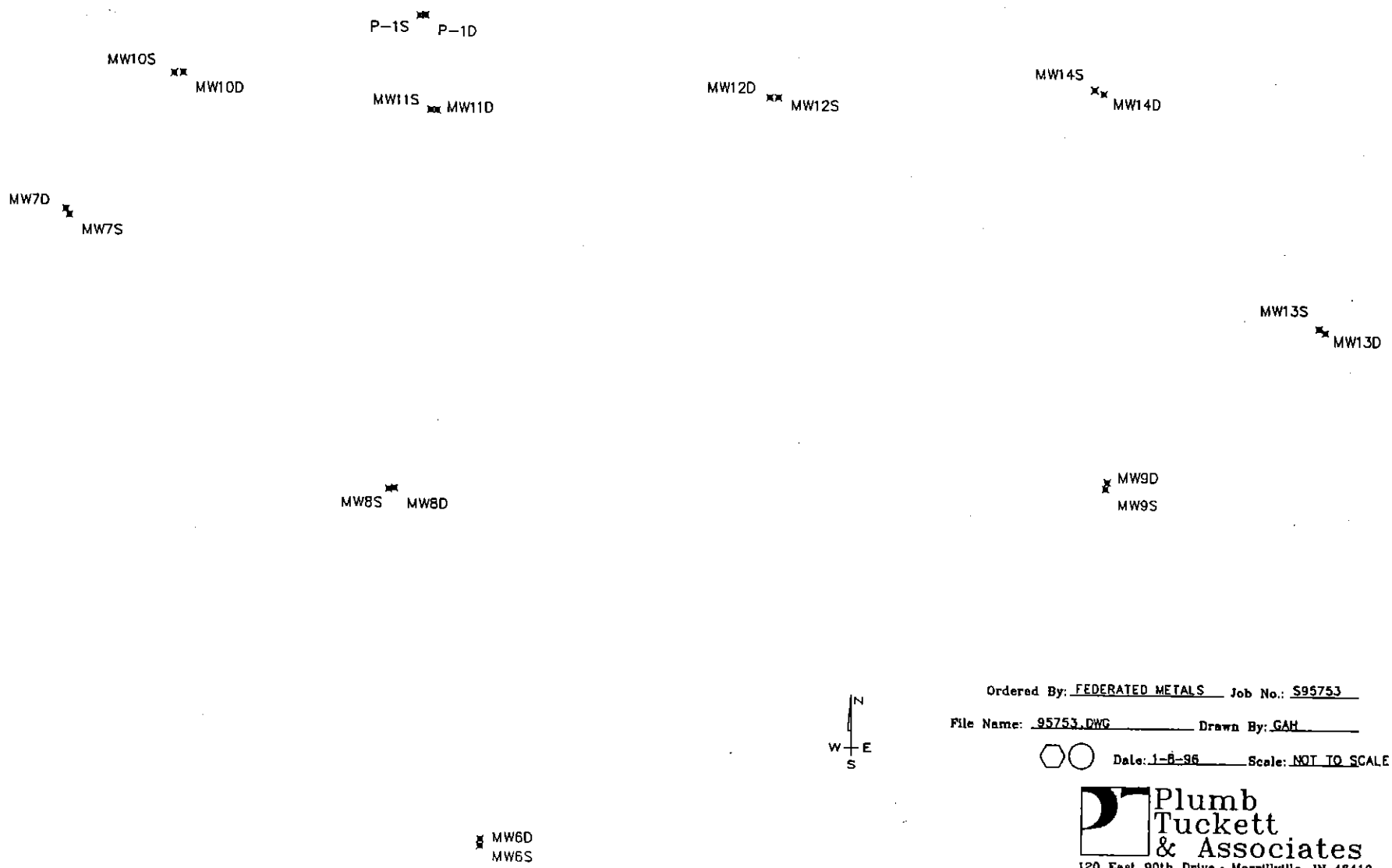
120 East 90th Drive
Merrillville, IN 46410
219-736-0555

FEDERATED METALS

RECEIVED
FEB 15 1996
GERAGHTY & MILLER, INC.
INDIANAPOLIS, INDIANA

Job Number: S95753
Reference ellipsoid: WGS 1984
Horizontal Datum: NAD 83
Vertical Datum: NAVD88
Coordinate Type: GRID
Projection: INDIANA STATE PLANE WEST (1302)
Unit: U.S. Feet

Northing	Easting	Elevation			Description
		Ground	Top of PVC @ mark	Top of Concrete Casing	
2340006.3607	2839628.4102	585.05	587.57		MW6S
2340013.5867	2839628.7439	585.09	587.76		MW6D
2340654.4962	2839204.4949	584.10	587.80		MW7S
2340660.9081	2839200.7913	584.19	587.04		MW7D
2340372.9007	2839532.7509	583.66	587.21		MW8S
2340373.9770	2839539.0116	584.10	587.22		MW8D
2340380.6111	2840270.4982	582.83	586.55		MW9S
2340387.6977	2840272.5478	582.93	585.88		MW9D
2340801.7956	2839311.0578	583.88	586.98		MW10S
2340802.2175	2839320.0205	583.47	586.13		MW10D
2340766.0323	2839574.4660	582.39	586.11	585.03	MW11S
2340765.8571	2839580.8641	582.48	585.39		MW11D
2340782.3818	2839932.1374	582.59	586.26	585.25	MW12S
2340782.2505	2839923.2478	582.58	585.74		MW12D
2340548.0619	2840491.8353	582.58	586.83		MW13S
2340543.9110	2840498.6589	582.61	585.34		MW13D
2340794.0225	2840257.9464	582.50	582.10		MW14S
2340789.9679	2840267.3796	582.48	581.85		MW14D
2340863.2234	2839562.9611		585.97		P-1S
2340863.7723	2839568.3318		585.51		P-1D



Ordered By: FEDERATED METALS Job No.: S95753

File Name: 95753.DWG Drawn By: GAH

Date: 1-8-96 Scale: NOT TO SCALE

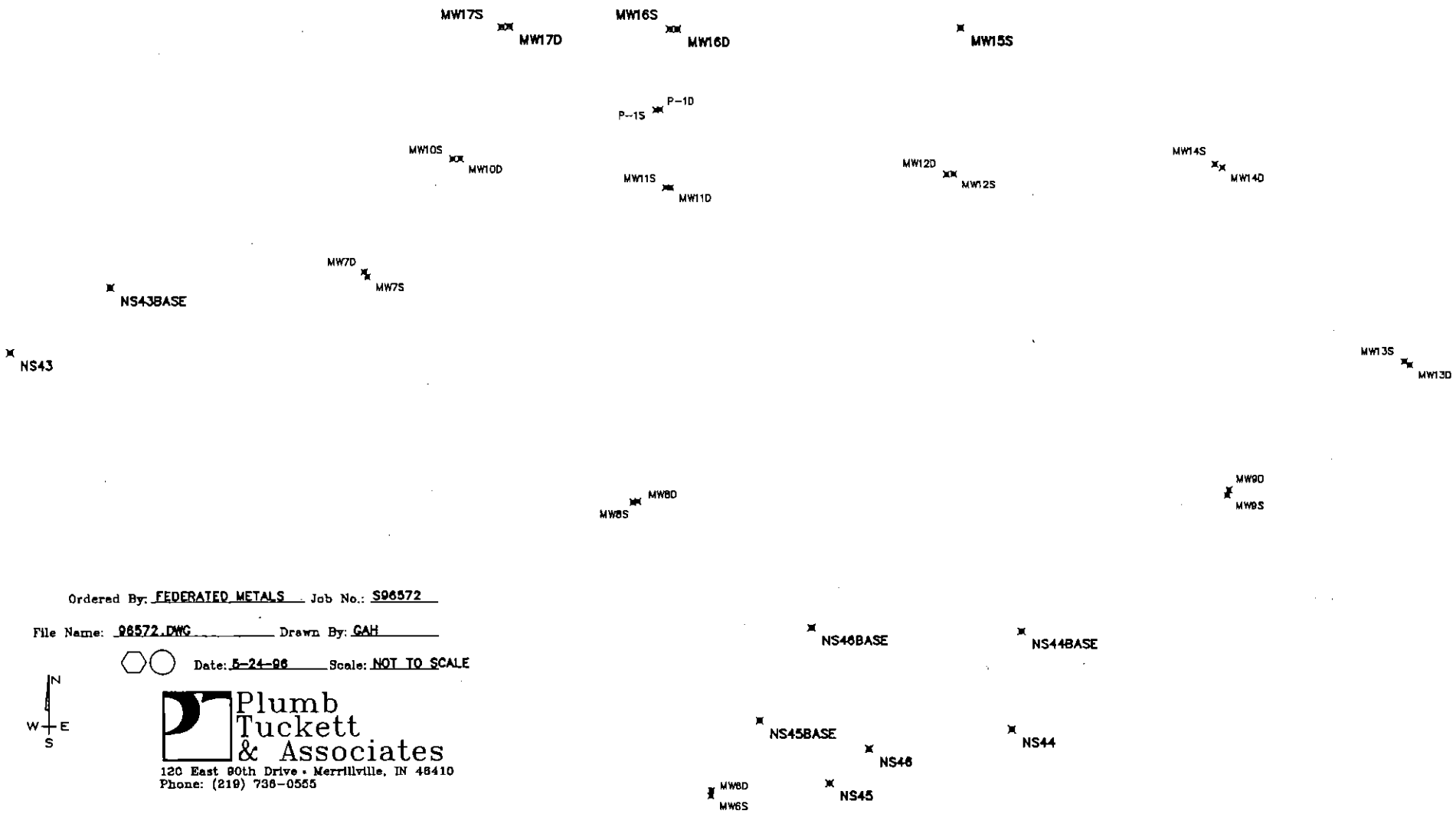
Plumb Tuckett & Associates
120 East 90th Drive • Merrillville, IN 46410
Phone: (219) 736-0555

Federated Metals

Job Number: S96572
Reference ellipsoid: WGS 1984
Horizontal Datum: NAD83
Vertical Datum: NAVD88
Coordinate Type: Grid
Projection: INDIANA STATE PLANE WEST (1302)
Unit: U.S. Feet

RECEIVED
MAY 3 1 1996
GERAGHTY & MILLER, INC.
INDIANAPOLIS, INDIANA

Northing	Easting	Elevation Ground	Elevation Top of PVC @ Mark	Description
2340965.8330	2839942.0222	581.84	586.10	MW15S
2340964.5881	2839590.1995	582.18	585.58	MW16D
2340964.6187	2839580.7287	582.32	586.67	MW16S
2340967.5829	2839381.7914	582.12	585.03	MW17D
2340967.0724	2839372.6550	582.16	586.34	MW17S
		Top of Stake		
2340641.3913	2838884.7935	584.33		NS43 BASE
2340561.2139	2838758.5052	583.39		NS43
2340213.4109	2840013.7425	584.94		NS44 BASE
2340089.5187	2840001.5599	584.34		NS44
2340100.5115	2839688.9317	587.07		NS45 BASE
2340022.5836	2839775.2591	585.16		NS45
2340218.4036	2839753.8205	585.58		NS46 BASE
2340066.0696	2839824.4710	584.79		NS46



Ordered By: FEDERATED METALS Job No.: S96572

File Name: 96572.DWG Drawn By: GAH

Date: 5-24-96 Scale: NOT TO SCALE

N
W E
S

Plumb Tuckett & Associates

120 East 90th Drive • Merrillville, IN 46410
Phone: (219) 736-0555

Plumb
Tuckett
& Associates

September 30, 1996

RECEIVED
OCT 3 1996
GERAGHTY & MILLER, INC.
INDIANAPOLIS, INDIANA

ATTN: TIMOTHY R. NORTHAM, CPG
GERAGHTY & MILLER, INC.
251 EAST OHIO STREET, SUITE 800
INDIANAPOLIS, IN 46204

RE: FEDERATED METALS
WHITING, INDIANA
MONITORING WELL INFORMATION

Dear Mr. Northam:

Following are the requested coordinates of the points specified:

Job Number:	S96651
Reference ellipsoid:	WGS1984
Horizontal Datum:	NAD83
Vertical Datum:	NAVD88
Coordinate Type:	Grid
Projection:	Indiana State Plane West (1302)
Unit:	U.S. Feet

Sincerely,

PLUMB, TUCKETT & ASSOCIATES, INC.

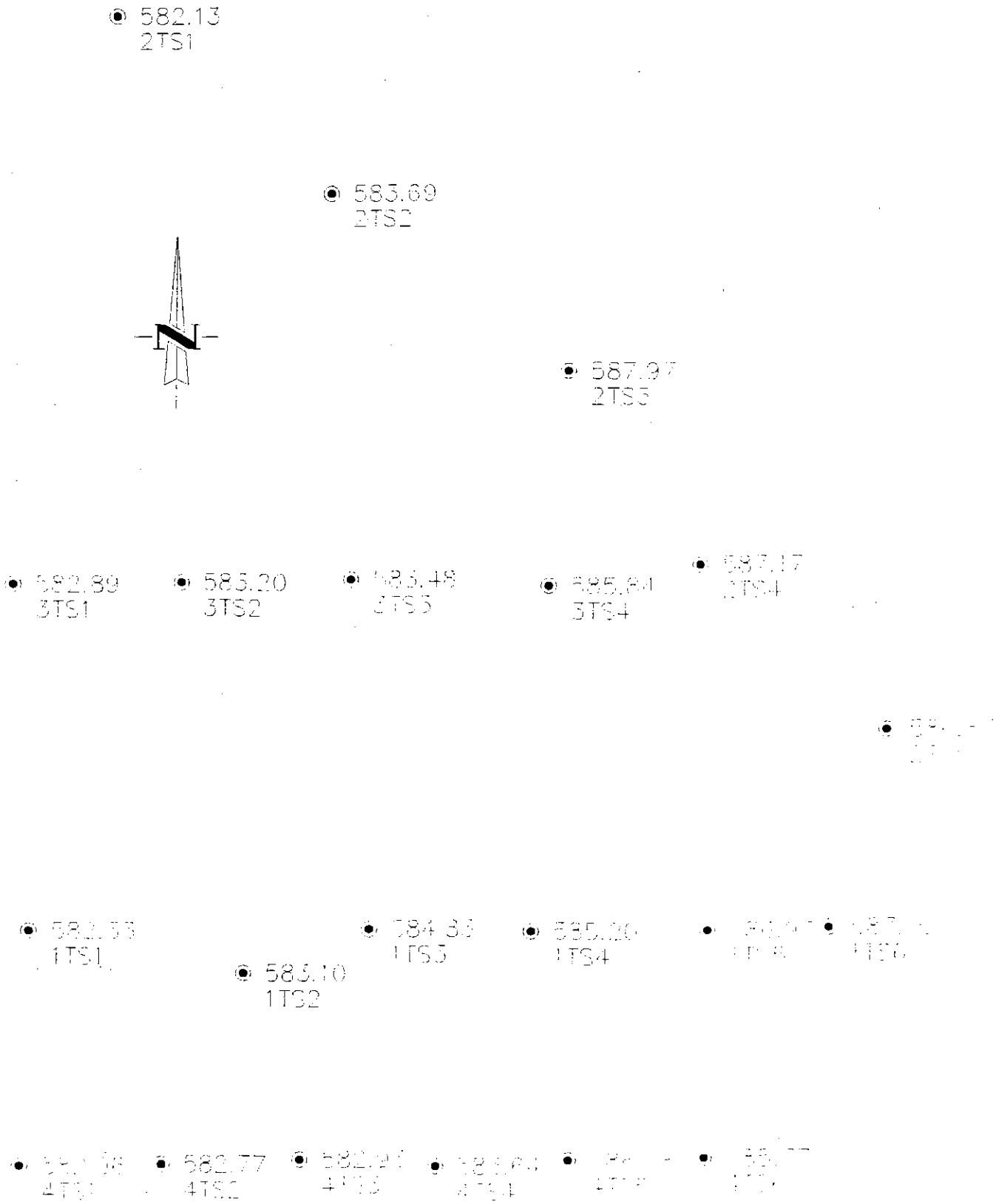
Kenneth Gembala, R.L.S.
Land Surveyor

KG:kc

D:\MSWORD\ADOC\96REP\S96651

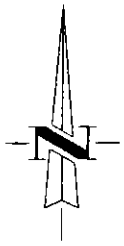
120 East 90th Drive
Merrillville, IN 46410
219-736-0555

Northing	Easting	Elevation	Description
2342908.4844	2839024.4820	582.33	1TS1
2342789.2194	2839639.1100	583.10	1TS2
2342914.9458	2839999.0515	584.83	1TS3
2342907.3940	2840465.0894	585.20	1TS4
2342911.0420	2840969.0270	586.93	1TS5
2342920.0970	2841315.0456	587.10	1TS6
2345533.5240	2839258.0049	582.13	2TS1
2345022.7976	2839877.5766	583.69	2TS2
2344513.1678	2840563.0982	587.97	2TS3
2343956.9147	2840941.8553	587.17	2TS4
2343483.2879	2841478.7684	586.87	2TS5
2343898.8608	2838973.4963	582.89	3TS1
2343905.4366	2839452.7758	583.20	3TS2
2343914.1848	2839941.1920	583.48	3TS3
2343894.6900	2840510.0093	585.84	3TS4
2342240.4973	2839000.9612	582.96	4TS1
2342245.8666	2839404.6684	582.77	4TS2
2342260.3283	2839803.8976	582.93	4TS3
2342239.3548	2840192.3645	583.64	4TS4
2342255.5966	2840572.9073	586.08	4TS5
2342264.2058	2840962.0221	585.77	4TS6


582.13
2TS1
583.69
2TS2
587.97
2TS3
582.89
3TS1
583.20
3TS2
583.48
3TS3
585.84
3TS4
587.17
2TS4
582.33
1TS1
583.10
1TS2
584.83
1TS3
585.20
1TS4
582.77
4TS2

582.13
2TS1

583.69
2TS2



587.97
2TS3

582.89
3TS1

583.20
3TS2

583.48
3TS3

585.84
3TS4

587.17
2TS4

586.87
2TS5

582.33
1TS1

583.10
1TS2

584.83
1TS3

585.20
1TS4

586.93
1TS5

587.10
1TS6

582.96
4TS1

582.77
4TS2

582.93
4TS3

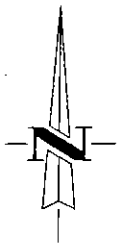
583.64
4TS4

586.08
4TS5

585.77
4TS6

582.13
2TS1

583.69
2TS2



587.97
2TS3

582.89
3TS1

583.20
3TS2

583.48
3TS3

585.84
3TS4

587.17
2TS4

586.87
2TS5

582.33
1TS1

583.10
1TS2

584.83
1TS3

585.20
1TS4

586.93
1TS5

587.10
1TS6

582.96
4TS1

582.77
4TS2

582.93
4TS3

583.64
4TS4

586.08
4TS5

585.77
4TS6

APPENDIX L

GROUNDWATER SAMPLING LOGS

GERAGHTY & MILLER, INC.
Environmental Services

WATER SAMPLING LOG

Project/No. Federated Metals / IN0144.109 Page 1 of 1

Site Location Hammond, IN

Site/Well No. MW-6S Coded/ Replicate No. FMGWmw6S Date 7/18/95

Weather Sunny, 80's Time Sampling Began 930A Time Sampling Completed 1230P

EVACUATION DATA

Description of Measuring Point (MP) T.O.C. (marked)

Height of MP Above/Below Land Surface _____ MP Elevation _____

Total Sounded Depth of Well Below MP 18.68 Water-Level Elevation _____

Held _____ Depth to Water Below MP 6.06 Diameter of Casing 2"

Wet _____ Water Column in Well 12.62 Gallons Pumped/Bailed Prior to Sampling 10

Gallons per Foot 0.16

Gallons in Well 2 Sampling Pump Intake Setting (feet below land surface) _____

Evacuation Method Teflon Bailer

SAMPLING DATA/FIELD PARAMETERS

Color Lt Brown Odor No Appearance Cloudy Temperature 74.8 °F/°C

Other (specific ion; OVA; HNU; etc.) _____

Specific Conductance, umhos/cm 1700 pH 6.88

Sampling Method and Material Teflon Bailer

Constituents Sampled	Container Description From Lab ✓ or G&M ____	Preservative
Full App. IX	Per Fed QAPP	Per Fed QAPP

Remarks 1 micron filter

Sampling Personnel Jamie Yater

WELL CASING VOLUMES

GAL./FT.				
	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

GERAGHTY & MILLER, INC.
Environmental Services

WATER SAMPLING LOG

Project/No. Federated Metals / IN0144.109 Page ____ of ____

Site Location Hammond, IN

Site/Well No. MW-6S Coded/ Replicate No. FMGWMW6S Date 7/27/95

Weather Sunny, 90s Time Sampling Began 1250P Time Sampling Completed 320P

EVACUATION DATA

Description of Measuring Point (MP) T.O.C. (Marked)

Height of MP Above/Below Land Surface ____ MP Elevation ____

Total Sounded Depth of Well Below MP 18.68 Water-Level Elevation ____

Held ____ Depth to Water Below MP 6.22 Diameter of Casing 2"

Wet ____ Water Column in Well 12.46 Gallons Pumped/Bailed Prior to Sampling 10

Gallons per Foot 0.16

Gallons in Well 2 Sampling Pump Intake Setting (feet below land surface) ____

Evacuation Method Teflon Bailer

SAMPLING DATA/FIELD PARAMETERS

Color Lt grayish brn Odor No Appearance Cloudy w/ some silt Temperature 63.1 °F/°C

Other (specific ion; OVA; HNU; etc.) ____

Specific Conductance, umhos/cm 1665 1514 1594 1495 1481 pH 6.99 ~~7.33~~ 7.24 7.33 7.10 6.94 (4 Replicates of pH, conductivity)

Sampling Method and Material Teflon Bailer

Constituents Sampled	Container Description From Lab ____ or G&M ____	Preservative
Dissolved Metals	1L plastic	HNO_3
IDEM parameters		

Remarks Collect 4 Replicates for Cd, Pb (Total + Dissolved), TOXs, TOCs MW 54, 55, 56, 57

Sampling Personnel T. Northam, J. Yater .1 micron filter

WELL CASING VOLUMES

GAL./FT.				
	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

GERAGHTY & MILLER, INC.
Environmental Services

WATER SAMPLING LOG

Project/No. Federated Metals / IN0144.107 Page ____ of ____

Site Location Hammond, IN

Site/Well No. MW-6D Coded/ Replicate No. FMEWMW6D Date 7/27/95

Weather Partly Sunny, 80's Time Sampling Began 725A Time Sampling Completed 12P

EVACUATION DATA

Description of Measuring Point (MP) T.O.C. (Marked)

Height of MP Above/Below Land Surface ____ MP Elevation ____

Total Sounded Depth of Well Below MP 32.46 Water-Level Elevation ____

Held ____ Depth to Water Below MP 6.42 Diameter of Casing 2"

Wet ____ Water Column in Well 26.04 Gallons Pumped/Bailed Prior to Sampling 2l

Gallons per Foot 0.16

Gallons in Well 4.2 Sampling Pump Intake Setting (feet below land surface) ____

Evacuation Method Teflon Bailer

SAMPLING DATA/FIELD PARAMETERS

Color Lt Grayish brn Odor No Appearance Cloudy w/ some silt Temperature 57.4 °F/°C

Other (specific ion; OVA; HNU; etc.) ____

Specific Conductance, umhos/cm 1700 1553 1560 1587 15.65 pH 7.26 6.98 6.99 6.99 6.92 (815A - 820A) PH, Conductivity 4 Replicate

Sampling Method and Material Teflon Bailer with double check valve at top + Bottom

Constituents Sampled	Container Description From Lab ✓ or G&M ____	Preservative
Dissolved Metals	1 L plastic	HNO3
IDEM parameters	Per Agreed Order	Per Agreed Order

Remarks Collect 4 Replicates (IDEM) for (TOXs, TOCs, Cadmium, Lead) FMEWMW50 MW52 MW51 MW53 .1 micron filter

Sampling Personnel T. Northam, J. Yater

WELL CASING VOLUMES

GAL./FT.				
	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

GERAGHTY & MILLER, INC.
Environmental Services

WATER SAMPLING LOG

Project/No. Federated Metals / IN0144.109 Page 1 of 1

Site Location Hammond, IN

Site/Well No. MW-6D Coded/ Replicate No. FMGWMW6D Date 7/18/95

Weather Sunny, 80's Time Sampling Began ~~930A~~ 1P Time Sampling Completed 5P

EVACUATION DATA

Description of Measuring Point (MP) T.O.C. (marked)

Height of MP Above/Below Land Surface _____ MP Elevation _____

Total Sounded Depth of Well Below MP 32.46 Water-Level Elevation _____

Held _____ Depth to Water Below MP 6.29 Diameter of Casing 2"

Wet _____ Water Column in Well 26.17 Gallons Pumped/Bailed Prior to Sampling 21

Gallons per Foot ~~4~~ 0.16

Gallons in Well 4.2 Sampling Pump Intake Setting (feet below land surface) _____

Evacuation Method Teflon Bailer

SAMPLING DATA/FIELD PARAMETERS

Color Lt Brown Odor No Appearance Cloudy w/ Some silt Temperature 78.6 (I) °F/°C 74.3 (F)

Other (specific ion; OVA; HNU; etc.) _____

Specific Conductance umhos/cm 2960 (I) 2490 (F) pH 6.02 (I) 7.04 (F)

Sampling Method and Material Double check-valve teflon Bailer
Sample collected from bottom of well

Constituents Sampled	Container Description From Lab ✓ or G&M ____	Preservative
Full App. IX	Per Fed QAPP	Per Fed QAPP

Remarks .1 micron filter

Sampling Personnel Jamie Yater

(F) final after sampling

(I) = initial (Before purging)

WELL CASING VOLUMES

GAL./FT.				
	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

GERAGHTY & MILLER, INC.
Environmental Services

WATER SAMPLING LOG

Project/No. Federated Metals / IN0144.109 Page ____ of ____

Site Location Hammond, IN

Site/Well No. MW-7S Coded/ Replicate No. FMGWMW-7S Date 7/28/95

Weather Sunny, 80's Time Sampling Began 745A Time Sampling Completed 1030A

EVACUATION DATA

Description of Measuring Point (MP) T.O.C. (North)

Height of MP Above/Below Land Surface ____ MP Elevation ____

Total Sounded Depth of Well Below MP 15.56 Water-Level Elevation ____

Held ____ Depth to Water Below MP 7.19 Diameter of Casing 2"

Wet ____ Water Column in Well 8.37 Gallons Pumped/Bailed Prior to Sampling 7

Gallons per Foot 0.16

Gallons in Well 1.4 Sampling Pump Intake Setting (feet below land surface) ____

Evacuation Method Teflon Bailer

SAMPLING DATA/FIELD PARAMETERS

Color Lt Grayish bn. Odor No Appearance Cloudy w/ SILT Temperature 58.8 °F/°C

Other (specific ion; OVA; HNU; etc.) ____

Specific Conductance, umhos/cm 932 pH 7.19

Sampling Method and Material Teflon Bailer

Constituents Sampled	Container Description From Lab ✓ or G&M ____	Preservative
Full App IV (FI)	Per Fed QAPP	Per Fed. QAPP

Collect Duplicate sample for all parameters desig. FMGWMW58

Remarks Collect IDEM parameters, and IDEM duplicate also (58) .1 micron filter

Sampling Personnel J. Yater, T. Northam

EPA (ATK) collects split and MS/MSD at MW-7S

WELL CASING VOLUMES

GAL./FT.				
	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

GERAGHTY & MILLER, INC.
Environmental Services

WATER SAMPLING LOG

Project/No. Federated Metals / IN0144.109 Page ____ of ____

Site Location Hammond, IN

Site/Well No. MW-7D Coded/ Replicate No. FMGWMW7D Date 7/28/95

Weather Sunny, 90's Time Sampling Began 1030A Time Sampling Completed 1P

EVACUATION DATA

Description of Measuring Point (MP) T.O.C. (Marked)

Height of MP Above/Below Land Surface ____ MP Elevation ____

Total Sounded Depth of Well Below MP 31.35 Water-Level Elevation ____

Held ____ Depth to Water Below MP 6.49 Diameter of Casing 2"

Wet ____ Water Column in Well 24.86 Gallons Pumped/Bailed Prior to Sampling 20

Gallons per Foot 0.16

Gallons in Well 4.0 Sampling Pump Intake Setting (feet below land surface) ____

Evacuation Method Teflon Bailer

SAMPLING DATA/FIELD PARAMETERS

Color Grayish brn Odor No Appearance Cloudy w/ silt Temperature 54.6 °F/°C

Other (specific ion; OVA; HNU; etc.) ____

Specific Conductance umhos/cm 1393 pH 7.51

Sampling Method and Material Teflon Bailer with double check value (Top + Bottom)

Constituents Sampled	Container Description From Lab ____ or G&M ____	Preservative
Full App IV (FI)	Per Fed QAPP	Per Fed QAPP
Dioxins		

Remarks Collected Equipment Blank after sampling MW-7D (FMGWMW59) .1 micron filter

Sampling Personnel Jamie Yater / Tim Northam

WELL CASING VOLUMES

GAL./FT.				
	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

GERAGHTY & MILLER, INC.
Environmental Services

WATER SAMPLING LOG

Project/No. FEDERATED METALS / Page ____ of ____

Site Location HAMMOND

Site/Well No. MW-8S Coded/ Replicate No. FMGWMW8S Date 8-1-95

Weather OVERCAST, 80's Time Sampling Began 1115A Time Sampling Completed 3P

EVACUATION DATA

Description of Measuring Point (MP) T.O.C.

Height of MP Above/Below Land Surface ____ MP Elevation ____

Total Sounded Depth of Well Below MP 14.95 Water-Level Elevation ____

Held ____ Depth to Water Below MP 6.36 Diameter of Casing 2"

Wet ____ Water Column in Well 8.59 Gallons Pumped/Bailed Prior to Sampling 5.0

Gallons per Foot 0.16

Gallons in Well 1.0 Sampling Pump Intake Setting (feet below land surface) ____

Evacuation Method TEFLON BAILER

SAMPLING DATA/FIELD PARAMETERS

Color Grayish Brn Odor No Appearance SILTY Temperature 62.7 °F/°C

Other (specific ion; OVA; HNU; etc.) ____

Specific Conductance, umhos/cm 710 pH 8.41

Sampling Method and Material Teflon Bailer

Constituents Sampled	Container Description From Lab ____ or G&M ____	Preservative
Full App IV (FI)	Per Fed QAPP	Per Fed QAPP
IDEM parameters	Per Agreed Order	Per Agreed Order

Remarks Also collect additional organic volumes for MS/MSD
Prefilter metals w/ 0.45um filter before 0.1um filters due to silt content

Sampling Personnel Jamie Yater / Blake Fahl

WELL CASING VOLUMES

GAL./FT.				
	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

GERAGHTY & MILLER, INC.
Environmental Services

WATER SAMPLING LOG

Project/No. Federated Metals / 1N0144.109 Page ____ of ____

Site Location Hammond

Site/Well No. MW-8D Coded/ Replicate No. FH6WMW8D Date 8/1/95

Weather Overcast, 80's Time Sampling Began 830A Time Sampling Completed 1030A

EVACUATION DATA

Description of Measuring Point (MP) T.O.C. (North)

Height of MP Above/Below Land Surface ____ MP Elevation ____

Total Sounded Depth of Well Below MP 32.75 Water-Level Elevation ____

Held ____ Depth to Water Below MP 6.40 Diameter of Casing 2"

Wet ____ Water Column in Well 26.35 Gallons Pumped/Bailed Prior to Sampling 2l

Gallons per Foot 0.16

Gallons in Well 4.2 Sampling Pump Intake Setting (feet below land surface) ____

Evacuation Method Teflon Bailer

SAMPLING DATA/FIELD PARAMETERS

Color Gray Odor No Appearance Cloudy w/ silt Temperature 56.2 °F/°C

Other (specific ion; OVA; HNU; etc.) ____

Specific Conductance umhos/cm 2910 pH 8.55

Sampling Method and Material Teflon Bailer w/ double check valve

Constituents Sampled	Container Description From Lab ✓ or G&M ____	Preservative
Dissolved Metals	1L plas	HNO3
IDEM parameters	Per Agreed Order	Per Agreed Order

Remarks USED PRE-WEIGHED 0.1 micron filter #4 (60.04g), #5 (60.06g) also used 0.45 micron filter #1 (78.32g)

Sampling Personnel Jamie Yater, Blake Fahl

WELL CASING VOLUMES

GAL./FT.				
	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

GERAGHTY & MILLER, INC.
Environmental Services

WATER SAMPLING LOG

Project/No. Federated Metals / IN0144.109 Page ____ of ____

Site Location Hammond, IN

Site/Well No. MW-8D Coded/ Replicate No. FMGWMW8D Date 7/20/95

Weather Overcast, 70s Time Sampling Began 830A Time Sampling Completed 1P

EVACUATION DATA

Description of Measuring Point (MP) T.O.C. (Marked)

Height of MP Above/Below Land Surface ____ MP Elevation ____

Total Sounded Depth of Well Below MP 32.75 Water-Level Elevation ____

Held ____ Depth to Water Below MP 6.37 Diameter of Casing 2"

Wet ____ Water Column in Well 26.38 Gallons Pumped/Bailed Prior to Sampling 21

Gallons per Foot 0.16

Gallons in Well 4.2 Sampling Pump Intake Setting (feet below land surface) ____

Evacuation Method Teflon Bailer

SAMPLING DATA/FIELD PARAMETERS

Color Lt Grayish Brown Odor No Appearance Cloudy w/some silt Temperature 62.3 (I) °F °C 69.6 (F)

Other (specific ion; OVA; HNU; etc.) ____

Specific Conductance, umhos/cm NW pH 7.79 (I) 7.83 (F)

Sampling Method and Material Teflon Bailer with double check valve, top + bottom

Constituents Sampled	Container Description From Lab ____ or G&M ____	Preservative
Full App. IV	Per Fed. QAPP	Per Fed QAPP

Remarks 1 micron filter

Sampling Personnel Jamie Yater

(I) after purging before sampling

(F) after sampling

NW = Not working

WELL CASING VOLUMES

GAL./FT.				
	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

G&M Form 12 6-86 Southprint 89-1473

GERAGHTY & MILLER, INC.
Environmental Services

WATER SAMPLING LOG

Project/No. FEDERATED METALS / IN0144.109 Page ____ of ____

Site Location HAMMOND, IN

Site/Well No. MW-9S Coded/ Replicate No. FMGWMW9S* Date 8/2/95

Weather CLOUDY, 80° Time Sampling Began 945A Time Sampling Completed 1145A

EVACUATION DATA

Description of Measuring Point (MP) T.O.C. (MARKED)

Height of MP Above/Below Land Surface ____ MP Elevation ____

Total Sounded Depth of Well Below MP 14.88 Water-Level Elevation ____

Held ____ Depth to Water Below MP 6.55 Diameter of Casing 2"

Wet ____ Water Column in Well 8.33 Gallons Pumped/Bailed Prior to Sampling 6.5

Gallons per Foot 0.16

Gallons in Well 1.3 Sampling Pump Intake Setting (feet below land surface) ____

Evacuation Method TEFLON BAILER

SAMPLING DATA/FIELD PARAMETERS

Color Grayish Brn Odor No Appearance Cloudy w/ SILT to SILTY Temperature 64.1 64.7 °F/°C

Other (specific ion; OVA; HNU; etc.) ____

Specific Conductance, umhos/cm 1151 1190 pH 7.85 7.91

Sampling Method and Material Teflon Bailer

Constituents Sampled	Container Description From Lab ____ or G&M ____	Preservative
Full Appex IV	Per Fed. QAPP	Per Fed. QAPP
IDEM parameters	Per Agreed Order	Per Agreed Order

Remarks *Also collect duplicate samples designated FMGWMW61 for Appix IV parameters, and only for Chloride, Nitrate (As N), Sulfate due to breaking during previous shipment .1 micron filter

Sampling Personnel ____

WELL CASING VOLUMES

GAL./FT.				
	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

GERAGHTY & MILLER, INC.
Environmental Services

WATER SAMPLING LOG

Project/No. IN0144.109 Page ____ of ____

Site Location HAMMOND, IN

Site/Well No. MW-9D Coded/ Replicate No. FMGWMW9D * Date 8/2/95

Weather Cloudy, 80° Time Sampling Began 1:10P Time Sampling Completed 4P

EVACUATION DATA

Description of Measuring Point (MP) T.O.C.

Height of MP Above/Below Land Surface ____ MP Elevation ____

Total Sounded Depth of Well Below MP 32.28 Water-Level Elevation ____

Held ____ Depth to Water Below MP 5.97 Diameter of Casing 2"

Wet ____ Water Column in Well 26.31 Gallons Pumped/Bailed Prior to Sampling 21

Gallons per Foot 0.16

Gallons in Well 4.2 Sampling Pump Intake Setting (feet below land surface) ____

Evacuation Method TEFLON BAILER

SAMPLING DATA/FIELD PARAMETERS

Color Grayish brown Odor No Appearance Cloudy w/ some silt Temperature 55.6 °F/°C

Other (specific ion; OVA; HNU; etc.) ____

Specific Conductance, umhos/cm 1719 pH 7.91

Sampling Method and Material Teflon Bailer with double check valve (TOP & BOTTOM

Constituents Sampled	Container Description From Lab ____ or G&M ____	Preservative
Full App. IV	Per Fed QAPP	Per Fed QAPP
IDEM parameters	Per Agreed Order	Per Agreed Order

Remarks * Also collect MS/MSD for Fed. QAPP Parameters (xtra volumes for organics)
Filter Pre-weighed 59.86g (#6) (.1 micron filter)

Sampling Personnel Jamie Yater / Blake Fahl

WELL CASING VOLUMES

GAL./FT.				
	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

GERAGHTY & MILLER, INC.
Environmental Services

WATER SAMPLING LOG

Project/No. Federated Metals / IN0144.109 Page ____ of ____

Site Location Hammond, IN

Site/Well No. MW-10S Coded/Replicate No. FMGWMW10S Date 7/21/95

Weather Sunny, 80s Time Sampling Began 830A Time Sampling Completed 1030A

EVACUATION DATA

Description of Measuring Point (MP) T.O.C. (Marked)

Height of MP Above/Below Land Surface ____ MP Elevation ____

Total Sounded Depth of Well Below MP 15.17 Water-Level Elevation ____

Held ____ Depth to Water Below MP 7.46 Diameter of Casing 2"

Wet ____ Water Column in Well 7.71 Gallons Pumped/Bailed Prior to Sampling 6

Gallons per Foot 0.16

Gallons in Well 1.2 Sampling Pump Intake Setting (feet below land surface) ____

Evacuation Method Teflon Bailer

SAMPLING DATA/FIELD PARAMETERS

Color Lt Grayish Brown Odor No Appearance Cloudy, some silt Temperature 69.4 (I) 68.4 (F) °F/°C

Other (specific ion; OVA; HNU; etc.) ____

Specific Conductance, umhos/cm NW pH 7.22 (I) 7.63 (F)

Sampling Method and Material Teflon Bailer

Constituents Sampled	Container Description From Lab ____ or G&M ____	Preservative
App IV Inorganics (Fl)	Per Fed. QAPP	Per Fed QAPP
VOCs, SVOCs		

Remarks ____

Sampling Personnel Jamie Yater

NW - Not Working

B-4 (I) ~~After~~ purging
B-4 sampling

WELL CASING VOLUMES

GAL./FT.				
	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

GERAGHTY & MILLER, INC.
Environmental Services

WATER SAMPLING LOG

Project/No. Federated Metals / IN0144.109 Page ____ of ____

Site Location Hammond, IN

Site/Well No. MW-105 Coded/ Replicate No. FMGWMW105 Date 7/26/95

Weather Overcast, 80's Time Sampling Began 345 P Time Sampling Completed 5P

EVACUATION DATA

Description of Measuring Point (MP) T.O.C. (Marked)

Height of MP Above/Below Land Surface ____ MP Elevation ____

Total Sounded Depth of Well Below MP 15.17 Water-Level Elevation ____

Held ____ Depth to Water Below MP 7.35 Diameter of Casing 2"

Wet ____ Water Column in Well 7.82 Gallons Pumped/Bailed Prior to Sampling 6.5

Gallons per Foot 0.16

Gallons in Well 1.3 Sampling Pump Intake Setting (feet below land surface) ____

Evacuation Method Teflon Bailer

SAMPLING DATA/FIELD PARAMETERS

Color Lt grayish brn Odor No Appearance Cloudy w/silt Temperature 56.4 °F/°C

Other (specific ion; OVA; HNU; etc.) ____

Specific Conductance, umhos/cm 1145 pH 7.24

Sampling Method and Material Teflon Bailer

Constituents Sampled	Container Description From Lab ✓ or G&M ____	Preservative
Metals (Dissolved)	1L plastic	HNO3

Remarks ____

Sampling Personnel T. Northam, J. Yater

WELL CASING VOLUMES

GAL./FT.				
	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

GERAGHTY & MILLER, INC.
Environmental Services

WATER SAMPLING LOG

Project/No. Federated Metals / IN0144.109 Page ____ of ____

Site Location Hammond, IN

Site/Well No. MW-10D Coded/ Replicate No. FMGWMW10D Date 7/21/95

Weather Sunny, 80's Time Sampling Began 1150A Time Sampling Completed ____

EVACUATION DATA

Description of Measuring Point (MP) T.O.C. (Marked)

Height of MP Above/Below Land Surface ____ MP Elevation ____

Total Sounded Depth of Well Below MP 31.44 Water-Level Elevation ____

Held ____ Depth to Water Below MP 6.62 Diameter of Casing 2"

Wet ____ Water Column in Well 24.82 Gallons Pumped/Bailed Prior to Sampling 20

Gallons per Foot 0.16

Gallons in Well 4.0 Sampling Pump Intake Setting (feet below land surface) ____

Evacuation Method Teflon Bailer

SAMPLING DATA/FIELD PARAMETERS

Color Lt Brown Odor No Appearance Cloudy little silt Temperature 70.4 °F/°C

Other (specific ion; OVA; HNU; etc.) ____

Specific Conductance, umhos/cm ND pH ND

Sampling Method and Material Teflon Bailer with double check valve (top & bottom)

Constituents Sampled	Container Description From Lab ____ or G&M ____	Preservative
HpIV Inorganics (Fl), VOCs, SVOCs	Per Fed. QAPP	Per Fed QAPP

Remarks ____

Sampling Personnel Jamie Yater

ND = No Display (Stopped working

WELL CASING VOLUMES

GAL./FT.				
	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

GERAGHTY & MILLER, INC.
Environmental Services

WATER SAMPLING LOG

Project/No. Federated Metals / IN0144.109 Page ____ of ____

Site Location Hammond, IN

Site/Well No. MW-10D Coded/ Replicate No. FMGWMW10D Date 7/26/95

Party Weather Sunny, 80's Time Sampling Began 325P Time Sampling Completed 445P

EVACUATION DATA

Description of Measuring Point (MP) T.O.C. (Marked)

Height of MP Above/Below Land Surface ____ MP Elevation ____

Total Sounded Depth of Well Below MP 31.44 Water-Level Elevation ____

Held ____ Depth to Water Below MP 6.50 Diameter of Casing 2"

Wet ____ Water Column in Well 24.94 Gallons Pumped/Bailed Prior to Sampling 20

Gallons per Foot 0.16

Gallons in Well 4.0 Sampling Pump Intake Setting (feet below land surface) ____

Evacuation Method Teflon Bailer

SAMPLING DATA/FIELD PARAMETERS

Color Lt Grayish brn Odor No Appearance Cloudy w/ silt Temperature 54.7 °F/°C

Other (specific ion; OVA; HNU; etc.) ____

Specific Conductance, umhos/cm 2610 pH 6.94

Sampling Method and Material Teflon Bailer with double check valve

Constituents Sampled	Container Description From Lab ✓ or G&M ____	Preservative
Metals (Dissolved)	1L plastic	HNO3

Remarks ____

Sampling Personnel T. Northam, J. Yater

WELL CASING VOLUMES

GAL./FT.				
	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

GERAGHTY & MILLER, INC.
Environmental Services

WATER SAMPLING LOG

Project/No. Federated Metals / IN0144.109 Page ____ of ____

Site Location Whiting IN

Site/Well No. MW-11S Coded/ Replicate No. FMGWMW11S Date 7/26/95

Weather Lt Rain, 80s Time Sampling Began 8A Time Sampling Completed 840A

EVACUATION DATA

Description of Measuring Point (MP) T.O.C. (Marked

Height of MP Above/Below Land Surface ____ MP Elevation ____

Total Sounded Depth of Well Below MP 15.00 Water-Level Elevation ____

Held ____ Depth to Water Below MP 6.25 Diameter of Casing ____

Wet ____ Water Column in Well 8.75 Gallons Pumped/Bailed Prior to Sampling 7 gals

Gallons per Foot 0.16

Gallons in Well 1.4 Sampling Pump Intake Setting (feet below land surface) ____

Evacuation Method Teflon Bailer

SAMPLING DATA/FIELD PARAMETERS

Color Lt Grayish brn Odor hydrocarbon like Appearance cloudy w/ sheen silty Temperature 65.7 °F/°C

Other (specific ion; OVA; HNU; etc.) Sheen in bucket, no product layer in bailer

Specific Conductance, umhos/cm ____ pH 7.04

Sampling Method and Material Teflon Bailer

Constituents Sampled	Container Description From Lab ✓ or G&M ____	Preservative
Dissolved Metals	1 L plastic	HNO3

Remarks Field Filtered with 0.1 micron filter

Sampling Personnel J. Yater, T. Northam

WELL CASING VOLUMES

GAL./FT.				
	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

GERAGHTY & MILLER, INC.
Environmental Services

WATER SAMPLING LOG

Project/No. Federated Metals / IN0144.109 Page ____ of ____

Site Location Hammond, IN

Site/Well No. MW-11S Coded/ Replicate No. FMGWMW11S Date 7/24/95

Weather Overcast, 80s Time Sampling Began 11A Time Sampling Completed 1P

EVACUATION DATA

Description of Measuring Point (MP) T.O.C. (Marked)

Height of MP Above/Below Land Surface ____ MP Elevation ____

Total Sounded Depth of Well Below MP 15.00 Water-Level Elevation ____

Held ____ Depth to Water Below MP 6.46 Diameter of Casing 2"

Wet ____ Water Column in Well 8.54 Gallons Pumped/Bailed Prior to Sampling 6.8

Gallons per Foot 0.16

Gallons in Well 1.4 Sampling Pump Intake Setting (feet below land surface) ____

Evacuation Method Teflon Bailer

SAMPLING DATA/FIELD PARAMETERS

Color Lt gray Odor hydrocarbon like Appearance Cloudy w/ sheen little silt Temperature 67.0 °F/°C

Other (specific ion; OVA; HNU; etc.) ____

Specific Conductance, umhos/cm 785 pH 7.67

Sampling Method and Material Teflon Bailer

Constituents Sampled	Container Description From Lab ____ or G&M ____	Preservative
App IV Inorganics (Fl)	Per. Fed. QAPP	Per Fed QAPP
VOCs, SVOCs		

Remarks ____

Sampling Personnel Jamie Upton

WELL CASING VOLUMES

GAL./FT.				
	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

GERAGHTY & MILLER, INC.
Environmental Services

WATER SAMPLING LOG

Project/No. Federated Metals / IN0144.109 Page ____ of ____

Site Location Whiting, IN

Site/Well No. MW-11D Coded/ Replicate No. FMGWMW11D Date 7/26/95

Weather Sunny, 80s Time Sampling Began 0830A Time Sampling Completed 1015A

EVACUATION DATA

Description of Measuring Point (MP) T.O.C. (Marked)

Height of MP Above/Below Land Surface ____ MP Elevation ____

Total Sounded Depth of Well Below MP 31.39 Water-Level Elevation ____

Held ____ Depth to Water Below MP 5.53 Diameter of Casing 2"

Wet ____ Water Column in Well 25.86 Gallons Pumped/Bailed Prior to Sampling 20.5

Gallons per Foot 0.16

Gallons in Well 4.1 Sampling Pump Intake Setting (feet below land surface) ____

Evacuation Method Teflon Bailer

SAMPLING DATA/FIELD PARAMETERS

Color Lt Grayish brn Odor No Appearance Cloudy w/ little silt Temperature 56.7 °F/°C

Other (specific ion; OVA; HNU; etc.) ____

Specific Conductance umhos/cm 3420 pH 6.85

Sampling Method and Material Teflon Bailer w/ double check valve

Constituents Sampled	Container Description From Lab ____ or G&M ____	Preservative
App. IX Inorg.	Per Fed QAPP	Per Fed QAPP
BNAs,		

Remarks Field filter Dissolved Metals with 0.1 micron.

Sampling Personnel J Yater, T. Northam

WELL CASING VOLUMES

GAL./FT.				
	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

GERAGHTY & MILLER, INC.
Environmental Services

WATER SAMPLING LOG

Project/No. Federated Metals / IN0144.109 Page ____ of ____

Site Location Hammond, IN

Site/Well No. MW-12D Coded/ Replicate No. FMGWMW12D Date 7/26/95

Weather Sunny, 90s Time Sampling Began 140P Time Sampling Completed 3P

EVACUATION DATA

Description of Measuring Point (MP) T.O.C. (Marked)

Height of MP Above/Below Land Surface ____ MP Elevation ____

Total Sounded Depth of Well Below MP 31.40 Water-Level Elevation ____

Held ____ Depth to Water Below MP 5.76 Diameter of Casing 2"

Wet ____ Water Column in Well 25.64 Gallons Pumped/Bailed Prior to Sampling 20.5

Gallons per Foot 0.16

Gallons in Well 4.1 Sampling Pump Intake Setting (feet below land surface) ____

Evacuation Method Teflon Bailer

SAMPLING DATA/FIELD PARAMETERS

Color Lt Grayish brown Odor No Appearance Cloudy w/ some silt Temperature 59.3 °F/°C

Other (specific ion; OVA; HNU; etc.) ____

Specific Conductance umhos/cm 3310 pH 6.99

Sampling Method and Material Teflon Bailer with double check valve

Constituents Sampled	Container Description From Lab ____ or G&M ____	Preservative
App IV Inorg.	Per Fed QAPP	Per Fed QAPP
BNAs, VOCs		

Remarks ____

Sampling Personnel J Yater, T. Northam

WELL CASING VOLUMES

GAL./FT.				
	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

GERAGHTY & MILLER, INC.
Environmental Services

WATER SAMPLING LOG

Project/No. Federated Metals / IN0144.109 Page ____ of ____

Site Location Hammond, IN

Site/Well No. MW-135 Coded/ Replicate No. FMGWMW135 Date 7/26/95

Weather Sunny 80s Time Sampling Began 1035A Time Sampling Completed 11A

EVACUATION DATA

Description of Measuring Point (MP) T.O.C. (Marked)

Height of MP Above/Below Land Surface ____ MP Elevation ____

Total Sounded Depth of Well Below MP 14.93 Water-Level Elevation ____

Held ____ Depth to Water Below MP 6.85 Diameter of Casing 2"

Wet ____ Water Column in Well 8.08 Gallons Pumped/Bailed Prior to Sampling 6.5

Gallons per Foot 0.16

Gallons in Well 1.3 Sampling Pump Intake Setting (feet below land surface) ____

Evacuation Method Teflon Bailer

SAMPLING DATA/FIELD PARAMETERS

Color Lt Brown Odor No Appearance Cloudy-some Silt Temperature 65.2 °F/°C

Other (specific ion; OVA; HNU; etc.) ____

Specific Conductance, umhos/cm 739 pH 7.79

Sampling Method and Material Teflon Bailer

Constituents Sampled	Container Description From Lab ✓ or G&M ____	Preservative
Filtered (Dissolved) Metals	1 L plas	HNO_3

Remarks ____

Sampling Personnel J. Yater / T. Northam

WELL CASING VOLUMES

GAL./FT.				
	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

GERAGHTY & MILLER, INC.
Environmental Services

WATER SAMPLING LOG

Project/No. IN0144.109 / Federated Metals Page ____ of ____

Site Location Hammond, IN

Site/Well No. MW-13S Coded/ Replicate No. FMGWMW13S Date 7/19/95

Weather Sunny, 90's Time Sampling Began 3P Time Sampling Completed 530P

EVACUATION DATA

Description of Measuring Point (MP) T.O.C. (Marked)

Height of MP Above/Below Land Surface ____ MP Elevation ____

Total Sounded Depth of Well Below MP 14.93 Water-Level Elevation ____

Held ____ Depth to Water Below MP 6.77 Diameter of Casing 2"

Wet ____ Water Column in Well 8.16 Gallons Pumped/Bailed Prior to Sampling 6.5

Gallons per Foot 0.16

Gallons in Well 1.3 Sampling Pump Intake Setting (feet below land surface) ____

Evacuation Method Teflon Bailer

SAMPLING DATA/FIELD PARAMETERS

Color ____ Odor ____ Appearance ____ Temperature 81.9 (I) 74.9 (F) °F/°C

Other (specific ion; OVA; HNU; etc.) ____

Specific Conductance, umhos/cm 1060 (I) 846 (F) pH 7.14 (I) 7.02 (F)

Sampling Method and Material Teflon Bailer

Constituents Sampled	Container Description From Lab ____ or G&M ____	Preservative
App IX inorganics	Per Fed. QAPP	Per Fed QAPP
+ Fl, VOCs, SVOCs		

Remarks ____

Sampling Personnel Jamie Yater

WELL CASING VOLUMES

GAL./FT.				
	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

GERAGHTY & MILLER, INC.
Environmental Services

WATER SAMPLING LOG

Project/No. IN0144.109 / Federated Metals Page ____ of ____

Site Location Hammond, IN

Site/Well No. MW-13D Coded/ Replicate No. FMGWMW13D Date 7/19/95

Weather Sunny, 90's Time Sampling Began 9A Time Sampling Completed 11A

EVACUATION DATA

Description of Measuring Point (MP) T.O.C. (Marked)

Height of MP Above/Below Land Surface ____ MP Elevation ____

Total Sounded Depth of Well Below MP 31.29 Water-Level Elevation ____

Held ____ Depth to Water Below MP 5.29 Diameter of Casing 2"

Wet ____ Water Column in Well 26 Gallons Pumped/Bailed Prior to Sampling 21

Gallons per Foot 0.16

Gallons in Well 4.2 Sampling Pump Intake Setting (feet below land surface) ____

Evacuation Method Teflon Bailer

SAMPLING DATA/FIELD PARAMETERS

Color Lt grayish brown Odor No Appearance Cloudy w/ some silt Temperature 64.7 (I) 66.4 (F) °F/°C

Other (specific ion; OVA; HNU; etc.) ____

Specific Conductance, umhos/cm 887 (I) 763 (F) pH 7.86 (I) 7.69 (F)

Sampling Method and Material Teflon Bailer with double check valve at top + bottom

Constituents Sampled	Container Description From Lab ____ or G&M ____	Preservative
App IV inorganics + Fl, VOCs, SVOCs	Per. Fed QAPP	Per Fed. QAPP

Remarks ____

Sampling Personnel Jamie Yater

WELL CASING VOLUMES

GAL./FT.				
	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

GERAGHTY & MILLER, INC.
Environmental Services

WATER SAMPLING LOG

Project/No. Federated Metals Page ____ of ____

Site Location Hammond, IN

Site/Well No. MW-13D Coded/ Replicate No. FMGWMW13D Date 7/26/95

Weather Sunny, 80s Time Sampling Began 1055A Time Sampling Completed 12P

EVACUATION DATA

Description of Measuring Point (MP) T.O.C. (Marked)

Height of MP Above/Below Land Surface ____ MP Elevation ____

Total Sounded Depth of Well Below MP 31.29 Water-Level Elevation ____

Held ____ Depth to Water Below MP 5.39 Diameter of Casing 2"

Wet ____ Water Column in Well 25.9 Gallons Pumped/Bailed Prior to Sampling 21

Gallons per Foot 0.16

Gallons in Well 4.1 Sampling Pump Intake Setting (feet below land surface) ____

Evacuation Method Teflon Bailer

SAMPLING DATA/FIELD PARAMETERS

Color Lt Grayish brn Odor No Appearance Cloudy-some SILT Temperature ~~65.2~~ 57.5 °C

Other (specific ion; OVA; HNU; etc.) ____

Specific Conductance, umhos/cm 633 pH 7.51

Sampling Method and Material Teflon Bailer with double check value

Constituents Sampled	Container Description From Lab ✓ or G&M ____	Preservative
Dissolved Metals (Filtered)	1 L plas	HNO3

Remarks ____

Sampling Personnel J. Yater, T. Northam

WELL CASING VOLUMES

GAL./FT.				
	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

GERAGHTY & MILLER, INC.
Environmental Services
a heidemij company

WATER SAMPLING LOG

(Low-Flow Purging)

Project/No. Federated Metals / IN0144.109 Page 1 of 1

Site Location Hammond, IN

Site/Well No. MW-105 Sample Identification FM6WMW-105

Weather Sunny, 60's Date/Time Tube Installed 5-29-96 415P

Date/Time Sampling Began 5-30-96 / 9A Date/Time Sampling Completed 5-30-96 / 930A

EVACUATION DATA

Description of Measuring Point (MP) T.O.C.

Height of MP Above/Below Land Surface (ft) _____ MP Elevation (ft) _____

Total Sounded Depth of Well Below MP (ft) 14.95 Water-Level Elevation (ft) _____

Depth to Water Below MP (ft) 5.54 Diameter of Casing 2"

Water Column in Well (ft) 9.41 Volume of Water in Tubing (mL) 9.33

Sampling Tube Intake Setting (feet below T.O.C.) 9.60 Volume Pumped Prior to Sampling (mL) 19

Screen Midpoint (feet below T.O.C.) 9.60

Length of Submerged Tubing (ft) 4.06 (1,237.49mm)

Evacuation Method Peristaltic Pump equipped with dedicated Tygon Tubing - Size 16 with 1/8" inner diameter

SAMPLING DATA/FIELD PARAMENTERS

Color clear Odor No Appearance clear

Other Comments _____

Sampling Method and Material As above - sample collected directly from Tygon tubing into container

Constituents Sampled	Container/Description From Lab ✓ or G&M ____	Preservative
Metals plus	1 L plastic	HNO_3 (ice)
Flucride	500 ml plastic	None (ice)

Sampling Personnel Jamie Yater / Blake Fahl

FEDWTRLG.XLT 5/22/96

GERAGHTY & MILLER, INC.
Environmental Services
a heidemij company

WATER SAMPLING LOG

(Low-Flow Purging)

Project/No. Federated Metals / IN0144.109 Page 1 of 1

Site Location Hammond, IN

Site/Well No. MW-10D Sample Identification FMGWMW-

Weather Sunny, 60's Date/Time Tube Installed 5-29-96 / 430P

Date/Time Sampling Began 5-30-96 / 930A Date/Time Sampling Completed 5/30/96 - 10A

EVACUATION DATA

Description of Measuring Point (MP) T.O.C.

Height of MP Above/Below Land Surface (ft) _____ MP Elevation (ft) _____

Total Sounded Depth of Well Below MP (ft) 30.55 Water-Level Elevation (ft) _____

Depth to Water Below MP (ft) 4.71 Diameter of Casing 2"

Water Column in Well (ft) 25.84 Volume of Water in Tubing (mL) 42

Sampling Tube Intake Setting (feet below T.O.C.) 22.66 Volume Pumped Prior to Sampling (mL) 84

Screen Midpoint (feet below T.O.C.) 22.66

ngth of Submerged Tubing (ft) 17.95 (5471 mm)

Evacuation Method Peristaltic Pump equipped with dedicated Tygon Tubing - Size 16 with 1/8" inner diameter

SAMPLING DATA/FIELD PARAMENTERS

Color Clear Odor No Appearance Clear

Other Comments _____

Sampling Method and Material As above - Sample collected directly from Tygon tubing into container

Constituents Sampled	Container/Description From Lab ✓ or G&M ___	Preservative
Metals plus	1 L plastic	HNO_3 (ice)
Fluoride	500 mL plastic	None (ice)

Sampling Personnel Jamie Yater / Blake Fahl

FEDWTRLG.XLT 5/22/96

GERAGHTY & MILLER, INC.
Environmental Services
a heidemij company

WATER SAMPLING LOG

(Low-Flow Purging)

Project/No. Federated Metals / IN0144.109 Page 1 of 1

Site Location Hammond, IN

Site/Well No. MW-11S Sample Identification FMGWMW-11S

Weather Sunny, 60's Date/Time Tube Installed 5.29.96 / 445P

Date/Time Sampling Began 5.30.96 / 1030A Date/Time Sampling Completed 5.30.96 / 11A

EVACUATION DATA

Description of Measuring Point (MP) T.O.C

Height of MP Above/Below Land Surface (ft) _____ MP Elevation (ft) _____

Total Sounded Depth of Well Below MP (ft) 14.79 Water-Level Elevation (ft) _____

Depth to Water Below MP (ft) 4.67 Diameter of Casing 2"

Water Column in Well (ft) 10.12 Volume of Water in Tubing (mL) 12

Sampling Tube Intake Setting (feet below T.O.C.) 9.72 Volume Pumped Prior to Sampling (mL) 24

Screen Midpoint (feet below T.O.C.) 9.72

ngth of Submerged Tubing (ft) 5.05 (1539mm)

Evacuation Method Peristaltic Pump equipped with dedicated Tygon Tubing - Size 16 with 1/8" inner diameter

SAMPLING DATA/FIELD PARAMENTERS

Color clear Odor No Appearance clear

Other Comments _____

Sampling Method and Material As above - sample collected directly from Tygon tubing into container

Constituents Sampled	Container/Description From Lab ✓ or G&M ____	Preservative
Metals plus	1L plastic	HNO_3 (ice)
Flucride	500mL plastic	None (ice)

Sampling Personnel Jamie Yater / Blake Fahl

GERAGHTY & MILLER, INC.
Environmental Services
a heidemij company

WATER SAMPLING LOG

(Low-Flow Purging)

Project/No. Federated Metals / IN0144.109 Page 1 of 1

Site Location Hammond, IN

Site/Well No. MW-11D Sample Identification FM6WMW-11D

Weather Sunny, 60s Date/Time Tube Installed 5.29.96 / 5P

Date/Time Sampling Began 5.30.96 / 11A Date/Time Sampling Completed 5.30.96 / 1130A

EVACUATION DATA

Description of Measuring Point (MP) T.O.C.

Height of MP Above/Below Land Surface (ft) _____ MP Elevation (ft) _____

Total Sounded Depth of Well Below MP (ft) 29.90 Water-Level Elevation (ft) _____

Depth to Water Below MP (ft) 3.96 Diameter of Casing 2"

Water Column in Well (ft) 25.94 Volume of Water in Tubing (mL) 45

Sampling Tube Intake Setting (feet below T.O.C.) 23.41 Volume Pumped Prior to Sampling (mL) 90

Screen Midpoint (feet below T.O.C.) 23.41

ngth of Submerged Tubing (ft) 19.45 (5928mm)

Evacuation Method Peristaltic Pump equipped with dedicated Tygon Tubing - Size 16 with 1/8" inner diameter

SAMPLING DATA/FIELD PARAMENTERS

Color U.pale yellow Odor No Appearance Clear

Other Comments _____

Sampling Method and Material As above - sample collected directly from Tygon tubing into container

Constituents Sampled	Container/Description From Lab ✓ or G&M ___	Preservative
Metals plus	1 L plastic	HNO_3 (ice)
Fluoride	500ml plastic	None (ice)

Sampling Personnel Jamie Yater / Blake Fahl

FEDWTRLG.XLT 5/22/96

GERAGHTY & MILLER, INC.
Environmental Services
A Heidemij Company

WATER SAMPLING LOG

Project/No. Federated Metals / IN0144.109

Page 8 of 5

Site Location Hammond, IN

Site/Well No. MW-12S

Coded/ Replicate No. FM6WMW-12S

Date 6-29-96

Weather Sunny, 50's

Time Sampling Began 315P

Time Sampling Completed 4P

EVACUATION DATA

Description of Measuring Point (MP) T.O.C (Marked)

Height of MP Above/Below Land Surface _____

MP Elevation _____

Total Sounded Depth of Well Below MP 14.94

Water-Level Elevation _____

Held _____ Depth to Water Below MP 5.17

Diameter of Casing 2"

Wet _____ Water Column in Well 9.77

Gallons Pumped/Bailed Prior to Sampling 8

Gallons per Foot 0.16

Gallons in Well 1.6

Sampling Pump Intake Setting (feet below land surface) _____

Evacuation Method Teflon Bailer w/ 5' Teflon wire lead (open top)

SAMPLING DATA/FIELD PARAMETERS

Color Brownish Gray Odor No Appearance Silty to cloudy w/ silt Temperature — °F/°C

Other (specific ion; OVA; HNU; etc.) —

Specific Conductance, umhos/cm — pH —

Sampling Method and Material As Above

Constituents Sampled	Container Description From Lab ✓ or G&M ___	Preservative
VOCs	3 40 ml vials	HCl

Remarks _____

Sampling Personnel Jamie Yater & Blake Fahl., G&M

WELL CASING VOLUMES

GAL./FT.				
	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

GERAGHTY & MILLER, INC.
Environmental Services
a heidemij company

WATER SAMPLING LOG

(Low-Flow Purging)

Project/No. Federated Metals / IN0144.109 Page 1 of 1

Site Location Hammond, IN

Site/Well No. MW-15S Sample Identification FMGWMW-15S

Weather Sunny, 50's Date/Time Tube Installed 5-28-96 630P

Date/Time Sampling Began 5-29-96 / 930A Date/Time Sampling Completed 5-29-96 / 10A

EVACUATION DATA

Description of Measuring Point (MP) T.O.C.

Height of MP Above/Below Land Surface (ft) _____ MP Elevation (ft) _____

Total Sounded Depth of Well Below MP (ft) 15.29 Water-Level Elevation (ft) _____

Depth to Water Below MP (ft) 4.94 Diameter of Casing 2"

Water Column in Well (ft) 10.35 Volume of Water in Tubing (mL) 12.3

Sampling Tube Intake Setting (feet below T.O.C.) 10.29 Volume Pumped Prior to Sampling (mL) 25

Screen Midpoint (feet below T.O.C.) 10.29

igth of Submerged Tubing (ft) 5.35 ft (1630.68 mm)

Evacuation Method Peristaltic Pump equipped with dedicated Tygon Tubing - Size 16 with 1/8" inner diameter

SAMPLING DATA/FIELD PARAMENTERS

Color V. pale yellow Odor NO Appearance clear

Other Comments Standing water surrounding concrete protective ring. (Approx 3" of rain on 5-28-96)

Sampling Method and Material As above - Sample collected directly from Tygon tubing into container

Constituents Sampled	Container/Description From Lab ✓ or G&M ____	Preservative
Metals plus	1L plastic	HNO_3 (ice)
Fluoride	500ml plastic	None (ice)

Sampling Personnel Jamie Yater / Blake Fahl

FEDWTRLG.XLT 5/22/96

GERAGHTY & MILLER, INC.
Environmental Services
A Heidemij Company

WATER SAMPLING LOG

Project/No. Federated Metals / IN0144.109 Page ____ of ____

Site Location Hammond, IN

Site/Well No. MW-15S Coded/ Replicate No. FMGWMW-15S Date 5-30-96

Weather Sunny, 60's Time Sampling Began 1140A Time Sampling Completed 1230P

EVACUATION DATA

Description of Measuring Point (MP) T.O.C (Marked)

Height of MP Above/Below Land Surface ____ MP Elevation ____

Total Sounded Depth of Well Below MP 15.29 Water-Level Elevation ____

Held ____ Depth to Water Below MP 4.81 Diameter of Casing 2"

Wet ____ Water Column in Well 10.48 Gallons Pumped/Bailed Prior to Sampling 8.5

Gallons per Foot 0.16

Gallons in Well 1.7 Sampling Pump Intake Setting (feet below land surface) ____

Evacuation Method Teflon Bailer w/ 5' Teflon wire lead (open top)

SAMPLING DATA/FIELD PARAMETERS

Color Yellowish brown Odor No Appearance Silty Temperature — °F/°C

Other (specific ion; OVA; HNU; etc.) —

Specific Conductance, umhos/cm — pH —

Sampling Method and Material As Above

Constituents Sampled	Container Description From Lab ✓ or G&M ____	Preservative
VOCs	3 40 ml vials	HCl

Remarks Slight Rxn w/ HCl Preservative

Sampling Personnel Jamie Yater & Blake Fahl, G&M

WELL CASING VOLUMES

GAL./FT.				
	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

GERAGHTY & MILLER, INC.
Environmental Services
a heidemij company

WATER SAMPLING LOG

(Low-Flow Purging)

Project/No. Federated Metals / IN0144.109 Page 1 of 1

Site Location Hammond, IN

Site/Well No. MW-16S Sample Identification FM6WMW-16S

Weather Sunny, 50s Date/Time Tube Installed 5.28.96 / 645P

Date/Time Sampling Began 5.29.96 / 1040A Date/Time Sampling Completed 5.29.96 / 11A

EVACUATION DATA

Description of Measuring Point (MP) T.O.C

Height of MP Above/Below Land Surface (ft) _____ MP Elevation (ft) _____

Total Sounded Depth of Well Below MP (ft) 15.30 Water-Level Elevation (ft) _____

Depth to Water Below MP (ft) 5.76 Diameter of Casing 2"

Water Column in Well (ft) 9.54 Volume of Water in Tubing (mL) 10.4

Sampling Tube Intake Setting (feet below T.O.C.) 10.30 Volume Pumped Prior to Sampling (mL) 21

Screen Midpoint (feet below T.O.C.) 10.30

ngth of Submerged Tubing (ft) 4.54 (1,383.79 mm)

Evacuation Method Peristaltic Pump equipped with dedicated Tygon Tubing - Size 16 with 1/8" inner diameter

SAMPLING DATA/FIELD PARAMENTERS

Color clear Odor No Appearance clear

Other Comments _____

Sampling Method and Material As above - sample collected directly from Tygon tubing into container

Constituents Sampled	Container/Description From Lab ✓ or G&M ____	Preservative
Metals plus	1 L plastic	HNO_3 (ice)
Fluoride	500 ml plastic	None (ice)

Sampling Personnel Jamie Yater / Blake Fahl

GERAGHTY & MILLER, INC.
Environmental Services
a heidemij company

WATER SAMPLING LOG

(Low-Flow Purging)

Project/No. Federated Metals / IN0144.109 Page 1 of 1

Site Location Hammond, IN

Site/Well No. MW-16D Sample Identification FMGWMW-16D FMGWMW-2 *

Weather Sunny, 50's Date/Time Tube Installed 5.28.96 / 655P

Date/Time Sampling Began 5.29.96 / 1120A Date/Time Sampling Completed 12P

EVACUATION DATA

Description of Measuring Point (MP) T.O.C.

Height of MP Above/Below Land Surface (ft) _____ MP Elevation (ft) _____

Total Sounded Depth of Well Below MP (ft) 30.00 Water-Level Elevation (ft) _____

Depth to Water Below MP (ft) 4.63 Diameter of Casing 2"

Water Column in Well (ft) 25.37 Volume of Water in Tubing (mL) 41

Sampling Tube Intake Setting (feet below T.O.C.) 22.50 Volume Pumped Prior to Sampling (mL) 82

Screen Midpoint (feet below T.O.C.) 22.50

ngth of Submerged Tubing (ft) 17.87 (5,446.77mm)

Evacuation Method Peristaltic Pump equipped with dedicated Tygon Tubing - Size 16 with 1/8" inner diameter

SAMPLING DATA/FIELD PARAMENTERS

Color Clear Odor No Appearance Clear

Other Comments * Also collect duplicate sample from well MW-16D Sample designated FMGWMW-2

Sampling Method and Material As above - Sample collected directly from Tygon tubing into container

Constituents Sampled	Container/Description From Lab ✓ or G&M ____	Preservative
Metals plus	(2) 1L Plastic	HNO_3 (ice)
Fluoride	(2) 500ml plastic	None (ice)

Sampling Personnel Jamie Yater / Blake Fahl

GERAGHTY & MILLER, INC.
Environmental Services
a heidemij company

WATER SAMPLING LOG

(Low-Flow Purging)

Project/No. Federated Metals / IN0144.109 Page 1 of 1

Site Location Hammond, IN

Site/Well No. MW-175 Sample Identification FMGWMW-175

Weather Sunny, 50's Date/Time Tube Installed 5·28·96 / 715P

Date/Time Sampling Began 5·29·96 / 1210P Date/Time Sampling Completed 5·29·96 / 1230P

EVACUATION DATA

Description of Measuring Point (MP) T.O.C.

Height of MP Above/Below Land Surface (ft) _____ MP Elevation (ft) _____

Total Sounded Depth of Well Below MP (ft) 15.32 Water-Level Elevation (ft) _____

Depth to Water Below MP (ft) 5.71 Diameter of Casing 2"

Water Column in Well (ft) 9.61 Volume of Water in Tubing (mL) 10.58

Sampling Tube Intake Setting (feet below T.O.C.) 10.32 Volume Pumped Prior to Sampling (mL) 22

Screen Midpoint (feet below T.O.C.) 10.32

ngth of Submerged Tubing (ft) 4.61 (1,405.13 mm)

Evacuation Method Peristaltic Pump equipped with dedicated Tygon Tubing - Size 16 with 1/8" inner diameter

SAMPLING DATA/FIELD PARAMENTERS

Color clear to v. pale yellow Odor No Appearance Clear

Other Comments _____

Sampling Method and Material As above - sample collected directly from Tygon tubing into container

Constituents Sampled	Container/Description From Lab ✓ or G&M ____	Preservative
Metals plus	1 L plastic	HNO_3 (ice)
Fluoride	500ml plastic	None (ice)

Sampling Personnel Jamie Yater / Blake Fahl

GERAGHTY & MILLER, INC.
Environmental Services
a heidemij company

WATER SAMPLING LOG

(Low-Flow Purging)

Project/No. Federated Metals / IN0144.109 Page 1 of 1

Site Location Hammond, IN

Site/Well No. MW-17D Sample Identification FMGWMW-17D

Weather Sunny, 50's Date/Time Tube Installed 5.28.96 / 730P

Date/Time Sampling Began 5.29.96 / 1230P Date/Time Sampling Completed 5.29.96 / 1P

EVACUATION DATA

Description of Measuring Point (MP) T.O.C.

Height of MP Above/Below Land Surface (ft) _____ MP Elevation (ft) _____

Total Sounded Depth of Well Below MP (ft) 28.90 Water-Level Elevation (ft) _____

Depth to Water Below MP (ft) 4.31 Diameter of Casing 2"

Water Column in Well (ft) 24.59 Volume of Water in Tubing (mL) 40

Sampling Tube Intake Setting (feet below T.O.C.) 21.40 Volume Pumped Prior to Sampling (mL) 80

Screen Midpoint (feet below T.O.C.) 21.40

ngth of Submerged Tubing (ft) 17.09 (5,209mm)

Evacuation Method Peristaltic Pump equipped with dedicated Tygon Tubing - Size 16 with 1/8" inner diameter

SAMPLING DATA/FIELD PARAMENTERS

Color Clear Odor No Appearance clear

Other Comments Also collected equipment blank after sampling 17D Equipment blank designated FMGWMW-Y

Sampling Method and Material As above - Sample collected directly from Tygon tubing into container

Constituents Sampled	Container/Description From Lab ✓ or G&M ____	Preservative
Metals plus	1 L plastic	HNO_3 (ice)
Fluoride	500ml plastic	None (ice)

Sampling Personnel Jamie Yater / Blake Fahl

APPENDIX M

GROUNDWATER LABORATORY ANALYTICAL RESULTS AND DATA VALIDATION SUMMARY REPORTS

Table 1. Pre-filter and post-filter Weights. Federated Metals, Hammond, Indiana.

Sample Location	Filter Number	Filter Size (microns)	Initial Weight (grams)	Final Weight (grams)	Weight Difference (grams
MW-8D	1	0.45	78.32	111.73	33.41
MW-7S	2	0.1	60.36	64.1	3.74
MW-7D	3	0.1	60.42	66.57	6.15
MW-8D	4	0.1	60.04	73.95	13.91
MW-8D	5	0.1	60.06	63.49	3.43
MW-9D	6	0.1	59.86	75.02	15.16

Filters weighed by Quanterra, North Canton, Ohio.

Quanterra Incorporated
4101 Shuffel Drive, NW
North Canton, Ohio 44720

216 497-9396 Telephone
216 497-0772 Fax

Quanterra
Environmental Services

RECEIVED
SEP 2 1995
GERAGHTY & MILLER, INC.
INDIANAPOLIS, INDIANA

ANALYTICAL REPORT

PROJECT NO. IN0144.109

FEDERATED METALS, HAMMOND

Tim Northam

GERAGHTY & MILLER

QUANTERRA INCORPORATED

Thomas M. Himes
Project Manager

September 28, 1995

TABLE OF CONTENTS (CONT'D)

Herbicide QC Summary Data

Herbicide Raw QC Data

Herbicide Sample Data

Herbicide Initial Calibration

Herbicide Continuing Calibration

Inorganic QC Summary Data

Inorganic Sample Data

Inorganic Calibration Data

Inorganic Instrument Print-out

Inorganic Prep Logs

Wet Chemistry QC Data

Wet Chemistry Sample Data

Wet Chemistry Log Sheets

Organic Extraction Log Sheets

Organic Instrument Log Sheets

Internal Chain-of-Custody

Chain-of-Custody

CASE NARRATIVE

CASE NARRATIVE

The following report contains the analytical results for two water samples and one quality control sample submitted to Quanterra-North Canton by Geraghty & Miller from the Federated Metals, Hammond Site, project number IN0144.109. The samples were received July 20, 1995, according to documented sample acceptance procedures.

The samples submitted for filtered inorganic analyses were not analyzed at the request of Tim Northam.

Quanterra-North Canton utilizes only USEPA approved methods and instrumentation in all analytical work. The samples presented in this report were analyzed for the parameters listed on the method reference page in accordance with the methods indicated.

The results included in this report have been reviewed for compliance with the laboratory QA/QC plan. All data have been found to be compliant with laboratory protocol with the exception of those items noted.

The matrix spike and matrix spike duplicate (MS/MSD) contained in this quality control report were generated as part of the laboratory QA/QC program requirements. These requirements include the analysis of a MS/MSD on a one in twenty basis. Therefore, the associated batch number indicated on the MS/MSD reports may not reflect the same batch numbers as those of the samples contained in the analytical report.

The laboratory performs MATRIX SPIKES (MS) and MATRIX SPIKE DUPLICATES (MSD) to indicate any matrix effects within a given sample. They also allow the laboratory to gather precision and bias data for a specific method and matrix.

Since matrix effects may bias percent recovery, the laboratory performs corrective action if the precision (RPD) criteria of the MS/MSD is not met.

SAMPLE SUMMARY

SAMPLE SUMMARY

The analytical results of the samples listed below are presented on the following pages.

WO #	LABORATORY ID	SAMPLE IDENTIFICATION	DATE/TIME SAMPLED
C09PC	A5G200131-001	FMGWMW6D	7/18/95 15:00
C09PD	A5G200131-002	FMGWMW6S	7/18/95 10:30
C09Q7	A5G200131-003	TRIP BLANK	7/18/95

METHOD REFERENCE

ANALYTICAL METHODS SUMMARY

A5G200131

Parameters	Methods
Organophosphorous Compounds by GC	SW846 8141
Organochlorine Pesticides and PCB's	SW846 8080
Chlorinated Herbicides by GC	SW846 8150A
Volatile Organics by GC/MS	SW846 8240A
Semivolatile Organic Compounds by GC/MS	SW846 8270A
Fluoride (Potentiometric, Ion Selective Electrode)	MCAWW 340.2
Sulfide	MCAWW 376.1
Inductively Coupled Plasma (ICP) Metals	SW846 6010A
Arsenic (AA, Furnace Technique)	SW846 7060
Lead (AA, Furnace Technique)	SW846 7421
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470
Selenium (AA, Furnace Technique)	SW846 7740
Thallium (AA, Furnace Technique)	SW846 7841
Total Cyanide	SW846 9012

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and Final Update I (7/92).

GC/MS VOLATILE SAMPLE DATA

GERAGHTY & MILLER

FMGWMW6D

WO #: C09PC10U
LAB #: A5G200131-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/18/95
DATE RECEIVED: 7/20/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Acetone	16 J	50	SW846 8240A	07/25/95	5208097
Acetonitrile	ND	50	SW846 8240A	07/25/95	5208097
Acrolein	ND	100	SW846 8240A	07/25/95	5208097
Acrylonitrile	ND	50	SW846 8240A	07/25/95	5208097
Allyl chloride	ND	5.0	SW846 8240A	07/25/95	5208097
Benzene	ND	5.0	SW846 8240A	07/25/95	5208097
Bromodichloromethane	ND	5.0	SW846 8240A	07/25/95	5208097
Bromoform	ND	10	SW846 8240A	07/25/95	5208097
Bromomethane	ND	10	SW846 8240A	07/25/95	5208097
2-Butanone (MEK)	ND	50	SW846 8240A	07/25/95	5208097
Carbon disulfide	ND	5.0	SW846 8240A	07/25/95	5208097
Carbon tetrachloride	ND	10	SW846 8240A	07/25/95	5208097
Chlorobenzene	ND	5.0	SW846 8240A	07/25/95	5208097
Chloroethane	ND	10	SW846 8240A	07/25/95	5208097
Chloroform	ND	5.0	SW846 8240A	07/25/95	5208097
Chloromethane	ND	10	SW846 8240A	07/25/95	5208097
Chloroprene	ND	5.0	SW846 8240A	07/25/95	5208097
Dibromochloromethane	ND	5.0	SW846 8240A	07/25/95	5208097
1,2-Dibromo-3-chloro-propane	ND	10	SW846 8240A	07/25/95	5208097
1,2-Dibromoethane (EDB)	ND	5.0	SW846 8240A	07/25/95	5208097
Dibromomethane	ND	5.0	SW846 8240A	07/25/95	5208097
trans-1,4-Dichloro-2-butene	ND	5.0	SW846 8240A	07/25/95	5208097
Dichlorodifluoromethane	ND	20	SW846 8240A	07/25/95	5208097

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	106	(76 - 114)
Toluene-d8	97	(88 - 110)
Bromofluorobenzene	99	(86 - 115)

NOTE:
AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
J ESTIMATED VALUE. (DETECTED). BUT BELOW QUANTITATION LIMIT.

GERAGHTY & MILLER

FMGWMW6D

WO #: C09PC10U
LAB #: A5G200131-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/18/95
DATE RECEIVED: 7/20/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,1-Dichloroethane	ND	5.0	SW846 8240A	07/25/95	5208097
1,2-Dichloroethane	ND	5.0	SW846 8240A	07/25/95	5208097
1,1-Dichloroethene	ND	5.0	SW846 8240A	07/25/95	5208097
1,2-Dichloropropane	ND	5.0	SW846 8240A	07/25/95	5208097
cis-1,3-Dichloropropene	ND	5.0	SW846 8240A	07/25/95	5208097
trans-1,3-Dichloropropene	ND	5.0	SW846 8240A	07/25/95	5208097
1,4-Dioxane	ND	1,000	SW846 8240A	07/25/95	5208097
Ethylbenzene	ND	5.0	SW846 8240A	07/25/95	5208097
Ethyl methacrylate	ND	5.0	SW846 8240A	07/25/95	5208097
2-Hexanone	ND	50	SW846 8240A	07/25/95	5208097
Iodomethane	ND	5.0	SW846 8240A	07/25/95	5208097
Isobutyl alcohol	ND	500	SW846 8240A	07/25/95	5208097
Methacrylonitrile	ND	20	SW846 8240A	07/25/95	5208097
Methylene chloride	ND	5.0	SW846 8240A	07/25/95	5208097
Methyl methacrylate	ND	5.0	SW846 8240A	07/25/95	5208097
4-Methyl-2-pentanone (MIBK)	ND	50	SW846 8240A	07/25/95	5208097
Propionitrile	ND	20	SW846 8240A	07/25/95	5208097
Styrene	ND	5.0	SW846 8240A	07/25/95	5208097
1,1,1,2-Tetrachloroethane	ND	5.0	SW846 8240A	07/25/95	5208097
1,1,2,2-Tetrachloroethane	ND	5.0	SW846 8240A	07/25/95	5208097
Tetrachloroethene	ND	5.0	SW846 8240A	07/25/95	5208097
Toluene	ND	5.0	SW846 8240A	07/25/95	5208097
1,1,1-Trichloroethane	ND	5.0	SW846 8240A	07/25/95	5208097

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	106	(76 - 114)
Toluene-d8	97	(88 - 110)
Bromofluorobenzene	99	(86 - 115)

NOTE:
AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW6D

WO #: C09PC10U
LAB #: A5G200131-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/18/95
DATE RECEIVED: 7/20/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,1,2-Trichloroethane	ND	5.0	SW846 8240A	07/25/95	520809
Trichloroethene	ND	5.0	SW846 8240A	07/25/95	520809
Trichlorofluoromethane	ND	5.0	SW846 8240A	07/25/95	520809
1,2,3-Trichloropropane	ND	5.0	SW846 8240A	07/25/95	520809
Vinyl acetate	ND	50	SW846 8240A	07/25/95	520809
Vinyl chloride	ND	10	SW846 8240A	07/25/95	520809
Xylenes (total)	ND	5.0	SW846 8240A	07/25/95	520809
1,2-Dichloroethene (total)	ND	5.0	SW846 8240A	07/25/95	520809

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	106	(76 - 114)
Toluene-d8	97	(88 - 110)
Bromofluorobenzene	99	(86 - 115)

NOTE:
AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW6D

WO #: C09PC10U
LAB #: A5G200131-001
MATRIX: WATER

DATE SAMPLED: 7/18/95
DATE RECEIVED: 7/20/95
DATE EXTRACTED: 7/25/95
DATE ANALYZED: 7/25/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
2-Propanol, 2-methyl-	**11**	**ug/L**	**5208097**
Unknown	**7**	**ug/L**	**5208097**

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
None		**ug/L**	**5208097**

GERAGHTY & MILLER

FMGWMW6S

WO #: C09PD10U
LAB #: A5G200131-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/18/95
DATE RECEIVED: 7/20/95

- GC/MS Volatiles -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Acetone	**9.3 J**	**50**	**SW846 8240A**	**07/25/95**	**5208097**
Acetonitrile	ND	50	SW846 8240A	07/25/95	5208097
Acrolein	ND	100	SW846 8240A	07/25/95	5208097
Acrylonitrile	ND	50	SW846 8240A	07/25/95	5208097
Allyl chloride	ND	5.0	SW846 8240A	07/25/95	5208097
Benzene	ND	5.0	SW846 8240A	07/25/95	5208097
Bromodichloromethane	ND	5.0	SW846 8240A	07/25/95	5208097
Bromoform	ND	10	SW846 8240A	07/25/95	5208097
Bromomethane	ND	10	SW846 8240A	07/25/95	5208097
2-Butanone (MEK)	ND	50	SW846 8240A	07/25/95	5208097
Carbon disulfide	ND	5.0	SW846 8240A	07/25/95	5208097
Carbon tetrachloride	ND	10	SW846 8240A	07/25/95	5208097
Chlorobenzene	ND	5.0	SW846 8240A	07/25/95	5208097
Chloroethane	ND	10	SW846 8240A	07/25/95	5208097
Chloroform	ND	5.0	SW846 8240A	07/25/95	5208097
Chloromethane	ND	10	SW846 8240A	07/25/95	5208097
Chloroprene	ND	5.0	SW846 8240A	07/25/95	5208097
Dibromochloromethane	ND	5.0	SW846 8240A	07/25/95	5208097
1,2-Dibromo-3-chloro-propane	ND	10	SW846 8240A	07/25/95	5208097
1,2-Dibromoethane (EDB)	ND	5.0	SW846 8240A	07/25/95	5208097
Dibromomethane	ND	5.0	SW846 8240A	07/25/95	5208097
trans-1,4-Dichloro-2-butene	ND	5.0	SW846 8240A	07/25/95	5208097
Dichlorodifluoromethane	ND	20	SW846 8240A	07/25/95	5208097

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	106	(76 - 114)
Toluene-d8	96	(88 - 110)
Bromofluorobenzene	99	(86 - 115)

NOTE:
AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
J ESTIMATED VALUE. (DETECTED), BUT BELOW QUANTITATION LIMIT.

GERAGHTY & MILLER

FMGWMW6S

WO #: C09PD10U
LAB #: A5G200131-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/18/95
DATE RECEIVED: 7/20/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,1-Dichloroethane	ND	5.0	SW846 8240A	07/25/95	5208097
1,2-Dichloroethane	ND	5.0	SW846 8240A	07/25/95	5208097
1,1-Dichloroethene	ND	5.0	SW846 8240A	07/25/95	5208097
1,2-Dichloropropane	ND	5.0	SW846 8240A	07/25/95	5208097
cis-1,3-Dichloropropene	ND	5.0	SW846 8240A	07/25/95	5208097
trans-1,3-Dichloropropene	ND	5.0	SW846 8240A	07/25/95	5208097
1,4-Dioxane	ND	1,000	SW846 8240A	07/25/95	5208097
Ethylbenzene	ND	5.0	SW846 8240A	07/25/95	5208097
Ethyl methacrylate	ND	5.0	SW846 8240A	07/25/95	5208097
2-Hexanone	ND	50	SW846 8240A	07/25/95	5208097
Iodomethane	ND	5.0	SW846 8240A	07/25/95	5208097
Isobutyl alcohol	ND	500	SW846 8240A	07/25/95	5208097
Methacrylonitrile	ND	20	SW846 8240A	07/25/95	5208097
Methylene chloride	ND	5.0	SW846 8240A	07/25/95	5208097
Methyl methacrylate	ND	5.0	SW846 8240A	07/25/95	5208097
4-Methyl-2-pentanone (MIBK)	ND	50	SW846 8240A	07/25/95	5208097
Propionitrile	ND	20	SW846 8240A	07/25/95	5208097
Styrene	ND	5.0	SW846 8240A	07/25/95	5208097
1,1,1,2-Tetrachloroethane	ND	5.0	SW846 8240A	07/25/95	5208097
1,1,2,2-Tetrachloroethane	ND	5.0	SW846 8240A	07/25/95	5208097
Tetrachloroethene	ND	5.0	SW846 8240A	07/25/95	5208097
Toluene	ND	5.0	SW846 8240A	07/25/95	5208097
1,1,1-Trichloroethane	ND	5.0	SW846 8240A	07/25/95	5208097

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	106	(76 - 114)
Toluene-d8	96	(88 - 110)
Bromofluorobenzene	99	(86 - 115)

NOTE:
AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW6S

WO #: C09PD10U
LAB #: A5G200131-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/18/95
DATE RECEIVED: 7/20/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,1,2-Trichloroethane	ND	5.0	SW846 8240A	07/25/95	5208097
Trichloroethene	ND	5.0	SW846 8240A	07/25/95	5208097
Trichlorofluoromethane	ND	5.0	SW846 8240A	07/25/95	5208097
1,2,3-Trichloropropane	ND	5.0	SW846 8240A	07/25/95	5208097
Vinyl acetate	ND	50	SW846 8240A	07/25/95	5208097
Vinyl chloride	ND	10	SW846 8240A	07/25/95	5208097
Xylenes (total)	ND	5.0	SW846 8240A	07/25/95	5208097
1,2-Dichloroethene (total)	ND	5.0	SW846 8240A	07/25/95	5208097

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	106	(76 - 114)
Toluene-d8	96	(88 - 110)
Bromofluorobenzene	99	(86 - 115)

NOTE:
AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW6S

WO #: C09PD10U
LAB #: A5G200131-002
MATRIX: WATER

DATE SAMPLED: 7/18/95
DATE RECEIVED: 7/20/95
DATE EXTRACTED: 7/25/95
DATE ANALYZED: 7/25/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
2-Propanol, 2-methyl-	**7**	**ug/L**	**5208097**

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
None		**ug/L**	**5208097**

GERAGHTY & MILLER

TRIP BLANK

WO #: C09Q7101
LAB #: A5G200131-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/18/95
DATE RECEIVED: 7/20/95

- GC/MS Volatiles -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Acetone	ND	50	SW846 8240A	07/25/95	520809
Acetonitrile	ND	50	SW846 8240A	07/25/95	520809
Acrolein	ND	100	SW846 8240A	07/25/95	520809
Acrylonitrile	ND	50	SW846 8240A	07/25/95	520809
Allyl chloride	ND	5.0	SW846 8240A	07/25/95	520809
Benzene	ND	5.0	SW846 8240A	07/25/95	520809
Bromodichloromethane	ND	5.0	SW846 8240A	07/25/95	520809
Bromoform	ND	10	SW846 8240A	07/25/95	520809
Bromomethane	ND	10	SW846 8240A	07/25/95	520809
2-Butanone (MEK)	ND	50	SW846 8240A	07/25/95	520809
Carbon disulfide	ND	5.0	SW846 8240A	07/25/95	520809
Carbon tetrachloride	ND	10	SW846 8240A	07/25/95	520809
Chlorobenzene	ND	5.0	SW846 8240A	07/25/95	520809
Chloroethane	ND	10	SW846 8240A	07/25/95	520809
Chloroform	ND	5.0	SW846 8240A	07/25/95	520809
Chloromethane	ND	10	SW846 8240A	07/25/95	520809
Chloroprene	ND	5.0	SW846 8240A	07/25/95	520809
Dibromochloromethane	ND	5.0	SW846 8240A	07/25/95	520809
1,2-Dibromo-3-chloro-propane	ND	10	SW846 8240A	07/25/95	520809
1,2-Dibromoethane (EDB)	ND	5.0	SW846 8240A	07/25/95	520809
Dibromomethane	ND	5.0	SW846 8240A	07/25/95	520809
trans-1,4-Dichloro-2-butene	ND	5.0	SW846 8240A	07/25/95	520809
Dichlorodifluoromethane	ND	20	SW846 8240A	07/25/95	520809

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	102	(76 - 114)
Toluene-d8	99	(88 - 110)
Bromofluorobenzene	96	(86 - 115)

NOTE:
AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

TRIP BLANK

WO #: C09Q7101
LAB #: A5G200131-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/18/95
DATE RECEIVED: 7/20/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,1-Dichloroethane	ND	5.0	SW846 8240A	07/25/95	52080
1,2-Dichloroethane	ND	5.0	SW846 8240A	07/25/95	52080
1,1-Dichloroethene	ND	5.0	SW846 8240A	07/25/95	52080
1,2-Dichloropropane	ND	5.0	SW846 8240A	07/25/95	52080
cis-1,3-Dichloropropene	ND	5.0	SW846 8240A	07/25/95	52080
trans-1,3-Dichloropropene	ND	5.0	SW846 8240A	07/25/95	52080
1,4-Dioxane	ND	1,000	SW846 8240A	07/25/95	52080
Ethylbenzene	ND	5.0	SW846 8240A	07/25/95	52080
Ethyl methacrylate	ND	5.0	SW846 8240A	07/25/95	52080
2-Hexanone	ND	50	SW846 8240A	07/25/95	52080
Iodomethane	ND	5.0	SW846 8240A	07/25/95	52080
Isobutyl alcohol	ND	500	SW846 8240A	07/25/95	52080
Methacrylonitrile	ND	20	SW846 8240A	07/25/95	52080
Methylene chloride	ND	5.0	SW846 8240A	07/25/95	52080
Methyl methacrylate	ND	5.0	SW846 8240A	07/25/95	52080
4-Methyl-2-pentanone (MIBK)	ND	50	SW846 8240A	07/25/95	52080
Propionitrile	ND	20	SW846 8240A	07/25/95	52080
Styrene	ND	5.0	SW846 8240A	07/25/95	52080
1,1,1,2-Tetrachloroethane	ND	5.0	SW846 8240A	07/25/95	52080
1,1,2,2-Tetrachloroethane	ND	5.0	SW846 8240A	07/25/95	52080
Tetrachloroethene	ND	5.0	SW846 8240A	07/25/95	52080
Toluene	ND	5.0	SW846 8240A	07/25/95	52080
1,1,1-Trichloroethane	ND	5.0	SW846 8240A	07/25/95	52080

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	102	(76 - 114)
Toluene-d8	99	(88 - 110)
Bromofluorobenzene	96	(86 - 115)

NOTE:
AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

TRIP BLANK

WO #: C09Q7101
LAB #: A5G200131-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/18/95
DATE RECEIVED: 7/20/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,1,2-Trichloroethane	ND	5.0	SW846 8240A	07/25/95	520809
Trichloroethene	ND	5.0	SW846 8240A	07/25/95	520809
Trichlorofluoromethane	ND	5.0	SW846 8240A	07/25/95	520809
1,2,3-Trichloropropane	ND	5.0	SW846 8240A	07/25/95	520809
Vinyl acetate	ND	50	SW846 8240A	07/25/95	520809
Vinyl chloride	ND	10	SW846 8240A	07/25/95	520809
Xylenes (total)	ND	5.0	SW846 8240A	07/25/95	520809
1,2-Dichloroethene (total)	ND	5.0	SW846 8240A	07/25/95	520809

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	102	(76 - 114)
Toluene-d8	99	(88 - 110)
Bromofluorobenzene	96	(86 - 115)

NOTE:
AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

TRIP BLANK

WO #: C09Q7101
LAB #: A5G200131-003
MATRIX: WATER

DATE SAMPLED: 7/18/95
DATE RECEIVED: 7/20/95
DATE EXTRACTED: 7/25/95
DATE ANALYZED: 7/25/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5208097

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5208097

GC/MS SEMIVOLATILE SAMPLE DATA

GERAGHTY & MILLER

FMGWMW6S

WO #: C09PD104
LAB #: A5G200131-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/18/95
TIME SAMPLED: 10:30
DATE RECEIVED: 7/20/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Acenaphthene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Acenaphthylene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Acetophenone	ND	10	SW846 8270A	07/24-08/10/95	5205089
2-Acetylaminofluorene	ND	20	SW846 8270A	07/24-08/10/95	5205089
4-Aminobiphenyl	ND	50	SW846 8270A	07/24-08/10/95	5205089
Aniline	ND	10	SW846 8270A	07/24-08/10/95	5205089
Anthracene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Aramite	--		**SW846 8270A**	**07/24-08/10/95**	**5205089**
Benzo(a)anthracene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Benzo(a)pyrene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Benzo(b)fluoranthene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Benzo(ghi)perylene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Benzo(k)fluoranthene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Benzyl alcohol	ND	10	SW846 8270A	07/24-08/10/95	5205089
4-Bromophenyl phenyl ether	ND	10	SW846 8270A	07/24-08/10/95	5205089
Butyl benzyl phthalate	ND	10	SW846 8270A	07/24-08/10/95	5205089
2-sec-Butyl-4,6-dinitro-phenol	ND	20	SW846 8270A	07/24-08/10/95	5205089
4-Chloroaniline	ND	10	SW846 8270A	07/24-08/10/95	5205089
bis(2-Chloroethoxy)methane	ND	10	SW846 8270A	07/24-08/10/95	5205089
bis(2-Chloroethyl) ether	ND	10	SW846 8270A	07/24-08/10/95	5205089
bis(2-Chloro-1-methylethyl) et	ND	10	SW846 8270A	07/24-08/10/95	5205089
4-Chloro-3-methylphenol	ND	10	SW846 8270A	07/24-08/10/95	5205089
2-Chloronaphthalene	ND	10	SW846 8270A	07/24-08/10/95	5205089

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	78	(36 - 148)
2-Fluorobiphenyl	70	(38 - 106)
2,4,6-Tribromophenol	75	(13 - 145)
Terphenyl-d14	43	(10 - 169)
Phenol-d5	64	(15 - 126)
2-Fluorophenol	45	(17 - 106)

OTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
-- (NOT ANALYZED)

GERAGHTY & MILLER

FMGWMW6S

WO #: C09PD104
LAB #: A5G200131-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/18/95
TIME SAMPLED: 10:30
DATE RECEIVED: 7/20/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
2-Chlorophenol	ND	10	SW846 8270A	07/24-08/10/95	5205089
4-Chlorophenyl phenyl ether	ND	10	SW846 8270A	07/24-08/10/95	5205089
Chrysene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Dibenz(a,h)anthracene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Dibenzofuran	ND	10	SW846 8270A	07/24-08/10/95	5205089
Di-n-butyl phthalate	ND	10	SW846 8270A	07/24-08/10/95	5205089
1,2-Dichlorobenzene	ND	10	SW846 8270A	07/24-08/10/95	5205089
1,3-Dichlorobenzene	ND	10	SW846 8270A	07/24-08/10/95	5205089
1,4-Dichlorobenzene	ND	10	SW846 8270A	07/24-08/10/95	5205089
3,3'-Dichlorobenzidine	ND	10	SW846 8270A	07/24-08/10/95	5205089
2,4-Dichlorophenol	ND	10	SW846 8270A	07/24-08/10/95	5205089
2,6-Dichlorophenol	ND	10	SW846 8270A	07/24-08/10/95	5205089
Diethyl phthalate	ND	10	SW846 8270A	07/24-08/10/95	5205089
p-Dimethylaminoazobenzene	ND	10	SW846 8270A	07/24-08/10/95	5205089
7,12-Dimethylbenz(a)-anthracene	ND	20	SW846 8270A	07/24-08/10/95	5205089
3,3'-Dimethylbenzidine	ND	20	SW846 8270A	07/24-08/10/95	5205089
a,a-Dimethylphenethylamine	ND	50	SW846 8270A	07/24-08/10/95	5205089
2,4-Dimethylphenol	ND	10	SW846 8270A	07/24-08/10/95	5205089
Dimethyl phthalate	ND	10	SW846 8270A	07/24-08/10/95	5205089
1,3-Dinitrobenzene	ND	10	SW846 8270A	07/24-08/10/95	5205089
4,6-Dinitro-2-methylphenol	ND	50	SW846 8270A	07/24-08/10/95	5205089
2,4-Dinitrophenol	ND	50	SW846 8270A	07/24-08/10/95	5205089
2,4-Dinitrotoluene	ND	10	SW846 8270A	07/24-08/10/95	5205089

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	78	(36 - 148)
2-Fluorobiphenyl	70	(38 - 106)
2,4,6-Tribromophenol	75	(13 - 145)
Terphenyl-d14	43	(10 - 169)
Phenol-d5	64	(15 - 126)
2-Fluorophenol	45	(17 - 106)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW6S

WO #: C09PD104
LAB #: A5G200131-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/18/95
TIME SAMPLED: 10:30
DATE RECEIVED: 7/20/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
2,6-Dinitrotoluene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Di-n-octyl phthalate	ND	10	SW846 8270A	07/24-08/10/95	5205089
Diphenylamine	ND	10	SW846 8270A	07/24-08/10/95	5205089
bis(2-Ethylhexyl) phthalate	**6.3 J**	**10**	**SW846 8270A**	**07/24-08/10/95**	**5205089**
Ethyl methanesulfonate	ND	10	SW846 8270A	07/24-08/10/95	5205089
Fluoranthene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Fluorene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Hexachlorobenzene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Hexachlorobutadiene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Hexachlorocyclopentadiene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Hexachloroethane	ND	10	SW846 8270A	07/24-08/10/95	5205089
Hexachlorophene	--		**SW846 8270A**	**07/24-08/10/95**	**5205089**
Hexachloropropene	ND	100	SW846 8270A	07/24-08/10/95	5205089
Indeno(1,2,3-cd)pyrene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Isophorone	ND	10	SW846 8270A	07/24-08/10/95	5205089
Isosafrole	ND	10	SW846 8270A	07/24-08/10/95	5205089
Methapyrilene	ND	100	SW846 8270A	07/24-08/10/95	5205089
3-Methylcholanthrene	ND	100	SW846 8270A	07/24-08/10/95	5205089
Methyl methanesulfonate	ND	10	SW846 8270A	07/24-08/10/95	5205089
2-Methylnaphthalene	ND	10	SW846 8270A	07/24-08/10/95	5205089
2-Methylphenol	ND	10	SW846 8270A	07/24-08/10/95	5205089
3-Methylphenol	ND	10	SW846 8270A	07/24-08/10/95	5205089
4-Methylphenol	ND	10	SW846 8270A	07/24-08/10/95	5205089

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	78	(36 - 148)
2-Fluorobiphenyl	70	(38 - 106)
2,4,6-Tribromophenol	75	(13 - 145)
Terphenyl-d14	43	(10 - 169)
Phenol-d5	64	(15 - 126)
2-Fluorophenol	45	(17 - 106)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
J ESTIMATED VALUE. (DETECTED), BUT BELOW QUANTITATION LIMIT.
– (NOT ANALYZED)

GERAGHTY & MILLER

FMGWMW6S

WO #: C09PD104
LAB #: A5G200131-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/18/95
TIME SAMPLED: 10:30
DATE RECEIVED: 7/20/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Naphthalene	ND	10	SW846 8270A	07/24-08/10/95	5205089
1,4-Naphthoquinone	ND	200	SW846 8270A	07/24-08/10/95	5205089
1-Naphthylamine	ND	10	SW846 8270A	07/24-08/10/95	5205089
2-Naphthylamine	ND	10	SW846 8270A	07/24-08/10/95	5205089
2-Nitroaniline	ND	50	SW846 8270A	07/24-08/10/95	5205089
3-Nitroaniline	ND	50	SW846 8270A	07/24-08/10/95	5205089
4-Nitroaniline	ND	50	SW846 8270A	07/24-08/10/95	5205089
Nitrobenzene	ND	10	SW846 8270A	07/24-08/10/95	5205089
2-Nitrophenol	ND	10	SW846 8270A	07/24-08/10/95	5205089
4-Nitrophenol	ND	50	SW846 8270A	07/24-08/10/95	5205089
4-Nitroquinoline-1-oxide	ND	100	SW846 8270A	07/24-08/10/95	5205089
N-Nitrosodi-n-butylamine	ND	10	SW846 8270A	07/24-08/10/95	5205089
N-Nitrosodiethylamine	ND	10	SW846 8270A	07/24-08/10/95	5205089
N-Nitrosodimethylamine	ND	10	SW846 8270A	07/24-08/10/95	5205089
N-Nitrosodiphenylamine	ND	10	SW846 8270A	07/24-08/10/95	5205089
N-Nitrosodi-n-propylamine	ND	10	SW846 8270A	07/24-08/10/95	5205089
N-Nitrosomethylethylamine	ND	10	SW846 8270A	07/24-08/10/95	5205089
N-Nitrosomorpholine	ND	10	SW846 8270A	07/24-08/10/95	5205089
N-Nitrosopiperidine	ND	10	SW846 8270A	07/24-08/10/95	5205089
N-Nitrosopyrrolidine	ND	10	SW846 8270A	07/24-08/10/95	5205089
5-Nitro-o-toluidine	ND	20	SW846 8270A	07/24-08/10/95	5205089
Pentachlorobenzene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Pentachloroethane	ND	50	SW846 8270A	07/24-08/10/95	5205089

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	78	(36 - 148)
2-Fluorobiphenyl	70	(38 - 106)
2,4,6-Tribromophenol	75	(13 - 145)
Terphenyl-d14	43	(10 - 169)
Phenol-d5	64	(15 - 126)
2-Fluorophenol	45	(17 - 106)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW6S

WO #: C09PD104
LAB #: A5G200131-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/18/95
TIME SAMPLED: 10:30
DATE RECEIVED: 7/20/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Pentachloronitrobenzene	ND	50	SW846 8270A	07/24-08/10/95	5205089
Pentachlorophenol	ND	50	SW846 8270A	07/24-08/10/95	5205089
Phenacetin	ND	50	SW846 8270A	07/24-08/10/95	5205089
Phenanthrene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Phenol	ND	10	SW846 8270A	07/24-08/10/95	5205089
p-Phenylene diamine	ND	50	SW846 8270A	07/24-08/10/95	5205089
2-Picoline	ND	20	SW846 8270A	07/24-08/10/95	5205089
Pronamide	ND	20	SW846 8270A	07/24-08/10/95	5205089
Pyrene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Pyridine	ND	10	SW846 8270A	07/24-08/10/95	5205089
Safrole	ND	10	SW846 8270A	07/24-08/10/95	5205089
1,2,4,5-Tetrachlorobenzene	ND	10	SW846 8270A	07/24-08/10/95	5205089
2,3,4,6-Tetrachlorophenol	ND	50	SW846 8270A	07/24-08/10/95	5205089
o-Toluidine	ND	20	SW846 8270A	07/24-08/10/95	5205089
1,2,4-Trichlorobenzene	ND	10	SW846 8270A	07/24-08/10/95	5205089
2,4,5-Trichlorophenol	ND	10	SW846 8270A	07/24-08/10/95	5205089
2,4,6-Trichlorophenol	ND	10	SW846 8270A	07/24-08/10/95	5205089
1,3,5-Trinitrobenzene	ND	50	SW846 8270A	07/24-08/10/95	5205089
Diallate	ND	10	SW846 8270A	07/24-08/10/95	5205089
Chlorobenzilate	ND	10	SW846 8270A	07/24-08/10/95	5205089

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	78	(36 - 148)
2-Fluorobiphenyl	70	(38 - 106)
2,4,6-Tribromophenol	75	(13 - 145)
Terphenyl-d14	43	(10 - 169)
Phenol-d5	64	(15 - 126)
2-Fluorophenol	45	(17 - 106)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW6D

WO #: C09PC104
LAB #: A5G200131-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/18/95
TIME SAMPLED: 15:00
DATE RECEIVED: 7/20/95

- **GC/MS Semi-Volatiles** -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Acenaphthene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Acenaphthylene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Acetophenone	ND	10	SW846 8270A	07/24-08/10/95	5205089
2-Acetylaminofluorene	ND	20	SW846 8270A	07/24-08/10/95	5205089
4-Aminobiphenyl	ND	50	SW846 8270A	07/24-08/10/95	5205089
Aniline	ND	10	SW846 8270A	07/24-08/10/95	5205089
Anthracene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Aramite	--		**SW846 8270A**	**07/24-08/10/95**	**5205089**
Benzo(a)anthracene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Benzo(a)pyrene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Benzo(b)fluoranthene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Benzo(ghi)perylene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Benzo(k)fluoranthene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Benzyl alcohol	ND	10	SW846 8270A	07/24-08/10/95	5205089
4-Bromophenyl phenyl ether	ND	10	SW846 8270A	07/24-08/10/95	5205089
Butyl benzyl phthalate	ND	10	SW846 8270A	07/24-08/10/95	5205089
2-sec-Butyl-4,6-dinitro-phenol	ND	20	SW846 8270A	07/24-08/10/95	5205089
4-Chloroaniline	ND	10	SW846 8270A	07/24-08/10/95	5205089
bis(2-Chloroethoxy)methane	ND	10	SW846 8270A	07/24-08/10/95	5205089
bis(2-Chloroethyl) ether	ND	10	SW846 8270A	07/24-08/10/95	5205089
bis(2-Chloro-1-methylethyl) et	ND	10	SW846 8270A	07/24-08/10/95	5205089
4-Chloro-3-methylphenol	ND	10	SW846 8270A	07/24-08/10/95	5205089
2-Chloronaphthalene	ND	10	SW846 8270A	07/24-08/10/95	5205089

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	82	(36 - 148)
2-Fluorobiphenyl	72	(38 - 106)
Terphenyl-d14	38	(10 - 169)
Phenol-d5	65	(15 - 126)
2-Fluorophenol	51	(17 - 106)
2,4,6-Tribromophenol	87	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
-- (NOT ANALYZED)

GERAGHTY & MILLER

FMGWMW6D

WO #: C09PC104
LAB #: A5G200131-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/18/95
TIME SAMPLED: 15:00
DATE RECEIVED: 7/20/95

- - - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
2-Chlorophenol	ND	10	SW846 8270A	07/24-08/10/95	5205089
4-Chlorophenyl phenyl ether	ND	10	SW846 8270A	07/24-08/10/95	5205089
Chrysene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Dibenz(a,h)anthracene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Dibenzofuran	ND	10	SW846 8270A	07/24-08/10/95	5205089
Di-n-butyl phthalate	ND	10	SW846 8270A	07/24-08/10/95	5205089
1,2-Dichlorobenzene	ND	10	SW846 8270A	07/24-08/10/95	5205089
1,3-Dichlorobenzene	ND	10	SW846 8270A	07/24-08/10/95	5205089
1,4-Dichlorobenzene	ND	10	SW846 8270A	07/24-08/10/95	5205089
3,3'-Dichlorobenzidine	ND	10	SW846 8270A	07/24-08/10/95	5205089
2,4-Dichlorophenol	ND	10	SW846 8270A	07/24-08/10/95	5205089
2,6-Dichlorophenol	ND	10	SW846 8270A	07/24-08/10/95	5205089
Diethyl phthalate	ND	10	SW846 8270A	07/24-08/10/95	5205089
p-Dimethylaminoazobenzene	ND	10	SW846 8270A	07/24-08/10/95	5205089
7,12-Dimethylbenz(a)-anthracene	ND	20	SW846 8270A	07/24-08/10/95	5205089
3,3'-Dimethylbenzidine	ND	20	SW846 8270A	07/24-08/10/95	5205089
a,a-Dimethylphenethylamine	ND	50	SW846 8270A	07/24-08/10/95	5205089
2,4-Dimethylphenol	ND	10	SW846 8270A	07/24-08/10/95	5205089
Dimethyl phthalate	ND	10	SW846 8270A	07/24-08/10/95	5205089
1,3-Dinitrobenzene	ND	10	SW846 8270A	07/24-08/10/95	5205089
4,6-Dinitro-2-methylphenol	ND	50	SW846 8270A	07/24-08/10/95	5205089
2,4-Dinitrophenol	ND	50	SW846 8270A	07/24-08/10/95	5205089
2,4-Dinitrotoluene	ND	10	SW846 8270A	07/24-08/10/95	5205089

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	82	(36 - 148)
2-Fluorobiphenyl	72	(38 - 106)
Terphenyl-d14	38	(10 - 169)
Phenol-d5	65	(15 - 126)
2-Fluorophenol	51	(17 - 106)
2,4,6-Tribromophenol	87	(13 - 145)

)TE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW6D

WO #: C09PC104
LAB #: A5G200131-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/18/95
TIME SAMPLED: 15:00
DATE RECEIVED: 7/20/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
2,6-Dinitrotoluene	ND	10	SW846 8270A	07/24-08/10/95	520508
Di-n-octyl phthalate	ND	10	SW846 8270A	07/24-08/10/95	520508
Diphenylamine	ND	10	SW846 8270A	07/24-08/10/95	520508
bis(2-Ethylhexyl) phthalate	**3.9 J**	**10**	**SW846 8270A**	**07/24-08/10/95**	**520508**
Ethyl methanesulfonate	ND	10	SW846 8270A	07/24-08/10/95	520508
Fluoranthene	ND	10	SW846 8270A	07/24-08/10/95	520508
Fluorene	ND	10	SW846 8270A	07/24-08/10/95	520508
Hexachlorobenzene	ND	10	SW846 8270A	07/24-08/10/95	520508
Hexachlorobutadiene	ND	10	SW846 8270A	07/24-08/10/95	520508
Hexachlorocyclopentadiene	ND	10	SW846 8270A	07/24-08/10/95	520508
Hexachloroethane	ND	10	SW846 8270A	07/24-08/10/95	520508
Hexachlorophene	--		**SW846 8270A**	**07/24-08/10/95**	**520508**
Hexachloropropene	ND	100	SW846 8270A	07/24-08/10/95	520508
Indeno(1,2,3-cd)pyrene	ND	10	SW846 8270A	07/24-08/10/95	520508
Isophorone	ND	10	SW846 8270A	07/24-08/10/95	520508
Isosafrole	ND	10	SW846 8270A	07/24-08/10/95	520508
Methapyrilene	ND	100	SW846 8270A	07/24-08/10/95	520508
3-Methylcholanthrene	ND	100	SW846 8270A	07/24-08/10/95	520508
Methyl methanesulfonate	ND	10	SW846 8270A	07/24-08/10/95	520508
2-Methylnaphthalene	ND	10	SW846 8270A	07/24-08/10/95	520508
2-Methylphenol	ND	10	SW846 8270A	07/24-08/10/95	520508
3-Methylphenol	ND	10	SW846 8270A	07/24-08/10/95	520508
4-Methylphenol	ND	10	SW846 8270A	07/24-08/10/95	520508

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	82	(36 - 148)
2-Fluorobiphenyl	72	(38 - 106)
Terphenyl-d14	38	(10 - 169)
Phenol-d5	65	(15 - 126)
2-Fluorophenol	51	(17 - 106)
2,4,6-Tribromophenol	87	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
J ESTIMATED VALUE. (DETECTED), BUT BELOW QUANTITATION LIMIT.
– (NOT ANALYZED)

GERAGHTY & MILLER

FMGWMW6D

WO #: C09PC104
LAB #: A5G200131-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/18/95
TIME SAMPLED: 15:00
DATE RECEIVED: 7/20/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Naphthalene	ND	10	SW846 8270A	07/24-08/10/95	5205089
1,4-Naphthoquinone	ND	200	SW846 8270A	07/24-08/10/95	5205089
1-Naphthylamine	ND	10	SW846 8270A	07/24-08/10/95	5205089
2-Naphthylamine	ND	10	SW846 8270A	07/24-08/10/95	5205089
2-Nitroaniline	ND	50	SW846 8270A	07/24-08/10/95	5205089
3-Nitroaniline	ND	50	SW846 8270A	07/24-08/10/95	5205089
4-Nitroaniline	ND	50	SW846 8270A	07/24-08/10/95	5205089
Nitrobenzene	ND	10	SW846 8270A	07/24-08/10/95	5205089
2-Nitrophenol	ND	10	SW846 8270A	07/24-08/10/95	5205089
4-Nitrophenol	ND	50	SW846 8270A	07/24-08/10/95	5205089
4-Nitroquinoline-1-oxide	ND	100	SW846 8270A	07/24-08/10/95	5205089
N-Nitrosodi-n-butylamine	ND	10	SW846 8270A	07/24-08/10/95	5205089
N-Nitrosodiethylamine	ND	10	SW846 8270A	07/24-08/10/95	5205089
N-Nitrosodimethylamine	ND	10	SW846 8270A	07/24-08/10/95	5205089
N-Nitrosodiphenylamine	ND	10	SW846 8270A	07/24-08/10/95	5205089
N-Nitrosodi-n-propylamine	ND	10	SW846 8270A	07/24-08/10/95	5205089
N-Nitrosomethylethylamine	ND	10	SW846 8270A	07/24-08/10/95	5205089
N-Nitrosomorpholine	ND	10	SW846 8270A	07/24-08/10/95	5205089
N-Nitrosopiperidine	ND	10	SW846 8270A	07/24-08/10/95	5205089
N-Nitrosopyrrolidine	ND	10	SW846 8270A	07/24-08/10/95	5205089
5-Nitro-o-toluidine	ND	20	SW846 8270A	07/24-08/10/95	5205089
Pentachlorobenzene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Pentachloroethane	ND	50	SW846 8270A	07/24-08/10/95	5205089

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	82	(36 - 148)
2-Fluorobiphenyl	72	(38 - 106)
Terphenyl-d14	38	(10 - 169)
Phenol-d5	65	(15 - 126)
2-Fluorophenol	51	(17 - 106)
2,4,6-Tribromophenol	87	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW6D

WO #: C09PC104
LAB #: A5G200131-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/18/95
TIME SAMPLED: 15:00
DATE RECEIVED: 7/20/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Pentachloronitrobenzene	ND	50	SW846 8270A	07/24-08/10/95	5205089
Pentachlorophenol	**4.1 J**	**50**	**SW846 8270A**	**07/24-08/10/95**	**5205089**
Phenacetin	ND	50	SW846 8270A	07/24-08/10/95	5205089
Phenanthrene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Phenol	ND	10	SW846 8270A	07/24-08/10/95	5205089
p-Phenylene diamine	ND	50	SW846 8270A	07/24-08/10/95	5205089
2-Picoline	ND	20	SW846 8270A	07/24-08/10/95	5205089
Pronamide	ND	20	SW846 8270A	07/24-08/10/95	5205089
Pyrene	ND	10	SW846 8270A	07/24-08/10/95	5205089
Pyridine	ND	10	SW846 8270A	07/24-08/10/95	5205089
Safrole	ND	10	SW846 8270A	07/24-08/10/95	5205089
1,2,4,5-Tetrachlorobenzene	ND	10	SW846 8270A	07/24-08/10/95	5205089
2,3,4,6-Tetrachlorophenol	ND	50	SW846 8270A	07/24-08/10/95	5205089
o-Toluidine	ND	20	SW846 8270A	07/24-08/10/95	5205089
1,2,4-Trichlorobenzene	ND	10	SW846 8270A	07/24-08/10/95	5205089
2,4,5-Trichlorophenol	ND	10	SW846 8270A	07/24-08/10/95	5205089
2,4,6-Trichlorophenol	ND	10	SW846 8270A	07/24-08/10/95	5205089
1,3,5-Trinitrobenzene	ND	50	SW846 8270A	07/24-08/10/95	5205089
Diallate	ND	10	SW846 8270A	07/24-08/10/95	5205089
Chlorobenzilate	ND	10	SW846 8270A	07/24-08/10/95	5205089

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	82	(36 - 148)
2-Fluorobiphenyl	72	(38 - 106)
Terphenyl-d14	38	(10 - 169)
Phenol-d5	65	(15 - 126)
2-Fluorophenol	51	(17 - 106)
2,4,6-Tribromophenol	87	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
J ESTIMATED VALUE. (DETECTED), BUT BELOW QUANTITATION LIMIT.

ORGANOPHOSPHORUS SAMPLE DATA

GERAGHTY & MILLER

FMGWMW6S

WO #: C09PD102
LAB #: A5G200131-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/18/95
TIME SAMPLED: 10:30
DATE RECEIVED: 7/20/95

- GC Semi-Volatiles -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Dimethoate	ND	0.50	SW846 8141	07/24-08/09/95	5205001
Disulfoton	ND	0.50	SW846 8141	07/24-08/09/95	5205001
Famphur	ND	0.50	SW846 8141	07/24-08/09/95	5205001
Methyl parathion	ND	0.50	SW846 8141	07/24-08/09/95	5205001
Parathion	ND	0.50	SW846 8141	07/24-08/09/95	5205001
Phorate	ND	0.50	SW846 8141	07/24-08/09/95	5205001
Tetraethyldithiopyrophosphate	ND	0.50	SW846 8141	07/24-08/09/95	5205001
O,O,O-Triethylphosphorothioate	ND	0.50	SW846 8141	07/24-08/09/95	5205001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Triphenyl phosphate	68	(38 - 146)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW6D

WO #: C09PC102
LAB #: A5G200131-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/18/95
TIME SAMPLED: 15:00
DATE RECEIVED: 7/20/95

- GC Semi-Volatiles - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Dimethoate	ND	0.50	SW846 8141	07/24-08/09/95	520500
Disulfoton	ND	0.50	SW846 8141	07/24-08/09/95	520500
Famphur	ND	0.50	SW846 8141	07/24-08/09/95	520500
Methyl parathion	ND	0.50	SW846 8141	07/24-08/09/95	520500
Parathion	ND	0.50	SW846 8141	07/24-08/09/95	520500
Phorate	ND	0.50	SW846 8141	07/24-08/09/95	520500
Tetraethyldithiopyrophosphate	ND	0.50	SW846 8141	07/24-08/09/95	520500
O,O,O-Triethylphosphorothioate	ND	0.50	SW846 8141	07/24-08/09/95	520500

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Triphenyl phosphate	49	(38 - 146)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

PESTICIDE/PCB SAMPLE DATA

GERAGHTY & MILLER

FMGWMW6S

WO #: C09PD101
LAB #: A5G200131-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/18/95
TIME SAMPLED: 10:30
DATE RECEIVED: 7/20/95

GC Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Aldrin	ND	0.050	SW846 8080	07/24-08/14/95	5205109
Aroclor 1016	ND	0.50	SW846 8080	07/24-08/14/95	5205109
Aroclor 1221	ND	0.50	SW846 8080	07/24-08/14/95	5205109
Aroclor 1232	ND	0.50	SW846 8080	07/24-08/14/95	5205109
Aroclor 1242	ND	0.50	SW846 8080	07/24-08/14/95	5205109
Aroclor 1248	ND	0.50	SW846 8080	07/24-08/14/95	5205109
Aroclor 1254	ND	1.0	SW846 8080	07/24-08/14/95	5205109
Aroclor 1260	ND	1.0	SW846 8080	07/24-08/14/95	5205109
alpha-BHC	ND	0.050	SW846 8080	07/24-08/14/95	5205109
beta-BHC	ND	0.050	SW846 8080	07/24-08/14/95	5205109
delta-BHC	ND	0.050	SW846 8080	07/24-08/14/95	5205109
gamma-BHC (Lindane)	ND	0.050	SW846 8080	07/24-08/14/95	5205109
Chlordane (technical)	ND	0.50	SW846 8080	07/24-08/14/95	5205109
4,4'-DDD	ND	0.10	SW846 8080	07/24-08/14/95	5205109
4,4'-DDE	ND	0.10	SW846 8080	07/24-08/14/95	5205109
4,4'-DDT	ND	0.10	SW846 8080	07/24-08/14/95	5205109
Dieldrin	ND	0.10	SW846 8080	07/24-08/14/95	5205109
Endosulfan I	ND	0.050	SW846 8080	07/24-08/14/95	5205109
Endosulfan II	ND	0.10	SW846 8080	07/24-08/14/95	5205109
Endosulfan sulfate	ND	0.10	SW846 8080	07/24-08/14/95	5205109
Endrin	ND	0.10	SW846 8080	07/24-08/14/95	5205109
Endrin aldehyde	ND	0.10	SW846 8080	07/24-08/14/95	5205109
Heptachlor	ND	0.050	SW846 8080	07/24-08/14/95	5205109

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Tetrachloro-m-xylene	88	(14 - 155)
Dibutylchlorendate	115	(10 - 155)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW6S

WO #: C09PD101
LAB #: A5G200131-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/18/95
TIME SAMPLED: 10:30
DATE RECEIVED: 7/20/95

- GC Semi-Volatiles -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Heptachlor epoxide	ND	0.050	SW846 8080	07/24-08/14/95	520510S
Isodrin	ND	0.050	SW846 8080	07/24-08/14/95	520510S
Kepone	ND	1.0	SW846 8080	07/24-08/14/95	520510S
Methoxychlor	ND	0.50	SW846 8080	07/24-08/14/95	520510S
Toxaphene	ND	1.0	SW846 8080	07/24-08/14/95	520510S

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Tetrachloro-m-xylene	88	(14 - 155)
Dibutylchlorendate	115	(10 - 155)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW6D

WO #: C09PC101
LAB #: ASG200131-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/18/95
TIME SAMPLED: 15:00
DATE RECEIVED: 7/20/95

- GC Semi-Volatiles - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Aldrin	ND	0.050	SW846 8080	07/24-08/14/95	520510
Aroclor 1016	ND	0.50	SW846 8080	07/24-08/14/95	520510
Aroclor 1221	ND	0.50	SW846 8080	07/24-08/14/95	520510
Aroclor 1232	ND	0.50	SW846 8080	07/24-08/14/95	520510
Aroclor 1242	ND	0.50	SW846 8080	07/24-08/14/95	520510
Aroclor 1248	ND	0.50	SW846 8080	07/24-08/14/95	520510
Aroclor 1254	ND	1.0	SW846 8080	07/24-08/14/95	520510
Aroclor 1260	ND	1.0	SW846 8080	07/24-08/14/95	520510
alpha-BHC	ND	0.050	SW846 8080	07/24-08/14/95	520510
beta-BHC	ND	0.050	SW846 8080	07/24-08/14/95	520510
delta-BHC	ND	0.050	SW846 8080	07/24-08/14/95	520510
gamma-BHC (Lindane)	ND	0.050	SW846 8080	07/24-08/14/95	520510
Chlordane (technical)	ND	0.50	SW846 8080	07/24-08/14/95	520510
4,4'-DDD	ND	0.10	SW846 8080	07/24-08/14/95	520510
4,4'-DDE	ND	0.10	SW846 8080	07/24-08/14/95	520510
4,4'-DDT	ND	0.10	SW846 8080	07/24-08/14/95	520510
Dieldrin	ND	0.10	SW846 8080	07/24-08/14/95	520510
Endosulfan I	ND	0.050	SW846 8080	07/24-08/14/95	520510
Endosulfan II	ND	0.10	SW846 8080	07/24-08/14/95	520510
Endosulfan sulfate	ND	0.10	SW846 8080	07/24-08/14/95	520510
Endrin	ND	0.10	SW846 8080	07/24-08/14/95	520510
Endrin aldehyde	ND	0.10	SW846 8080	07/24-08/14/95	520510
Heptachlor	ND	0.050	SW846 8080	07/24-08/14/95	520510

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Tetrachloro-m-xylene	86	(14 - 155)
Dibutylchlorendate	111	(10 - 155)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW6D

WO #: C09PC101
LAB #: A5G200131-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/18/95
TIME SAMPLED: 15:00
DATE RECEIVED: 7/20/95

- GC Semi-Volatiles -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Heptachlor epoxide	ND	0.050	SW846 8080	07/24-08/14/95	5205109
Isodrin	ND	0.050	SW846 8080	07/24-08/14/95	5205109
Kepone	ND	1.0	SW846 8080	07/24-08/14/95	5205109
Methoxychlor	ND	0.50	SW846 8080	07/24-08/14/95	5205109
Toxaphene	ND	1.0	SW846 8080	07/24-08/14/95	5205109

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Tetrachloro-m-xylene	86	(14 - 155)
Dibutylchlorendate	111	(10 - 155)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

HERBICIDE SAMPLE DATA

GERAGHTY & MILLER

FMGWMW6S

WO #: C09PD103
LAB #: A5G200131-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/18/95
DATE RECEIVED: 7/20/95

- GC Semi-Volatiles -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
2,4-D	ND	0.50	SW846 8150A	07/25-07/28/95	5206083
2,4,5-TP (Silvex)	ND	0.20	SW846 8150A	07/25-07/28/95	5206083
2,4,5-T	ND	0.10	SW846 8150A	07/25-07/28/95	5206083
Dinoseb	ND	1.0	SW846 8150A	07/25-07/28/95	5206083

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2,4-Dichlorophenylacetic acid	69	(50 - 150)

'OTE:
AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW6D

WO #: C09PC103
LAB #: A5G200131-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/18/95
DATE RECEIVED: 7/20/95

- GC Semi-Volatiles -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
2,4-D	ND	0.50	SW846 8150A	07/25-07/28/95	5206083
2,4,5-TP (Silvex)	ND	0.20	SW846 8150A	07/25-07/28/95	5206083
2,4,5-T	ND	0.10	SW846 8150A	07/25-07/28/95	5206083
Dinoseb	ND	1.0	SW846 8150A	07/25-07/28/95	5206083

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2,4-Dichlorophenylacetic acid	58	(50 - 150)

OTE:
AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

WET CHEMISTRY SAMPLE DATA

GERAGHTY & MILLER

FMGWMW6D

WO #: C09PC
LAB #: A5G200131-001
MATRIX: WATER

DATE SAMPLED: 7/18/95
DATE RECEIVED: 7/20/95

- - - - - - - - - - - - - - - - - - INORGANIC ANALYTICAL REPORT - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Fluoride (Colorimetric, Ion Selective Electrode)	7.1	2.4	mg/L	MCAWW 340.2	8/09/95	5222021
Sulfide	ND	0.50	mg/L	MCAWW 376.1	7/24/95	5206011
Total cyanide	ND	5.0	ug/L	SW846 9012	7/28- 7/29/95	5209037

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW6S

WO #: C09PD
LAB #: A5G200131-002
MATRIX: WATER

DATE SAMPLED: 7/18/95
DATE RECEIVED: 7/20/95

- - - - - - - - - - - - - - - - - - INORGANIC ANALYTICAL REPORT - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Fluoride (Colorimetric, Ion Selective Electrode)	1.2	1.2	mg/L	MCAWW 340.2	8/09/95	5222021
Sulfide	ND	0.50	mg/L	MCAWW 376.1	7/24/95	5206011
Total cyanide	ND	5.0	ug/L	SW846 9012	7/31- 8/01/95	5212025

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

INORGANIC SAMPLE DATA

GERAGHTY & MILLER

FMGWMW6D

WO #: C09PC
LAB #: A5G200131-001
MATRIX: WATER

DATE SAMPLED: 7/18/95
TIME SAMPLED: 15:00
DATE RECEIVED: 7/20/95

- - - - - - - - - - - - - - - - - - REQUESTED METALS - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Silver	ND	10.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Barium	374	200	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Beryllium	ND	5.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Cadmium	ND	5.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Cobalt	ND	50.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Chromium	50.3	10.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Copper	61.4	25.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Nickel	58.9	40.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Antimony	ND	60.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Tin	ND	100	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Vanadium	66.4	50.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Zinc	200	50.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Arsenic	21.0	10.0	ug/L	SW846 7060	8/03- 8/07/95	5215051
Lead	50.2	6.0	ug/L	SW846 7421	8/03- 8/07/95	5215051
Mercury	ND	0.20	ug/L	SW846 7470	8/03- 8/05/95	5215051
Selenium	ND W	5.0	ug/L	SW846 7740	8/09- 8/11/95	5220109
Thallium	ND W	10.0	ug/L	SW846 7841	8/03- 8/07/95	5215051

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
W - POST DIGESTION SPIKE RECOVERY FELL BETWEEN 40 - 85% WHILE SAMPLE RESULT WAS LESS THAN ONE-HALF THE REPORTING LIMIT.

GERAGHTY & MILLER

FMGWMW6S

WO #: C09PD
LAB #: A5G200131-002
MATRIX: WATER

DATE SAMPLED: 7/18/95
TIME SAMPLED: 10:30
DATE RECEIVED: 7/20/95

- - - - - - - - - - - - - - - - - - - REQUESTED METALS - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Silver	ND	10.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Barium	**242**	**200**	**ug/L**	**SW846 6010A**	**8/03- 9/13/95**	**5215051**
Beryllium	ND	5.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Cadmium	ND	5.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Cobalt	ND	50.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Chromium	**19.5**	**10.0**	**ug/L**	**SW846 6010A**	**8/03- 9/13/95**	**5215051**
Copper	ND	25.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Nickel	ND	40.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Antimony	ND	60.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Tin	ND	100	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Vanadium	ND	50.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Zinc	**88.6**	**50.0**	**ug/L**	**SW846 6010A**	**8/03- 9/13/95**	**5215051**
Arsenic	**14.3**	**10.0**	**ug/L**	**SW846 7060**	**8/03- 8/07/95**	**5215051**
Lead	**19.4**	**3.0**	**ug/L**	**SW846 7421**	**8/03- 8/07/95**	**5215051**
Mercury	ND	0.20	ug/L	SW846 7470	8/03- 8/05/95	5215051
Selenium	ND W	5.0	ug/L	SW846 7740	8/09- 8/11/95	5220109
Thallium	ND W	10.0	ug/L	SW846 7841	8/03- 8/07/95	5215051

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
W - POST DIGESTION SPIKE RECOVERY FELL BETWEEN 40 - 85% WHILE SAMPLE RESULT WAS LESS THAN ONE-HALF THE REPORTING LIMIT.

GERAGHTY & MILLER, INC.
Environmental Services
Dem|j Company

Laboratory Task Order No._____

CHAIN-OF-CUSTODY RECORD

Page___ of 2

Project Number 1N0144.109

Project Location Federated Metals, Hammond

Laboratory Quanterra - North Canton

Sampler(s)/Affiliation Jamie Yater / G+M

SAMPLE BOTTLE / CONTAINER DESCRIPTION

SAMPLE IDENTITY	Code	Date/Time Sampled	Lab ID	VOC ~~8260~~ 8240 HCl TH 7-31-95 3 40ml vials	BNA 8270 2 L glass	Pest/PCB 8080 2 L glass	O-P-Pest 8140 2 L glass	Herbs 8150 2 L glass	T. Metals plastic HNO3 L glass	Dissolved Metals HNO3 L plastic	CN NaOH 250ml	Sulfide NaOH + Zinc Ace 1 L plastic	TOTAL
FMGWMW6D	L	7/18/95 3P		3	2	2	2	2	1	1	1	1	15
FMGWMW6S	L	7/18/95 1030A		3	2	2	2	2	1	1	1	1	15
TRIP BLANK				1									1

Sample Code: L = Liquid; S = Solid; A = Air

Total No. of Bottles/Containers 31

Relinquished by: Jamie Yater	Organization: G+M	Date 7/19/95	Time 8A	Seal Intact? Yes No N/A
Received by: S. Hecker	Organization: QES	Date 7/20/95	Time 12:30	
Relinquished by:	Organization:	Date / /	Time	Seal Intact? Yes No N/A
Received by:	Organization:	Date / /	Time	

Special Instructions/Remarks: See Table 7-1 of Fed. Metals QAPP for Prep & Analysis SOPs

1474

Delivery Method: ☐ In Person ☒ Common Carrier Fed X (SPECIFY) ☐ Lab Courier ☐ Other _____ (SPECIFY)

GERAGHTY & MILLER, INC.
Environmental Services
emij Company

Laboratory Task Order No._____

CHAIN-OF-CUSTODY RECORD

Project Number IN0144.109

Project Location Federated Metals - Hammond

Laboratory Quanterra - North Canton

Sampler(s)/Affiliation Jamie Yater / G&M

SAMPLE BOTTLE / CONTAINER DESCRIPTION

SAMPLE IDENTITY	Code	Date/Time Sampled	Lab ID	Flouride 250 ml									TOTAL
FMGWMW6D	L	7/18/95 3P		1									1
FMGWMW6S	L	7/18/95 1030A		1									1

Sample Code: L = Liquid; S = Solid; A = Air

Total No. of Bottles/Containers 2

Relinquished by: Jamie Yater	Organization: G&M	Date 7/19/95 Time 8A	Seal Intact? Yes No N/A
Received by: D. Becker	Organization: QES	Date 7/20/95 Time 12:30	
Relinquished by:	Organization:	Date / / Time	Seal Intact? Yes No N/A
Received by:	Organization:	Date / / Time	

Special Instructions/Remarks: See Table 7-1 of Fed Metals QAPP for Prep & Analysis SOPs

Delivery Method: ☐ In Person ☒ Common Carrier Fed X (SPECIFY) ☐ Lab Courier ☐ Other _____ (SPECIFY)

1475

GW
7-8-95

Quanterra
Environmental Services

Quanterra Incorporated
4101 Shuffel Drive, NW
North Canton, Ohio 44720

216 497-9396 Telephone
216 497-0772 Fax

RECEIVED
OCT 11 1995
GERAGHTY & MILLER, INC.
INDIANAPOLIS, INDIANA

ANALYTICAL REPORT

PROJECT NO. IN0144.109

FEDERATED METALS/HAMMOND, IN

Tim Northam

GERAGHTY & MILLER

QUANTERRA INCORPORATED

Thomas M. Himes

Thomas M. Himes
Project Manager

October 10, 1995

TABLE OF CONTENTS

Case Narrative

Sample Summary

Method Reference

GC/MS Volatile QC Summary Data

GC/MS Volatile Sample Data

GC/MS Volatile Standard Data

GC/MS Volatile Raw QC Data

GC/MS Semivolatile QC Summary Data

GC/MS Semivolatile Sample Data

GC/MS Semivolatile Standard Data

GC/MS Semivolatile Raw QC Data

Organophosphorus Pesticide QC Summary Data

Organophosphorus Pesticide Sample Data

Organophosphorus Initial Calibration Data

Organophosphorus Continuing Calibration Data

Organophosphorus Pesticide Raw QC Data

Pesticide/PCB QC Summary Data

Pesticide/PCB Sample Data

Pesticide/PCB Initial Calibration Data

TABLE OF CONTENTS (CONT'D)

Pesticide/PCB Continuing Calibration Data

Pesticide/PCB Raw QC Data

Herbicide QC Summary Data

Herbicide Sample Data

Herbicide Initial Calibration Data

Herbicide Continuing Calibration Data

Herbicide Raw QC Data

Inorganic QC Summary Data

Inorganic Sample Data

Inorganic Calibration Data

Inorganic Instrument Print-Out

Inorganic Prep Logs

Wet Chemistry QC Data

Wet Chemistry Sample Data

Wet Chemistry Log Sheets

Organic Instrument Log Sheets

Organic Extraction Log Sheets

Internal Chain-of-Custody

Chain-of-Custody

CASE NARRATIVE

CASE NARRATIVE

The following report contains the analytical results for four water samples and one quality control sample submitted to Quanterra-North Canton by Geraghty & Miller from the Federated Metals/Hammond, IN Site, project number IN0144.109. The samples were received August 3, 1995, according to documented sample acceptance procedures.

Quanterra-North Canton utilizes only USEPA approved methods and instrumentation in all analytical work. The samples presented in this report were analyzed for the parameters listed on the method reference page in accordance with the methods indicated.

Fluoride analyses were performed by Quanterra-Tampa.

The results included in this report have been reviewed for compliance with the laboratory QA/QC plan. All data have been found to be compliant with the exception of those items noted.

The Volatile Organic Compounds Standard V0701393 for Isobutanol were manually integrated due to poor automated integration.

The Volatile Organic Compounds Check 92 and Vblank associated with batch number 5229016 have been provided to represent instrument quality and should not be considered as control samples for this report.

Samples A5H030125-002 and -003 requested for Volatile Organic Compounds analyses were found to have a pH >2. All samples submitted for Volatile Organic Compounds were checked for pH prior to analysis.

The Pesticide/PCB Compounds MS/MSD associated with batch number 5220024 shows the percent recoveries for Lindane and Endrin to be outside the acceptable limits, however the RPD values are within the acceptable limits. Since matrix effects may bias percent recovery, the laboratory performs corrective action if the precision (RPD) criteria of the MS/MSD is not met.

The AD/RPD for the Selenium MS/MSD performed on sample A5H030125-004 associated with batch 5229008 was outside laboratory acceptance criteria. Upon, re-extraction and re-analysis, the AD/RPD was within acceptance criteria.

CASE NARRATIVE (CONT'D)

The AD/RPD for the Total Iron and Total Manganese MS/MSD performed on sample A5H030125-004 associated with batch number 5229008 was outside laboratory acceptance criteria. Remaining elements spiked from the same spiking solution and from the same prep were within laboratory acceptance criteria. Matrix effect was demonstrated and associated results were accepted.

The Fluoride MS/MSD could not be performed due to insufficient sample volume.

SAMPLE SUMMARY

SAMPLE SUMMARY

The analytical results of the samples listed below are presented on the following pages.

WO #	LABORATORY ID	SAMPLE IDENTIFICATION	DATE/TIME SAMPLED	
C0H0E	A5H030125-001	FMGWMW60	8/02/95	8:00
C0H0K	A5H030125-002	FMGWMW9S	8/02/95	10:00
C0H0P	A5H030125-003	FMGWMW61	8/02/95	10:00
C0H12	A5H030125-004	FMGWMW9D (MS/MSD)	8/02/95	14:00
C0H13	A5H030125-005	TRIP BLANK	8/02/95	

METHOD REFERENCE

ANALYTICAL METHODS SUMMARY

A5H030125

Parameters	Methods
Organophosphorous Compounds by GC	SW846 8141
Organochlorine Pesticides and PCB's	SW846 8080
Chlorinated Herbicides by GC	SW846 8150A
Volatile Organics by GC/MS	SW846 8240A
Semivolatile Organic Compounds by GC/MS	SW846 8270A
Fluoride (Potentiometric, Ion Selective Electrode)	MCAWW 340.2
Sulfide	MCAWW 376.1
Inductively Coupled Plasma (ICP) Metals	SW846 6010A
Dissolved ICP Metals	SW846 6010A
Arsenic (AA, Furnace Technique)	SW846 7060
Dissolved Arsenic (GFAA)	SW846 7060
Lead (AA, Furnace Technique)	SW846 7421
Dissolved Lead (GFAA)	SW846 7421
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470
Dissolved Mercury (CVAA)	SW846 7470
Selenium (AA, Furnace Technique)	SW846 7740
Dissolved Selenium (GFAA)	SW846 7740
Thallium (AA, Furnace Technique)	SW846 7841
Dissolved Thallium (GFAA)	SW846 7841
Total Cyanide	SW846 9012

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and Final Update I (7/92).

GC/MS VOLATILE SAMPLE DATA

GERAGHTY & MILLER

FMGWMW60

WO #: C0H0E104
LAB #: A5H030125-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 8:00
DATE RECEIVED: 8/03/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Acetone	ND	50	SW846 8240A	08/07/95	5226065
Acetonitrile	ND	50	SW846 8240A	08/07/95	5226065
Acrolein	ND	100	SW846 8240A	08/07/95	5226065
Acrylonitrile	ND	50	SW846 8240A	08/07/95	5226065
Benzene	ND	5.0	SW846 8240A	08/07/95	5226065
Bromodichloromethane	ND	5.0	SW846 8240A	08/07/95	5226065
Bromoform	ND	10	SW846 8240A	08/07/95	5226065
Bromomethane	ND	10	SW846 8240A	08/07/95	5226065
Carbon disulfide	ND	5.0	SW846 8240A	08/07/95	5226065
Carbon tetrachloride	ND	10	SW846 8240A	08/07/95	5226065
Chlorobenzene	ND	5.0	SW846 8240A	08/07/95	5226065
Chloroprene	ND	5.0	SW846 8240A	08/07/95	5226065
Dibromochloromethane	ND	5.0	SW846 8240A	08/07/95	5226065
1,2-Dibromo-3-chloro-propane	ND	10	SW846 8240A	08/07/95	5226065
Chloroethane	ND	10	SW846 8240A	08/07/95	5226065
Chloroform	ND	5.0	SW846 8240A	08/07/95	5226065
Chloromethane	ND	10	SW846 8240A	08/07/95	5226065
Allyl chloride	ND	5.0	SW846 8240A	08/07/95	5226065
Dibromomethane	ND	5.0	SW846 8240A	08/07/95	5226065
trans-1,4-Dichloro-2-butene	ND	5.0	SW846 8240A	08/07/95	5226065
Dichlorodifluoromethane	ND	20	SW846 8240A	08/07/95	5226065
1,1-Dichloroethane	ND	5.0	SW846 8240A	08/07/95	5226065
1,2-Dichloroethane	ND	5.0	SW846 8240A	08/07/95	5226065

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	102	(76 - 114)
Toluene-d8	102	(88 - 110)
Bromofluorobenzene	97	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW60

WO #: C0H0E104
LAB #: A5H030125-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 8:00
DATE RECEIVED: 8/03/95

GC/MS Volatiles

2 OF 3

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,1-Dichloroethene	ND	5.0	SW846 8240A	08/07/95	522606
1,2-Dichloroethene (total)	ND	5.0	SW846 8240A	08/07/95	522606
1,2-Dichloropropane	ND	5.0	SW846 8240A	08/07/95	522606
cis-1,3-Dichloropropene	ND	5.0	SW846 8240A	08/07/95	522606
trans-1,3-Dichloropropene	ND	5.0	SW846 8240A	08/07/95	522606
1,4-Dioxane	ND	1,000	SW846 8240A	08/07/95	522606
Ethylbenzene	ND	5.0	SW846 8240A	08/07/95	522606
Ethyl methacrylate	ND	5.0	SW846 8240A	08/07/95	522606
* Trichlorofluoromethane	ND	5.0	SW846 8240A	08/07/95	522606
2-Hexanone	ND	50	SW846 8240A	08/07/95	522606
Iodomethane	ND	5.0	SW846 8240A	08/07/95	522606
Isobutyl alcohol	ND	500	SW846 8240A	08/07/95	522606
Methacrylonitrile	ND	20	SW846 8240A	08/07/95	5226065
Methylene chloride	ND	5.0	SW846 8240A	08/07/95	5226065
Methyl methacrylate	ND	5.0	SW846 8240A	08/07/95	5226065
Propionitrile	ND	20	SW846 8240A	08/07/95	5226065
Styrene	ND	5.0	SW846 8240A	08/07/95	5226065
1,1,1,2-Tetrachloroethane	ND	5.0	SW846 8240A	08/07/95	5226065
1,1,2,2-Tetrachloroethane	ND	5.0	SW846 8240A	08/07/95	5226065
Tetrachloroethene	ND	5.0	SW846 8240A	08/07/95	5226065
Toluene	ND	5.0	SW846 8240A	08/07/95	5226065
1,1,1-Trichloroethane	ND	5.0	SW846 8240A	08/07/95	5226065
1,1,2-Trichloroethane	ND	5.0	SW846 8240A	08/07/95	5226065

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	102	(76 - 114)
Toluene-d8	102	(88 - 110)
Bromofluorobenzene	97	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW60

WO #: C0H0E104
LAB #: A5H030125-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 8:00
DATE RECEIVED: 8/03/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Trichloroethene	ND	5.0	SW846 8240A	08/07/95	5226065
1,2,3-Trichloropropane	ND	5.0	SW846 8240A	08/07/95	5226065
Vinyl acetate	ND	50	SW846 8240A	08/07/95	5226065
Vinyl chloride	ND	10	SW846 8240A	08/07/95	5226065
Xylenes (total)	ND	5.0	SW846 8240A	08/07/95	5226065
1,2-Dibromoethane (EDB)	ND	5.0	SW846 8240A	08/07/95	5226065
2-Butanone (MEK)	ND	50	SW846 8240A	08/07/95	5226065
4-Methyl-2-pentanone (MIBK)	ND	50	SW846 8240A	08/07/95	5226065

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	102	(76 - 114)
Toluene-d8	102	(88 - 110)
Bromofluorobenzene	97	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW60

WO #: C0H0E104
LAB #: A5H030125-001
MATRIX: WATER

DATE SAMPLED: 8/02/95
DATE RECEIVED: 8/03/95
DATE EXTRACTED: 8/07/95
DATE ANALYZED: 8/07/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5226065

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5226065

GERAGHTY & MILLER

FMGWMW9S

WO #: C0H0K104
LAB #: A5H030125-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Acetone	ND	50	SW846 8240A	08/07/95	5226065
Acetonitrile	ND	50	SW846 8240A	08/07/95	5226065
Acrolein	ND	100	SW846 8240A	08/07/95	5226065
Acrylonitrile	ND	50	SW846 8240A	08/07/95	5226065
Benzene	ND	5.0	SW846 8240A	08/07/95	5226065
Bromodichloromethane	ND	5.0	SW846 8240A	08/07/95	5226065
Bromoform	ND	10	SW846 8240A	08/07/95	5226065
Bromomethane	ND	10	SW846 8240A	08/07/95	5226065
Carbon disulfide	ND	5.0	SW846 8240A	08/07/95	5226065
Carbon tetrachloride	ND	10	SW846 8240A	08/07/95	5226065
Chlorobenzene	ND	5.0	SW846 8240A	08/07/95	5226065
Chloroprene	ND	5.0	SW846 8240A	08/07/95	5226065
Dibromochloromethane	ND	5.0	SW846 8240A	08/07/95	5226065
1,2-Dibromo-3-chloro-propane	ND	10	SW846 8240A	08/07/95	5226065
Chloroethane	ND	10	SW846 8240A	08/07/95	5226065
Chloroform	ND	5.0	SW846 8240A	08/07/95	5226065
Chloromethane	ND	10	SW846 8240A	08/07/95	5226065
Allyl chloride	ND	5.0	SW846 8240A	08/07/95	5226065
Dibromomethane	ND	5.0	SW846 8240A	08/07/95	5226065
trans-1,4-Dichloro-2-butene	ND	5.0	SW846 8240A	08/07/95	5226065
Dichlorodifluoromethane	ND	20	SW846 8240A	08/07/95	5226065
1,1-Dichloroethane	ND	5.0	SW846 8240A	08/07/95	5226065
1,2-Dichloroethane	ND	5.0	SW846 8240A	08/07/95	5226065

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	103	(76 - 114)
Toluene-d8	101	(88 - 110)
Bromofluorobenzene	97	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW9S

WO #: C0H0K104
LAB #: A5H030125-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,1-Dichloroethene	ND	5.0	SW846 8240A	08/07/95	5226065
1,2-Dichloroethene (total)	ND	5.0	SW846 8240A	08/07/95	5226065
1,2-Dichloropropane	ND	5.0	SW846 8240A	08/07/95	5226065
cis-1,3-Dichloropropene	ND	5.0	SW846 8240A	08/07/95	5226065
trans-1,3-Dichloropropene	ND	5.0	SW846 8240A	08/07/95	5226065
1,4-Dioxane	ND	1,000	SW846 8240A	08/07/95	5226065
Ethylbenzene	ND	5.0	SW846 8240A	08/07/95	5226065
Ethyl methacrylate	ND	5.0	SW846 8240A	08/07/95	5226065
Trichlorofluoromethane	ND	5.0	SW846 8240A	08/07/95	5226065
2-Hexanone	ND	50	SW846 8240A	08/07/95	5226065
Iodomethane	ND	5.0	SW846 8240A	08/07/95	5226065
Isobutyl alcohol	ND	500	SW846 8240A	08/07/95	5226065
Methacrylonitrile	ND	20	SW846 8240A	08/07/95	5226065
Methylene chloride	ND	5.0	SW846 8240A	08/07/95	5226065
Methyl methacrylate	ND	5.0	SW846 8240A	08/07/95	5226065
Propionitrile	ND	20	SW846 8240A	08/07/95	5226065
Styrene	ND	5.0	SW846 8240A	08/07/95	5226065
1,1,1,2-Tetrachloroethane	ND	5.0	SW846 8240A	08/07/95	5226065
1,1,2,2-Tetrachloroethane	ND	5.0	SW846 8240A	08/07/95	5226065
Tetrachloroethene	ND	5.0	SW846 8240A	08/07/95	5226065
Toluene	ND	5.0	SW846 8240A	08/07/95	5226065
1,1,1-Trichloroethane	ND	5.0	SW846 8240A	08/07/95	5226065
1,1,2-Trichloroethane	ND	5.0	SW846 8240A	08/07/95	5226065

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	103	(76 - 114)
Toluene-d8	101	(88 - 110)
Bromofluorobenzene	97	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW9S

WO #: C0H0K104
LAB #: A5H030125-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

- GC/MS Volatiles - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Trichloroethene	ND	5.0	SW846 8240A	08/07/95	522606
1,2,3-Trichloropropane	ND	5.0	SW846 8240A	08/07/95	522606
Vinyl acetate	ND	50	SW846 8240A	08/07/95	522606
Vinyl chloride	ND	10	SW846 8240A	08/07/95	522606
Xylenes (total)	ND	5.0	SW846 8240A	08/07/95	522606
1,2-Dibromoethane (EDB)	ND	5.0	SW846 8240A	08/07/95	522606
2-Butanone (MEK)	ND	50	SW846 8240A	08/07/95	522606
4-Methyl-2-pentanone (MIBK)	ND	50	SW846 8240A	08/07/95	522606

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	103	(76 - 114)
Toluene-d8	101	(88 - 110)
Bromofluorobenzene	97	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW9S

WO #: C0H0K104
LAB #: A5H030125-002
MATRIX: WATER

DATE SAMPLED: 8/02/95
DATE RECEIVED: 8/03/95
DATE EXTRACTED: 8/07/95
DATE ANALYZED: 8/07/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5226065

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5226065

GERAGHTY & MILLER

FMGWMW61

WO #: C0H0P104
LAB #: A5H030125-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Bromomethane	ND	10	SW846 8240A	08/07/95	5226065
trans-1,3-Dichloropropene	ND	5.0	SW846 8240A	08/07/95	5226065
Acetone	ND	50	SW846 8240A	08/07/95	5226065
Acetonitrile	ND	50	SW846 8240A	08/07/95	5226065
Acrolein	ND	100	SW846 8240A	08/07/95	5226065
Acrylonitrile	ND	50	SW846 8240A	08/07/95	5226065
Benzene	ND	5.0	SW846 8240A	08/07/95	5226065
Bromodichloromethane	ND	5.0	SW846 8240A	08/07/95	5226065
Bromoform	ND	10	SW846 8240A	08/07/95	5226065
Carbon disulfide	ND	5.0	SW846 8240A	08/07/95	5226065
Carbon tetrachloride	ND	10	SW846 8240A	08/07/95	5226065
Chlorobenzene	ND	5.0	SW846 8240A	08/07/95	5226065
Chloroprene	ND	5.0	SW846 8240A	08/07/95	5226065
Dibromochloromethane	ND	5.0	SW846 8240A	08/07/95	5226065
1,2-Dibromo-3-chloro-propane	ND	10	SW846 8240A	08/07/95	5226065
Chloroethane	ND	10	SW846 8240A	08/07/95	5226065
Chloroform	ND	5.0	SW846 8240A	08/07/95	5226065
Chloromethane	ND	10	SW846 8240A	08/07/95	5226065
Allyl chloride	ND	5.0	SW846 8240A	08/07/95	5226065
Dibromomethane	ND	5.0	SW846 8240A	08/07/95	5226065
trans-1,4-Dichloro-2-butene	ND	5.0	SW846 8240A	08/07/95	5226065
Dichlorodifluoromethane	ND	20	SW846 8240A	08/07/95	5226065
1,1-Dichloroethane	ND	5.0	SW846 8240A	08/07/95	5226065

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	102	(76 - 114)
Toluene-d8	102	(88 - 110)
Bromofluorobenzene	96	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW61

WO #: C0H0P104
LAB #: A5H030125-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

- GC/MS Volatiles -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,2-Dichloroethane	ND	5.0	SW846 8240A	08/07/95	522606
1,1-Dichloroethene	ND	5.0	SW846 8240A	08/07/95	522606
1,2-Dichloroethene (total)	ND	5.0	SW846 8240A	08/07/95	522606
1,2-Dichloropropane	ND	5.0	SW846 8240A	08/07/95	522606
cis-1,3-Dichloropropene	ND	5.0	SW846 8240A	08/07/95	522606
1,4-Dioxane	ND	1,000	SW846 8240A	08/07/95	522606
Ethylbenzene	ND	5.0	SW846 8240A	08/07/95	522606
Ethyl methacrylate	ND	5.0	SW846 8240A	08/07/95	522606
Trichlorofluoromethane	ND	5.0	SW846 8240A	08/07/95	522606
2-Hexanone	ND	50	SW846 8240A	08/07/95	522606
Iodomethane	ND	5.0	SW846 8240A	08/07/95	522606
Isobutyl alcohol	ND	500	SW846 8240A	08/07/95	522606
Methacrylonitrile	ND	20	SW846 8240A	08/07/95	522606
Methylene chloride	ND	5.0	SW846 8240A	08/07/95	522606
Methyl methacrylate	ND	5.0	SW846 8240A	08/07/95	522606
Propionitrile	ND	20	SW846 8240A	08/07/95	522606
Styrene	ND	5.0	SW846 8240A	08/07/95	522606
1,1,1,2-Tetrachloroethane	ND	5.0	SW846 8240A	08/07/95	522606
1,1,2,2-Tetrachloroethane	ND	5.0	SW846 8240A	08/07/95	522606
Tetrachloroethene	ND	5.0	SW846 8240A	08/07/95	522606
Toluene	ND	5.0	SW846 8240A	08/07/95	522606
1,1,1-Trichloroethane	ND	5.0	SW846 8240A	08/07/95	522606
1,1,2-Trichloroethane	ND	5.0	SW846 8240A	08/07/95	522606

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	102	(76 - 114)
Toluene-d8	102	(88 - 110)
Bromofluorobenzene	96	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW61

WO #: C0H0P104
LAB #: A5H030125-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

- GC/MS Volatiles -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Trichloroethene	ND	5.0	SW846 8240A	08/07/95	522606
1,2,3-Trichloropropane	ND	5.0	SW846 8240A	08/07/95	522606
Vinyl acetate	ND	50	SW846 8240A	08/07/95	522606
Vinyl chloride	ND	10	SW846 8240A	08/07/95	522606
Xylenes (total)	ND	5.0	SW846 8240A	08/07/95	522606
1,2-Dibromoethane (EDB)	ND	5.0	SW846 8240A	08/07/95	522606
2-Butanone (MEK)	ND	50	SW846 8240A	08/07/95	522606
4-Methyl-2-pentanone (MIBK)	ND	50	SW846 8240A	08/07/95	522606

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	102	(76 - 114)
Toluene-d8	102	(88 - 110)
Bromofluorobenzene	96	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW61

WO #: C0H0P104
LAB #: A5H030125-003
MATRIX: WATER

DATE SAMPLED: 8/02/95
DATE RECEIVED: 8/03/95
DATE EXTRACTED: 8/07/95
DATE ANALYZED: 8/07/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5226065

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5226065

GERAGHTY & MILLER

FMGWMW9D (MS/MSD)

WO #: C0H12104
LAB #: A5H030125-004
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 14:00
DATE RECEIVED: 8/03/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Acetone	ND	50	SW846 8240A	08/07/95	522606
Acetonitrile	ND	50	SW846 8240A	08/07/95	522606
Acrolein	ND	100	SW846 8240A	08/07/95	522606
Acrylonitrile	ND	50	SW846 8240A	08/07/95	522606
Benzene	ND	5.0	SW846 8240A	08/07/95	522606
Bromodichloromethane	ND	5.0	SW846 8240A	08/07/95	522606
Bromoform	ND	10	SW846 8240A	08/07/95	522606
Bromomethane	ND	10	SW846 8240A	08/07/95	522606
Carbon disulfide	ND	5.0	SW846 8240A	08/07/95	522606
Carbon tetrachloride	ND	10	SW846 8240A	08/07/95	522606
Chlorobenzene	ND	5.0	SW846 8240A	08/07/95	522606
Chloroprene	ND	5.0	SW846 8240A	08/07/95	522606
Dibromochloromethane	ND	5.0	SW846 8240A	08/07/95	522606
1,2-Dibromo-3-chloro-propane	ND	10	SW846 8240A	08/07/95	522606
Chloroethane	ND	10	SW846 8240A	08/07/95	522606
Chloroform	ND	5.0	SW846 8240A	08/07/95	522606
Chloromethane	ND	10	SW846 8240A	08/07/95	522606
Allyl chloride	ND	5.0	SW846 8240A	08/07/95	522606
Dibromomethane	ND	5.0	SW846 8240A	08/07/95	522606
trans-1,4-Dichloro-2-butene	ND	5.0	SW846 8240A	08/07/95	522606
Dichlorodifluoromethane	ND	20	SW846 8240A	08/07/95	522606
1,1-Dichloroethane	ND	5.0	SW846 8240A	08/07/95	522606
1,2-Dichloroethane	ND	5.0	SW846 8240A	08/07/95	522606

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	103	(76 - 114)
Toluene-d8	102	(88 - 110)
Bromofluorobenzene	98	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW9D (MS/MSD)

WO #: C0H12104
LAB #: A5H030125-004
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 14:00
DATE RECEIVED: 8/03/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,1-Dichloroethene	ND	5.0	SW846 8240A	08/07/95	522606
1,2-Dichloroethene (total)	ND	5.0	SW846 8240A	08/07/95	522606
1,2-Dichloropropane	ND	5.0	SW846 8240A	08/07/95	522606
cis-1,3-Dichloropropene	ND	5.0	SW846 8240A	08/07/95	522606
trans-1,3-Dichloropropene	ND	5.0	SW846 8240A	08/07/95	522606
1,4-Dioxane	ND	1,000	SW846 8240A	08/07/95	522606
Ethylbenzene	ND	5.0	SW846 8240A	08/07/95	522606
Ethyl methacrylate	ND	5.0	SW846 8240A	08/07/95	522606
Trichlorofluoromethane	ND	5.0	SW846 8240A	08/07/95	522606
2-Hexanone	ND	50	SW846 8240A	08/07/95	522606
Iodomethane	ND	5.0	SW846 8240A	08/07/95	522606
Isobutyl alcohol	ND	500	SW846 8240A	08/07/95	522606
Methacrylonitrile	ND	20	SW846 8240A	08/07/95	522606
Methylene chloride	ND	5.0	SW846 8240A	08/07/95	522606
Methyl methacrylate	ND	5.0	SW846 8240A	08/07/95	522606
Propionitrile	ND	20	SW846 8240A	08/07/95	522606
Styrene	ND	5.0	SW846 8240A	08/07/95	522606
1,1,1,2-Tetrachloroethane	ND	5.0	SW846 8240A	08/07/95	522606
1,1,2,2-Tetrachloroethane	ND	5.0	SW846 8240A	08/07/95	522606
Tetrachloroethene	ND	5.0	SW846 8240A	08/07/95	522606
Toluene	ND	5.0	SW846 8240A	08/07/95	522606
1,1,1-Trichloroethane	ND	5.0	SW846 8240A	08/07/95	522606
1,1,2-Trichloroethane	ND	5.0	SW846 8240A	08/07/95	522606

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	103	(76 - 114)
Toluene-d8	102	(88 - 110)
Bromofluorobenzene	98	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW9D (MS/MSD)

WO #: C0H12104
LAB #: A5H030125-004
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 14:00
DATE RECEIVED: 8/03/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Trichloroethene	ND	5.0	SW846 8240A	08/07/95	522606
1,2,3-Trichloropropane	ND	5.0	SW846 8240A	08/07/95	522606
Vinyl acetate	ND	50	SW846 8240A	08/07/95	522606
Vinyl chloride	ND	10	SW846 8240A	08/07/95	522606
Xylenes (total)	ND	5.0	SW846 8240A	08/07/95	522606
1,2-Dibromoethane (EDB)	ND	5.0	SW846 8240A	08/07/95	522606
2-Butanone (MEK)	ND	50	SW846 8240A	08/07/95	522606
4-Methyl-2-pentanone (MIBK)	ND	50	SW846 8240A	08/07/95	522606

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	103	(76 - 114)
Toluene-d8	102	(88 - 110)
Bromofluorobenzene	98	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW9D (MS/MSD)

WO #: C0H12104
LAB #: A5H030125-004
MATRIX: WATER

DATE SAMPLED: 8/02/95
DATE RECEIVED: 8/03/95
DATE EXTRACTED: 8/07/95
DATE ANALYZED: 8/07/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5226065

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5226065

GERAGHTY & MILLER

TRIP BLANK

WO #: C0H13101
LAB #: A5H030125-005
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED:
DATE RECEIVED: 8/03/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Acetone	ND	50	SW846 8240A	08/07/95	522606
Acetonitrile	ND	50	SW846 8240A	08/07/95	522606
Acrolein	ND	100	SW846 8240A	08/07/95	522606
Acrylonitrile	ND	50	SW846 8240A	08/07/95	522606
Benzene	ND	5.0	SW846 8240A	08/07/95	522606
Bromodichloromethane	ND	5.0	SW846 8240A	08/07/95	522606
Bromoform	ND	10	SW846 8240A	08/07/95	522606
Bromomethane	ND	10	SW846 8240A	08/07/95	522606
Carbon disulfide	ND	5.0	SW846 8240A	08/07/95	522606
Carbon tetrachloride	ND	10	SW846 8240A	08/07/95	522606
Chlorobenzene	ND	5.0	SW846 8240A	08/07/95	522606
Chloroprene	ND	5.0	SW846 8240A	08/07/95	522606
Dibromochloromethane	ND	5.0	SW846 8240A	08/07/95	522606
1,2-Dibromo-3-chloro-propane	ND	10	SW846 8240A	08/07/95	522606
Chloroethane	ND	10	SW846 8240A	08/07/95	522606
Chloroform	ND	5.0	SW846 8240A	08/07/95	5226065
Chloromethane	ND	10	SW846 8240A	08/07/95	5226065
Allyl chloride	ND	5.0	SW846 8240A	08/07/95	5226065
Dibromomethane	ND	5.0	SW846 8240A	08/07/95	5226065
trans-1,4-Dichloro-2-butene	ND	5.0	SW846 8240A	08/07/95	5226065
Dichlorodifluoromethane	ND	20	SW846 8240A	08/07/95	5226065
1,1-Dichloroethane	ND	5.0	SW846 8240A	08/07/95	5226065
1,2-Dichloroethane	ND	5.0	SW846 8240A	08/07/95	5226065

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	103	(76 - 114)
Toluene-d8	103	(88 - 110)
Bromofluorobenzene	96	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

TRIP BLANK

WO #: C0H13101
LAB #: A5H030125-005
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED:
DATE RECEIVED: 8/03/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,1-Dichloroethene	ND	5.0	SW846 8240A	08/07/95	5226065
1,2-Dichloroethene (total)	ND	5.0	SW846 8240A	08/07/95	5226065
1,2-Dichloropropane	ND	5.0	SW846 8240A	08/07/95	5226065
cis-1,3-Dichloropropene	ND	5.0	SW846 8240A	08/07/95	5226065
trans-1,3-Dichloropropene	ND	5.0	SW846 8240A	08/07/95	5226065
1,4-Dioxane	ND	1,000	SW846 8240A	08/07/95	5226065
Ethylbenzene	ND	5.0	SW846 8240A	08/07/95	5226065
Ethyl methacrylate	ND	5.0	SW846 8240A	08/07/95	5226065
Trichlorofluoromethane	ND	5.0	SW846 8240A	08/07/95	5226065
2-Hexanone	ND	50	SW846 8240A	08/07/95	5226065
Iodomethane	ND	5.0	SW846 8240A	08/07/95	5226065
Isobutyl alcohol	ND	500	SW846 8240A	08/07/95	5226065
Methacrylonitrile	ND	20	SW846 8240A	08/07/95	5226065
Methylene chloride	ND	5.0	SW846 8240A	08/07/95	5226065
Methyl methacrylate	ND	5.0	SW846 8240A	08/07/95	5226065
Propionitrile	ND	20	SW846 8240A	08/07/95	5226065
Styrene	ND	5.0	SW846 8240A	08/07/95	5226065
1,1,1,2-Tetrachloroethane	ND	5.0	SW846 8240A	08/07/95	5226065
1,1,2,2-Tetrachloroethane	ND	5.0	SW846 8240A	08/07/95	5226065
Tetrachloroethene	ND	5.0	SW846 8240A	08/07/95	5226065
Toluene	ND	5.0	SW846 8240A	08/07/95	5226065
1,1,1-Trichloroethane	ND	5.0	SW846 8240A	08/07/95	5226065
1,1,2-Trichloroethane	ND	5.0	SW846 8240A	08/07/95	5226065

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	103	(76 - 114)
Toluene-d8	103	(88 - 110)
Bromofluorobenzene	96	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

TRIP BLANK

WO #: C0H13101
LAB #: A5H030125-005
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED:
DATE RECEIVED: 8/03/95

- GC/MS Volatiles -

3 OF 3

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Trichloroethene	ND	5.0	SW846 8240A	08/07/95	522606
1,2,3-Trichloropropane	ND	5.0	SW846 8240A	08/07/95	522606
Vinyl acetate	ND	50	SW846 8240A	08/07/95	522606
Vinyl chloride	ND	10	SW846 8240A	08/07/95	522606
Xylenes (total)	ND	5.0	SW846 8240A	08/07/95	522606
1,2-Dibromoethane (EDB)	ND	5.0	SW846 8240A	08/07/95	522606
2-Butanone (MEK)	ND	50	SW846 8240A	08/07/95	522606
4-Methyl-2-pentanone (MIBK)	ND	50	SW846 8240A	08/07/95	522606

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	103	(76 - 114)
Toluene-d8	103	(88 - 110)
Bromofluorobenzene	96	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

TRIP BLANK

WO #: C0H13101
LAB #: A5H030125-005
MATRIX: WATER

DATE SAMPLED: 8/02/95
DATE RECEIVED: 8/03/95
DATE EXTRACTED: 8/07/95
DATE ANALYZED: 8/07/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5226065

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5226065

GC/MS SEMIVOLATILE SAMPLE DATA

GERAGHTY & MILLER

FMGWMW60

WO #: C0H0E105
LAB #: A5H030125-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 8:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
4-Aminobiphenyl	ND	50	SW846 8270A	08/05-08/21/95	521700
p-Dimethylaminoazobenzene	ND	10	SW846 8270A	08/05-08/21/95	521700
7,12-Dimethylbenz(a)-anthracene	ND	20	SW846 8270A	08/05-08/21/95	521700
Hexachloropropene	ND	100	SW846 8270A	08/05-08/21/95	521700
Phenacetin	ND	50	SW846 8270A	08/05-08/21/95	521700
Pronamide	ND	20	SW846 8270A	08/05-08/21/95	521700
a,a-Dimethylphenethylamine	ND	50	SW846 8270A	08/05-08/21/95	521700
Diallate	ND	10	SW846 8270A	08/05-08/21/95	521700
Chlorobenzilate	ND	10	SW846 8270A	08/05-08/21/95	521700
Acenaphthene	ND	10	SW846 8270A	08/05-08/21/95	521700
Acenaphthylene	ND	10	SW846 8270A	08/05-08/21/95	521700
Acetophenone	ND	10	SW846 8270A	08/05-08/21/95	521700
2-Acetylaminofluorene	ND	20	SW846 8270A	08/05-08/21/95	521700
Aniline	ND	10	SW846 8270A	08/05-08/21/95	521700
Anthracene	ND	10	SW846 8270A	08/05-08/21/95	521700
Benzo(a)anthracene	ND	10	SW846 8270A	08/05-08/21/95	521700
Benzo(b)fluoranthene	ND	10	SW846 8270A	08/05-08/21/95	521700
Benzo(k)fluoranthene	ND	10	SW846 8270A	08/05-08/21/95	521700
Benzo(ghi)perylene	ND	10	SW846 8270A	08/05-08/21/95	521700
Benzo(a)pyrene	ND	10	SW846 8270A	08/05-08/21/95	521700
Benzyl alcohol	ND	10	SW846 8270A	08/05-08/21/95	521700

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	63	(36 - 148)
2-Fluorobiphenyl	66	(38 - 106)
Terphenyl-d14	86	(10 - 169)
Phenol-d5	53	(15 - 126)
2-Fluorophenol	40	(17 - 106)
2,4,6-Tribromophenol	92	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW60

WO #: C0H0E105
LAB #: A5H030125-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 8:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
bis(2-Chloroethoxy)methane	ND	10	SW846 8270A	08/05-08/21/95	5217003
bis(2-Chloroethyl) ether	ND	10	SW846 8270A	08/05-08/21/95	5217003
bis(2-Chloro-1-methylethyl) et	ND	10	SW846 8270A	08/05-08/21/95	5217003
bis(2-Ethylhexyl) phthalate	ND	10	SW846 8270A	08/05-08/21/95	5217003
4-Bromophenyl phenyl ether	ND	10	SW846 8270A	08/05-08/21/95	5217003
Butyl benzyl phthalate	ND	10	SW846 8270A	08/05-08/21/95	5217003
4-Chloroaniline	ND	10	SW846 8270A	08/05-08/21/95	5217003
4-Chloro-3-methylphenol	ND	10	SW846 8270A	08/05-08/21/95	5217003
2-Chloronaphthalene	ND	10	SW846 8270A	08/05-08/21/95	5217003
2-Chlorophenol	ND	10	SW846 8270A	08/05-08/21/95	5217003
4-Chlorophenyl phenyl ether	ND	10	SW846 8270A	08/05-08/21/95	5217003
Chrysene	ND	10	SW846 8270A	08/05-08/21/95	5217003
Dibenz(a,h)anthracene	ND	10	SW846 8270A	08/05-08/21/95	5217003
Dibenzofuran	ND	10	SW846 8270A	08/05-08/21/95	5217003
Di-n-butyl phthalate	ND	10	SW846 8270A	08/05-08/21/95	5217003
1,2-Dichlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	5217003
1,3-Dichlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	5217003
1,4-Dichlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	5217003
3,3'-Dichlorobenzidine	ND	10	SW846 8270A	08/05-08/21/95	5217003
2,4-Dichlorophenol	ND	10	SW846 8270A	08/05-08/21/95	5217003
2,6-Dichlorophenol	ND	10	SW846 8270A	08/05-08/21/95	5217003

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	63	(36 - 148)
2-Fluorobiphenyl	66	(38 - 106)
Terphenyl-d14	86	(10 - 169)
Phenol-d5	53	(15 - 126)
2-Fluorophenol	40	(17 - 106)
2,4,6-Tribromophenol	92	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW60

WO #: C0H0E105
LAB #: A5H030125-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 8:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Diethyl phthalate	ND	10	SW846 8270A	08/05-08/21/95	5217003
3,3'-Dimethylbenzidine	ND	20	SW846 8270A	08/05-08/21/95	5217003
2,4-Dimethylphenol	ND	10	SW846 8270A	08/05-08/21/95	5217003
Dimethyl phthalate	ND	10	SW846 8270A	08/05-08/21/95	5217003
Di-n-octyl phthalate	ND	10	SW846 8270A	08/05-08/21/95	5217003
1,3-Dinitrobenzene	ND	10	SW846 8270A	08/05-08/21/95	5217003
4,6-Dinitro-2-methylphenol	ND	50	SW846 8270A	08/05-08/21/95	5217003
2,4-Dinitrophenol	ND	50	SW846 8270A	08/05-08/21/95	5217003
2,4-Dinitrotoluene	ND	10	SW846 8270A	08/05-08/21/95	5217003
2,6-Dinitrotoluene	ND	10	SW846 8270A	08/05-08/21/95	5217003
2-sec-Butyl-4,6-dinitro-phenol	ND	20	SW846 8270A	08/05-08/21/95	5217003
Diphenylamine	ND	10	SW846 8270A	08/05-08/21/95	5217003
Ethyl methanesulfonate	ND	10	SW846 8270A	08/05-08/21/95	5217003
Fluoranthene	ND	10	SW846 8270A	08/05-08/21/95	5217003
Fluorene	ND	10	SW846 8270A	08/05-08/21/95	5217003
Hexachlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	5217003
Hexachlorobutadiene	ND	10	SW846 8270A	08/05-08/21/95	5217003
Hexachlorocyclopentadiene	ND	10	SW846 8270A	08/05-08/21/95	5217003
Hexachloroethane	ND	10	SW846 8270A	08/05-08/21/95	5217003
Hexachlorophene	--		**SW846 8270A**	**08/05-08/21/95**	**5217003**
Indeno(1,2,3-cd)pyrene	ND	10	SW846 8270A	08/05-08/21/95	5217003

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	63	(36 - 148)
2-Fluorobiphenyl	66	(38 - 106)
Terphenyl-d14	86	(10 - 169)
Phenol-d5	53	(15 - 126)
2-Fluorophenol	40	(17 - 106)
2,4,6-Tribromophenol	92	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
-- (NOT ANALYZED)

GERAGHTY & MILLER

FMGWMW60

WO #: C0H0E105
LAB #: A5H030125-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 8:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Isophorone	ND	10	SW846 8270A	08/05-08/21/95	521700
Isosafrole	ND	10	SW846 8270A	08/05-08/21/95	521700
Methapyrilene	ND	100	SW846 8270A	08/05-08/21/95	521700
o-Toluidine	ND	20	SW846 8270A	08/05-08/21/95	521700
3-Methylcholanthrene	ND	100	SW846 8270A	08/05-08/21/95	521700
Methyl methanesulfonate	ND	10	SW846 8270A	08/05-08/21/95	521700
2-Methylnaphthalene	ND	10	SW846 8270A	08/05-08/21/95	521700
2-Methylphenol	ND	10	SW846 8270A	08/05-08/21/95	521700
3-Methylphenol	ND	10	SW846 8270A	08/05-08/21/95	521700
4-Methylphenol	ND	10	SW846 8270A	08/05-08/21/95	521700
Naphthalene	ND	10	SW846 8270A	08/05-08/21/95	521700
1,4-Naphthoquinone	ND	200	SW846 8270A	08/05-08/21/95	521700
1-Naphthylamine	ND	10	SW846 8270A	08/05-08/21/95	521700
2-Naphthylamine	ND	10	SW846 8270A	08/05-08/21/95	521700
2-Nitroaniline	ND	50	SW846 8270A	08/05-08/21/95	521700
3-Nitroaniline	ND	50	SW846 8270A	08/05-08/21/95	521700
4-Nitroaniline	ND	50	SW846 8270A	08/05-08/21/95	521700
Nitrobenzene	ND	10	SW846 8270A	08/05-08/21/95	521700
2-Nitrophenol	ND	10	SW846 8270A	08/05-08/21/95	521700
4-Nitrophenol	ND	50	SW846 8270A	08/05-08/21/95	521700
4-Nitroquinoline-1-oxide	ND	100	SW846 8270A	08/05-08/21/95	521700

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	63	(36 - 148)
2-Fluorobiphenyl	66	(38 - 106)
Terphenyl-d14	86	(10 - 169)
Phenol-d5	53	(15 - 126)
2-Fluorophenol	40	(17 - 106)
2,4,6-Tribromophenol	92	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW60

WO #: C0H0E105
LAB #: A5H030125-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 8:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
N-Nitrosodi-n-butylamine	ND	10	SW846 8270A	08/05-08/21/95	521700
N-Nitrosodiethylamine	ND	10	SW846 8270A	08/05-08/21/95	521700
N-Nitrosodimethylamine	ND	10	SW846 8270A	08/05-08/21/95	521700
N-Nitrosodi-n-propylamine	ND	10	SW846 8270A	08/05-08/21/95	521700
N-Nitrosodiphenylamine	ND	10	SW846 8270A	08/05-08/21/95	521700
N-Nitrosomethylethylamine	ND	10	SW846 8270A	08/05-08/21/95	521700
N-Nitrosomorpholine	ND	10	SW846 8270A	08/05-08/21/95	521700
N-Nitrosopiperidine	ND	10	SW846 8270A	08/05-08/21/95	521700
N-Nitrosopyrrolidine	ND	10	SW846 8270A	08/05-08/21/95	521700
5-Nitro-o-toluidine	ND	20	SW846 8270A	08/05-08/21/95	521700
Pentachlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	521700
Pentachloroethane	ND	50	SW846 8270A	08/05-08/21/95	521700
Pentachloronitrobenzene	ND	50	SW846 8270A	08/05-08/21/95	521700
Pentachlorophenol	ND	50	SW846 8270A	08/05-08/21/95	521700
Phenanthrene	ND	10	SW846 8270A	08/05-08/21/95	521700
Phenol	ND	10	SW846 8270A	08/05-08/21/95	521700
p-Phenylene diamine	ND	50	SW846 8270A	08/05-08/21/95	521700
2-Picoline	ND	20	SW846 8270A	08/05-08/21/95	521700
Pyrene	ND	10	SW846 8270A	08/05-08/21/95	521700
Pyridine	ND	10	SW846 8270A	08/05-08/21/95	521700
Safrole	ND	10	SW846 8270A	08/05-08/21/95	521700

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	63	(36 - 148)
2-Fluorobiphenyl	66	(38 - 106)
Terphenyl-d14	86	(10 - 169)
Phenol-d5	53	(15 - 126)
2-Fluorophenol	40	(17 - 106)
2,4,6-Tribromophenol	92	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW60

WO #: C0H0E105
LAB #: A5H030125-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 8:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,2,4,5-Tetrachlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	521700
2,3,4,6-Tetrachlorophenol	ND	50	SW846 8270A	08/05-08/21/95	521700
1,2,4-Trichlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	521700
2,4,5-Trichlorophenol	ND	10	SW846 8270A	08/05-08/21/95	521700
2,4,6-Trichlorophenol	ND	10	SW846 8270A	08/05-08/21/95	521700
1,3,5-Trinitrobenzene	ND	50	SW846 8270A	08/05-08/21/95	521700
Aramite	--		SW846 8270A	08/05-08/21/95	521700

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	63	(36 - 148)
2-Fluorobiphenyl	66	(38 - 106)
Terphenyl-d14	86	(10 - 169)
Phenol-d5	53	(15 - 126)
2-Fluorophenol	40	(17 - 106)
2,4,6-Tribromophenol	92	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
-- (NOT ANALYZED)

GERAGHTY & MILLER

FMGWMW60

WO #: C0H0E105
LAB #: A5H030125-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
DATE RECEIVED: 8/03/95
DATE EXTRACTED: 8/05/95
DATE ANALYZED: 8/21/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
Base/Neutrals and Acids (8270)			
Unknown	**27**	**ug/L**	**5217003**

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
Base/Neutrals and Acids (8270)			
None		**ug/L**	**5217003**

GERAGHTY & MILLER

FMGWMW9S

WO #: C0H0K105
LAB #: A5H030125-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
4-Aminobiphenyl	ND	50	SW846 8270A	08/05-08/21/95	521700
p-Dimethylaminoazobenzene	ND	10	SW846 8270A	08/05-08/21/95	521700
7,12-Dimethylbenz(a)-anthracene	ND	20	SW846 8270A	08/05-08/21/95	521700
Hexachloropropene	ND	100	SW846 8270A	08/05-08/21/95	521700
Phenacetin	ND	50	SW846 8270A	08/05-08/21/95	521700
Pronamide	ND	20	SW846 8270A	08/05-08/21/95	521700
a,a-Dimethylphenethylamine	ND	50	SW846 8270A	08/05-08/21/95	521700
Diallate	ND	10	SW846 8270A	08/05-08/21/95	521700
Chlorobenzilate	ND	10	SW846 8270A	08/05-08/21/95	521700
Acenaphthene	ND	10	SW846 8270A	08/05-08/21/95	521700
Acenaphthylene	ND	10	SW846 8270A	08/05-08/21/95	521700
Acetophenone	ND	10	SW846 8270A	08/05-08/21/95	521700
2-Acetylaminofluorene	ND	20	SW846 8270A	08/05-08/21/95	521700
Aniline	ND	10	SW846 8270A	08/05-08/21/95	521700
Anthracene	ND	10	SW846 8270A	08/05-08/21/95	521700
Benzo(a)anthracene	ND	10	SW846 8270A	08/05-08/21/95	521700
Benzo(b)fluoranthene	ND	10	SW846 8270A	08/05-08/21/95	521700
Benzo(k)fluoranthene	ND	10	SW846 8270A	08/05-08/21/95	521700
Benzo(ghi)perylene	ND	10	SW846 8270A	08/05-08/21/95	521700
Benzo(a)pyrene	ND	10	SW846 8270A	08/05-08/21/95	521700
Benzyl alcohol	ND	10	SW846 8270A	08/05-08/21/95	521700

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	68	(36 - 148)
2-Fluorobiphenyl	74	(38 - 106)
Terphenyl-d14	50	(10 - 169)
Phenol-d5	60	(15 - 126)
2-Fluorophenol	38	(17 - 106)
2,4,6-Tribromophenol	101	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW9S

WO #: C0H0K105
LAB #: A5H030125-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
bis(2-Chloroethoxy)methane	ND	10	SW846 8270A	08/05-08/21/95	521700
bis(2-Chloroethyl) ether	ND	10	SW846 8270A	08/05-08/21/95	521700
bis(2-Chloro-1-methylethyl) et	ND	10	SW846 8270A	08/05-08/21/95	521700
bis(2-Ethylhexyl) phthalate	ND	10	SW846 8270A	08/05-08/21/95	521700
4-Bromophenyl phenyl ether	ND	10	SW846 8270A	08/05-08/21/95	521700
Butyl benzyl phthalate	ND	10	SW846 8270A	08/05-08/21/95	521700
4-Chloroaniline	ND	10	SW846 8270A	08/05-08/21/95	521700
4-Chloro-3-methylphenol	ND	10	SW846 8270A	08/05-08/21/95	521700
2-Chloronaphthalene	ND	10	SW846 8270A	08/05-08/21/95	521700
2-Chlorophenol	ND	10	SW846 8270A	08/05-08/21/95	521700
4-Chlorophenyl phenyl ether	ND	10	SW846 8270A	08/05-08/21/95	521700
Chrysene	ND	10	SW846 8270A	08/05-08/21/95	521700
Dibenz(a,h)anthracene	ND	10	SW846 8270A	08/05-08/21/95	521700
Dibenzofuran	ND	10	SW846 8270A	08/05-08/21/95	521700
Di-n-butyl phthalate	ND	10	SW846 8270A	08/05-08/21/95	521700
1,2-Dichlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	521700
1,3-Dichlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	521700
1,4-Dichlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	521700
3,3'-Dichlorobenzidine	ND	10	SW846 8270A	08/05-08/21/95	521700
2,4-Dichlorophenol	ND	10	SW846 8270A	08/05-08/21/95	521700
2,6-Dichlorophenol	ND	10	SW846 8270A	08/05-08/21/95	521700

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	68	(36 - 148)
2-Fluorobiphenyl	74	(38 - 106)
Terphenyl-d14	50	(10 - 169)
Phenol-d5	60	(15 - 126)
2-Fluorophenol	38	(17 - 106)
2,4,6-Tribromophenol	101	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW9S

WO #: C0H0K105
LAB #: A5H030125-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Diethyl phthalate	ND	10	SW846 8270A	08/05-08/21/95	521700
3,3'-Dimethylbenzidine	ND	20	SW846 8270A	08/05-08/21/95	521700
2,4-Dimethylphenol	ND	10	SW846 8270A	08/05-08/21/95	521700
Dimethyl phthalate	ND	10	SW846 8270A	08/05-08/21/95	521700
Di-n-octyl phthalate	ND	10	SW846 8270A	08/05-08/21/95	521700
1,3-Dinitrobenzene	ND	10	SW846 8270A	08/05-08/21/95	521700
4,6-Dinitro-2-methylphenol	ND	50	SW846 8270A	08/05-08/21/95	521700
2,4-Dinitrophenol	ND	50	SW846 8270A	08/05-08/21/95	521700
2,4-Dinitrotoluene	ND	10	SW846 8270A	08/05-08/21/95	521700
2,6-Dinitrotoluene	ND	10	SW846 8270A	08/05-08/21/95	521700
2-sec-Butyl-4,6-dinitro-phenol	ND	20	SW846 8270A	08/05-08/21/95	521700
Diphenylamine	ND	10	SW846 8270A	08/05-08/21/95	521700
Ethyl methanesulfonate	ND	10	SW846 8270A	08/05-08/21/95	521700
Fluoranthene	ND	10	SW846 8270A	08/05-08/21/95	521700
Fluorene	ND	10	SW846 8270A	08/05-08/21/95	521700
Hexachlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	521700
Hexachlorobutadiene	ND	10	SW846 8270A	08/05-08/21/95	521700
Hexachlorocyclopentadiene	ND	10	SW846 8270A	08/05-08/21/95	521700
Hexachloroethane	ND	10	SW846 8270A	08/05-08/21/95	521700
Hexachlorophene	ND	-	SW846 8270A	08/05-08/21/95	521700
Indeno(1,2,3-cd)pyrene	ND	10	SW846 8270A	08/05-08/21/95	521700

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	68	(36 - 148)
2-Fluorobiphenyl	74	(38 - 106)
Terphenyl-d14	50	(10 - 169)
Phenol-d5	60	(15 - 126)
2-Fluorophenol	38	(17 - 106)
2,4,6-Tribromophenol	101	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW9S

WO #: C0H0K105
LAB #: A5H030125-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Isophorone	ND	10	SW846 8270A	08/05-08/21/95	5217003
Isosafrole	ND	10	SW846 8270A	08/05-08/21/95	5217003
Methapyrilene	ND	100	SW846 8270A	08/05-08/21/95	5217003
o-Toluidine	ND	20	SW846 8270A	08/05-08/21/95	5217003
3-Methylcholanthrene	ND	100	SW846 8270A	08/05-08/21/95	5217003
Methyl methanesulfonate	ND	10	SW846 8270A	08/05-08/21/95	5217003
2-Methylnaphthalene	ND	10	SW846 8270A	08/05-08/21/95	5217003
2-Methylphenol	ND	10	SW846 8270A	08/05-08/21/95	5217003
3-Methylphenol	ND	10	SW846 8270A	08/05-08/21/95	5217003
4-Methylphenol	ND	10	SW846 8270A	08/05-08/21/95	5217003
Naphthalene	ND	10	SW846 8270A	08/05-08/21/95	5217003
1,4-Naphthoquinone	ND	200	SW846 8270A	08/05-08/21/95	5217003
1-Naphthylamine	ND	10	SW846 8270A	08/05-08/21/95	5217003
2-Naphthylamine	ND	10	SW846 8270A	08/05-08/21/95	5217003
2-Nitroaniline	ND	50	SW846 8270A	08/05-08/21/95	5217003
3-Nitroaniline	ND	50	SW846 8270A	08/05-08/21/95	5217003
4-Nitroaniline	ND	50	SW846 8270A	08/05-08/21/95	5217003
Nitrobenzene	ND	10	SW846 8270A	08/05-08/21/95	5217003
2-Nitrophenol	ND	10	SW846 8270A	08/05-08/21/95	5217003
4-Nitrophenol	ND	50	SW846 8270A	08/05-08/21/95	5217003
4-Nitroquinoline-1-oxide	ND	100	SW846 8270A	08/05-08/21/95	5217003

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	68	(36 - 148)
2-Fluorobiphenyl	74	(38 - 106)
Terphenyl-d14	50	(10 - 169)
Phenol-d5	60	(15 - 126)
2-Fluorophenol	38	(17 - 106)
2,4,6-Tribromophenol	101	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW9S

WO #: C0H0K105
LAB #: A5H030125-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
N-Nitrosodi-n-butylamine	ND	10	SW846 8270A	08/05-08/21/95	5217003
N-Nitrosodiethylamine	ND	10	SW846 8270A	08/05-08/21/95	5217003
N-Nitrosodimethylamine	ND	10	SW846 8270A	08/05-08/21/95	5217003
N-Nitrosodi-n-propylamine	ND	10	SW846 8270A	08/05-08/21/95	5217003
N-Nitrosodiphenylamine	ND	10	SW846 8270A	08/05-08/21/95	5217003
N-Nitrosomethylethylamine	ND	10	SW846 8270A	08/05-08/21/95	5217003
N-Nitrosomorpholine	ND	10	SW846 8270A	08/05-08/21/95	5217003
N-Nitrosopiperidine	ND	10	SW846 8270A	08/05-08/21/95	5217003
N-Nitrosopyrrolidine	ND	10	SW846 8270A	08/05-08/21/95	5217003
5-Nitro-o-toluidine	ND	20	SW846 8270A	08/05-08/21/95	5217003
Pentachlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	5217003
Pentachloroethane	ND	50	SW846 8270A	08/05-08/21/95	5217003
Pentachloronitrobenzene	ND	50	SW846 8270A	08/05-08/21/95	5217003
Pentachlorophenol	ND	50	SW846 8270A	08/05-08/21/95	5217003
Phenanthrene	ND	10	SW846 8270A	08/05-08/21/95	5217003
Phenol	ND	10	SW846 8270A	08/05-08/21/95	5217003
p-Phenylene diamine	ND	50	SW846 8270A	08/05-08/21/95	5217003
2-Picoline	ND	20	SW846 8270A	08/05-08/21/95	5217003
Pyrene	ND	10	SW846 8270A	08/05-08/21/95	5217003
Pyridine	ND	10	SW846 8270A	08/05-08/21/95	5217003
Safrole	ND	10	SW846 8270A	08/05-08/21/95	5217003

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	68	(36 - 148)
2-Fluorobiphenyl	74	(38 - 106)
Terphenyl-d14	50	(10 - 169)
Phenol-d5	60	(15 - 126)
2-Fluorophenol	38	(17 - 106)
2,4,6-Tribromophenol	101	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW9S

WO #: C0H0K105
LAB #: A5H030125-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,2,4,5-Tetrachlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	521700
2,3,4,6-Tetrachlorophenol	ND	50	SW846 8270A	08/05-08/21/95	521700
1,2,4-Trichlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	521700
2,4,5-Trichlorophenol	ND	10	SW846 8270A	08/05-08/21/95	521700
2,4,6-Trichlorophenol	ND	10	SW846 8270A	08/05-08/21/95	521700
1,3,5-Trinitrobenzene	ND	50	SW846 8270A	08/05-08/21/95	521700
Aramite	ND	50	SW846 8270A	08/05-08/21/95	521700

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	68	(36 - 148)
2-Fluorobiphenyl	74	(38 - 106)
Terphenyl-d14	50	(10 - 169)
Phenol-d5	60	(15 - 126)
2-Fluorophenol	38	(17 - 106)
2,4,6-Tribromophenol	101	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW9S

WO #: C0H0K105		**DATE SAMPLED:**	8/02/95
LAB #: A5H030125-002		**DATE RECEIVED:**	8/03/95
MATRIX: WATER		**DATE EXTRACTED:**	8/05/95
DILUTION FACTOR:	1.00	**DATE ANALYZED:**	8/21/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
Base/Neutrals and Acids (8270)			
Ethanol, 2-(2-ethoxyethoxy)-	**4**	**ug/L**	**5217003**
Unknown	**14**	**ug/L**	**5217003**
Sulfur, mol. (S8)	**5**	**ug/L**	**5217003**

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
Base/Neutrals and Acids (8270)			
None		**ug/L**	**5217003**

GERAGHTY & MILLER

FMGWMW61

WO #: C0H0P105
LAB #: A5H030125-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
4-Aminobiphenyl	ND	50	SW846 8270A	08/05-08/21/95	521700
p-Dimethylaminoazobenzene	ND	10	SW846 8270A	08/05-08/21/95	521700
7,12-Dimethylbenz(a)-anthracene	ND	20	SW846 8270A	08/05-08/21/95	521700
Hexachloropropene	ND	100	SW846 8270A	08/05-08/21/95	521700
Phenacetin	ND	50	SW846 8270A	08/05-08/21/95	521700
Pronamide	ND	20	SW846 8270A	08/05-08/21/95	521700
a,a-Dimethylphenethylamine	ND	50	SW846 8270A	08/05-08/21/95	521700
Diallate	ND	10	SW846 8270A	08/05-08/21/95	521700
Chlorobenzilate	ND	10	SW846 8270A	08/05-08/21/95	521700
Acenaphthene	ND	10	SW846 8270A	08/05-08/21/95	521700
Acenaphthylene	ND	10	SW846 8270A	08/05-08/21/95	521700
Acetophenone	ND	10	SW846 8270A	08/05-08/21/95	521700
2-Acetylaminofluorene	ND	20	SW846 8270A	08/05-08/21/95	521700
Aniline	ND	10	SW846 8270A	08/05-08/21/95	521700
Anthracene	ND	10	SW846 8270A	08/05-08/21/95	521700
Benzo(a)anthracene	ND	10	SW846 8270A	08/05-08/21/95	521700
Benzo(b)fluoranthene	ND	10	SW846 8270A	08/05-08/21/95	521700
Benzo(k)fluoranthene	ND	10	SW846 8270A	08/05-08/21/95	521700
Benzo(ghi)perylene	ND	10	SW846 8270A	08/05-08/21/95	521700
Benzo(a)pyrene	ND	10	SW846 8270A	08/05-08/21/95	521700
Benzyl alcohol	ND	10	SW846 8270A	08/05-08/21/95	521700

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	65	(36 - 148)
2-Fluorobiphenyl	68	(38 - 106)
Terphenyl-d14	48	(10 - 169)
Phenol-d5	47	(15 - 126)
2-Fluorophenol	28	(17 - 106)
2,4,6-Tribromophenol	89	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW61

WO #: C0H0P105
LAB #: A5H030125-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

GC/MS Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
bis(2-Chloroethoxy)methane	ND	10	SW846 8270A	08/05-08/21/95	5217003
bis(2-Chloroethyl) ether	ND	10	SW846 8270A	08/05-08/21/95	5217003
bis(2-Chloro-1-methylethyl) et	ND	10	SW846 8270A	08/05-08/21/95	5217003
bis(2-Ethylhexyl) phthalate	ND	10	SW846 8270A	08/05-08/21/95	5217003
4-Bromophenyl phenyl ether	ND	10	SW846 8270A	08/05-08/21/95	5217003
Butyl benzyl phthalate	ND	10	SW846 8270A	08/05-08/21/95	5217003
4-Chloroaniline	ND	10	SW846 8270A	08/05-08/21/95	5217003
4-Chloro-3-methylphenol	ND	10	SW846 8270A	08/05-08/21/95	5217003
2-Chloronaphthalene	ND	10	SW846 8270A	08/05-08/21/95	5217003
2-Chlorophenol	ND	10	SW846 8270A	08/05-08/21/95	5217003
4-Chlorophenyl phenyl ether	ND	10	SW846 8270A	08/05-08/21/95	5217003
Chrysene	ND	10	SW846 8270A	08/05-08/21/95	5217003
Dibenz(a,h)anthracene	ND	10	SW846 8270A	08/05-08/21/95	5217003
Dibenzofuran	ND	10	SW846 8270A	08/05-08/21/95	5217003
Di-n-butyl phthalate	ND	10	SW846 8270A	08/05-08/21/95	5217003
1,2-Dichlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	5217003
1,3-Dichlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	5217003
1,4-Dichlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	5217003
3,3'-Dichlorobenzidine	ND	10	SW846 8270A	08/05-08/21/95	5217003
2,4-Dichlorophenol	ND	10	SW846 8270A	08/05-08/21/95	5217003
2,6-Dichlorophenol	ND	10	SW846 8270A	08/05-08/21/95	5217003

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	65	(36 - 148)
2-Fluorobiphenyl	68	(38 - 106)
Terphenyl-d14	48	(10 - 169)
Phenol-d5	47	(15 - 126)
2-Fluorophenol	28	(17 - 106)
2,4,6-Tribromophenol	89	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW61

WO #: C0H0P105
LAB #: A5H030125-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Diethyl phthalate	ND	10	SW846 8270A	08/05-08/21/95	521700
3,3'-Dimethylbenzidine	ND	20	SW846 8270A	08/05-08/21/95	521700
2,4-Dimethylphenol	ND	10	SW846 8270A	08/05-08/21/95	521700
Dimethyl phthalate	ND	10	SW846 8270A	08/05-08/21/95	521700
Di-n-octyl phthalate	ND	10	SW846 8270A	08/05-08/21/95	521700
1,3-Dinitrobenzene	ND	10	SW846 8270A	08/05-08/21/95	521700
4,6-Dinitro-2-methylphenol	ND	50	SW846 8270A	08/05-08/21/95	521700
2,4-Dinitrophenol	ND	50	SW846 8270A	08/05-08/21/95	521700
2,4-Dinitrotoluene	ND	10	SW846 8270A	08/05-08/21/95	521700
2,6-Dinitrotoluene	ND	10	SW846 8270A	08/05-08/21/95	521700
2-sec-Butyl-4,6-dinitro-phenol	ND	20	SW846 8270A	08/05-08/21/95	521700
Diphenylamine	ND	10	SW846 8270A	08/05-08/21/95	521700
Ethyl methanesulfonate	ND	10	SW846 8270A	08/05-08/21/95	521700
Fluoranthene	ND	10	SW846 8270A	08/05-08/21/95	521700
Fluorene	ND	10	SW846 8270A	08/05-08/21/95	521700
Hexachlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	521700
Hexachlorobutadiene	ND	10	SW846 8270A	08/05-08/21/95	521700
Hexachlorocyclopentadiene	ND	10	SW846 8270A	08/05-08/21/95	521700
Hexachloroethane	ND	10	SW846 8270A	08/05-08/21/95	521700
Hexachlorophene	--		**SW846 8270A**	**08/05-08/21/95**	**521700**
Indeno(1,2,3-cd)pyrene	ND	10	SW846 8270A	08/05-08/21/95	521700

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	65	(36 - 148)
2-Fluorobiphenyl	68	(38 - 106)
Terphenyl-d14	48	(10 - 169)
Phenol-d5	47	(15 - 126)
2-Fluorophenol	28	(17 - 106)
2,4,6-Tribromophenol	89	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
-- (NOT ANALYZED)

GERAGHTY & MILLER

FMGWMW61

WO #: C0H0P105
LAB #: A5H030125-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Isophorone	ND	10	SW846 8270A	08/05-08/21/95	5217003
Isosafrole	ND	10	SW846 8270A	08/05-08/21/95	5217003
Methapyrilene	ND	100	SW846 8270A	08/05-08/21/95	5217003
o-Toluidine	ND	20	SW846 8270A	08/05-08/21/95	5217003
3-Methylcholanthrene	ND	100	SW846 8270A	08/05-08/21/95	5217003
Methyl methanesulfonate	ND	10	SW846 8270A	08/05-08/21/95	5217003
2-Methylnaphthalene	ND	10	SW846 8270A	08/05-08/21/95	5217003
2-Methylphenol	ND	10	SW846 8270A	08/05-08/21/95	5217003
3-Methylphenol	ND	10	SW846 8270A	08/05-08/21/95	5217003
4-Methylphenol	ND	10	SW846 8270A	08/05-08/21/95	5217003
Naphthalene	ND	10	SW846 8270A	08/05-08/21/95	5217003
1,4-Naphthoquinone	ND	200	SW846 8270A	08/05-08/21/95	5217003
1-Naphthylamine	ND	10	SW846 8270A	08/05-08/21/95	5217003
2-Naphthylamine	ND	10	SW846 8270A	08/05-08/21/95	5217003
2-Nitroaniline	ND	50	SW846 8270A	08/05-08/21/95	5217003
3-Nitroaniline	ND	50	SW846 8270A	08/05-08/21/95	5217003
4-Nitroaniline	ND	50	SW846 8270A	08/05-08/21/95	5217003
Nitrobenzene	ND	10	SW846 8270A	08/05-08/21/95	5217003
2-Nitrophenol	ND	10	SW846 8270A	08/05-08/21/95	5217003
4-Nitrophenol	ND	50	SW846 8270A	08/05-08/21/95	5217003
4-Nitroquinoline-1-oxide	ND	100	SW846 8270A	08/05-08/21/95	5217003

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	65	(36 - 148)
2-Fluorobiphenyl	68	(38 - 106)
Terphenyl-d14	48	(10 - 169)
Phenol-d5	47	(15 - 126)
2-Fluorophenol	28	(17 - 106)
2,4,6-Tribromophenol	89	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW61

WO #: C0H0P105
LAB #: A5H030125-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

GC/MS Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
N-Nitrosodi-n-butylamine	ND	10	SW846 8270A	08/05-08/21/95	521700
N-Nitrosodiethylamine	ND	10	SW846 8270A	08/05-08/21/95	521700
N-Nitrosodimethylamine	ND	10	SW846 8270A	08/05-08/21/95	521700
N-Nitrosodi-n-propylamine	ND	10	SW846 8270A	08/05-08/21/95	521700
N-Nitrosodiphenylamine	ND	10	SW846 8270A	08/05-08/21/95	521700
N-Nitrosomethylethylamine	ND	10	SW846 8270A	08/05-08/21/95	521700
N-Nitrosomorpholine	ND	10	SW846 8270A	08/05-08/21/95	521700
N-Nitrosopiperidine	ND	10	SW846 8270A	08/05-08/21/95	521700
N-Nitrosopyrrolidine	ND	10	SW846 8270A	08/05-08/21/95	521700
5-Nitro-o-toluidine	ND	20	SW846 8270A	08/05-08/21/95	521700
Pentachlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	521700
Pentachloroethane	ND	50	SW846 8270A	08/05-08/21/95	521700
Pentachloronitrobenzene	ND	50	SW846 8270A	08/05-08/21/95	521700
Pentachlorophenol	ND	50	SW846 8270A	08/05-08/21/95	521700
Phenanthrene	ND	10	SW846 8270A	08/05-08/21/95	521700
Phenol	ND	10	SW846 8270A	08/05-08/21/95	521700
p-Phenylene diamine	ND	50	SW846 8270A	08/05-08/21/95	521700
2-Picoline	ND	20	SW846 8270A	08/05-08/21/95	521700
Pyrene	ND	10	SW846 8270A	08/05-08/21/95	521700
Pyridine	ND	10	SW846 8270A	08/05-08/21/95	521700
Safrole	ND	10	SW846 8270A	08/05-08/21/95	521700

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	65	(36 - 148)
2-Fluorobiphenyl	68	(38 - 106)
Terphenyl-d14	48	(10 - 169)
Phenol-d5	47	(15 - 126)
2-Fluorophenol	28	(17 - 106)
2,4,6-Tribromophenol	89	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW61

WO #: C0H0P105
LAB #: A5H030125-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,2,4,5-Tetrachlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	5217003
2,3,4,6-Tetrachlorophenol	ND	50	SW846 8270A	08/05-08/21/95	5217003
1,2,4-Trichlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	5217003
2,4,5-Trichlorophenol	ND	10	SW846 8270A	08/05-08/21/95	5217003
2,4,6-Trichlorophenol	ND	10	SW846 8270A	08/05-08/21/95	5217003
1,3,5-Trinitrobenzene	ND	50	SW846 8270A	08/05-08/21/95	5217003
Aramite	--		**SW846 8270A**	**08/05-08/21/95**	**5217003**

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	65	(36 - 148)
2-Fluorobiphenyl	68	(38 - 106)
Terphenyl-d14	48	(10 - 169)
Phenol-d5	47	(15 - 126)
2-Fluorophenol	28	(17 - 106)
2,4,6-Tribromophenol	89	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
– (NOT ANALYZED)

GERAGHTY & MILLER

FMGWMW61

WO #: C0H0P105		**DATE SAMPLED:**	8/02/95
LAB #: A5H030125-003		**DATE RECEIVED:**	8/03/95
MATRIX: WATER		**DATE EXTRACTED:**	8/05/95
DILUTION FACTOR:	1.00	**DATE ANALYZED:**	8/21/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
Base/Neutrals and Acids (8270)			
Unknown	**31**	**ug/L**	**5217003**
Sulfur, mol. (S8)	**5**	**ug/L**	**5217003**

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
Base/Neutrals and Acids (8270)			
None		**ug/L**	**5217003**

GERAGHTY & MILLER

FMGWMW9D (MS/MSD)

WO #: C0H12105
LAB #: A5H030125-004
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 14:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
4-Aminobiphenyl	ND	50	SW846 8270A	08/05-08/21/95	521700
p-Dimethylaminoazobenzene	ND	10	SW846 8270A	08/05-08/21/95	521700
7,12-Dimethylbenz(a)-anthracene	ND	20	SW846 8270A	08/05-08/21/95	521700
Hexachloropropene	ND	100	SW846 8270A	08/05-08/21/95	521700
Phenacetin	ND	50	SW846 8270A	08/05-08/21/95	521700
Pronamide	ND	20	SW846 8270A	08/05-08/21/95	521700
a,a-Dimethylphenethylamine	ND	50	SW846 8270A	08/05-08/21/95	521700
Diallate	ND	10	SW846 8270A	08/05-08/21/95	521700
Chlorobenzilate	ND	10	SW846 8270A	08/05-08/21/95	521700
Acenaphthene	ND	10	SW846 8270A	08/05-08/21/95	521700
Acenaphthylene	ND	10	SW846 8270A	08/05-08/21/95	521700
Acetophenone	ND	10	SW846 8270A	08/05-08/21/95	521700
2-Acetylaminofluorene	ND	20	SW846 8270A	08/05-08/21/95	521700
Aniline	ND	10	SW846 8270A	08/05-08/21/95	521700
Anthracene	ND	10	SW846 8270A	08/05-08/21/95	521700
Benzo(a)anthracene	ND	10	SW846 8270A	08/05-08/21/95	521700
Benzo(b)fluoranthene	ND	10	SW846 8270A	08/05-08/21/95	521700
Benzo(k)fluoranthene	ND	10	SW846 8270A	08/05-08/21/95	521700
Benzo(ghi)perylene	ND	10	SW846 8270A	08/05-08/21/95	521700
Benzo(a)pyrene	ND	10	SW846 8270A	08/05-08/21/95	521700
Benzyl alcohol	ND	10	SW846 8270A	08/05-08/21/95	521700

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	74	(36 - 148)
2-Fluorobiphenyl	78	(38 - 106)
Terphenyl-d14	40	(10 - 169)
Phenol-d5	56	(15 - 126)
2-Fluorophenol	34	(17 - 106)
2,4,6-Tribromophenol	93	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW9D (MS/MSD)

WO #: C0H12105
LAB #: A5H030125-004
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 14:00
DATE RECEIVED: 8/03/95

- GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
bis(2-Chloroethoxy)methane	ND	10	SW846 8270A	08/05-08/21/95	5217003
bis(2-Chloroethyl) ether	ND	10	SW846 8270A	08/05-08/21/95	5217003
bis(2-Chloro-1-methylethyl) et	ND	10	SW846 8270A	08/05-08/21/95	5217003
bis(2-Ethylhexyl) phthalate	ND	10	SW846 8270A	08/05-08/21/95	5217003
4-Bromophenyl phenyl ether	ND	10	SW846 8270A	08/05-08/21/95	5217003
Butyl benzyl phthalate	ND	10	SW846 8270A	08/05-08/21/95	5217003
4-Chloroaniline	ND	10	SW846 8270A	08/05-08/21/95	5217003
4-Chloro-3-methylphenol	ND	10	SW846 8270A	08/05-08/21/95	5217003
2-Chloronaphthalene	ND	10	SW846 8270A	08/05-08/21/95	5217003
2-Chlorophenol	ND	10	SW846 8270A	08/05-08/21/95	5217003
4-Chlorophenyl phenyl ether	ND	10	SW846 8270A	08/05-08/21/95	5217003
Chrysene	ND	10	SW846 8270A	08/05-08/21/95	5217003
Dibenz(a,h)anthracene	ND	10	SW846 8270A	08/05-08/21/95	5217003
Dibenzofuran	ND	10	SW846 8270A	08/05-08/21/95	5217003
Di-n-butyl phthalate	ND	10	SW846 8270A	08/05-08/21/95	5217003
1,2-Dichlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	5217003
1,3-Dichlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	5217003
1,4-Dichlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	5217003
3,3'-Dichlorobenzidine	ND	10	SW846 8270A	08/05-08/21/95	5217003
2,4-Dichlorophenol	ND	10	SW846 8270A	08/05-08/21/95	5217003
2,6-Dichlorophenol	ND	10	SW846 8270A	08/05-08/21/95	5217003

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	74	(36 - 148)
2-Fluorobiphenyl	78	(38 - 106)
Terphenyl-d14	40	(10 - 169)
Phenol-d5	56	(15 - 126)
2-Fluorophenol	34	(17 - 106)
2,4,6-Tribromophenol	93	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW9D (MS/MSD)

WO #: C0H12105
LAB #: A5H030125-004
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 14:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Diethyl phthalate	ND	10	SW846 8270A	08/05-08/21/95	521700
3,3'-Dimethylbenzidine	ND	20	SW846 8270A	08/05-08/21/95	521700
2,4-Dimethylphenol	ND	10	SW846 8270A	08/05-08/21/95	521700
Dimethyl phthalate	ND	10	SW846 8270A	08/05-08/21/95	521700
Di-n-octyl phthalate	ND	10	SW846 8270A	08/05-08/21/95	521700
1,3-Dinitrobenzene	ND	10	SW846 8270A	08/05-08/21/95	521700
4,6-Dinitro-2-methylphenol	ND	50	SW846 8270A	08/05-08/21/95	521700
2,4-Dinitrophenol	ND	50	SW846 8270A	08/05-08/21/95	521700
2,4-Dinitrotoluene	ND	10	SW846 8270A	08/05-08/21/95	521700
2,6-Dinitrotoluene	ND	10	SW846 8270A	08/05-08/21/95	521700
2-sec-Butyl-4,6-dinitro-phenol	ND	20	SW846 8270A	08/05-08/21/95	521700
Diphenylamine	ND	10	SW846 8270A	08/05-08/21/95	521700
Ethyl methanesulfonate	ND	10	SW846 8270A	08/05-08/21/95	521700
Fluoranthene	ND	10	SW846 8270A	08/05-08/21/95	521700
Fluorene	ND	10	SW846 8270A	08/05-08/21/95	521700
Hexachlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	521700
Hexachlorobutadiene	ND	10	SW846 8270A	08/05-08/21/95	521700
Hexachlorocyclopentadiene	ND	10	SW846 8270A	08/05-08/21/95	521700
Hexachloroethane	ND	10	SW846 8270A	08/05-08/21/95	521700
Hexachlorophene	--		**SW846 8270A**	**08/05-08/21/95**	**521700**
Indeno(1,2,3-cd)pyrene	ND	10	SW846 8270A	08/05-08/21/95	521700

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	74	(36 - 148)
2-Fluorobiphenyl	78	(38 - 106)
Terphenyl-d14	40	(10 - 169)
Phenol-d5	56	(15 - 126)
2-Fluorophenol	34	(17 - 106)
2,4,6-Tribromophenol	93	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
-- (NOT ANALYZED)

GERAGHTY & MILLER

FMGWMW9D (MS/MSD)

WO #: C0H12105
LAB #: A5H030125-004
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 14:00
DATE RECEIVED: 8/03/95

GC/MS Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Isophorone	ND	10	SW846 8270A	08/05-08/21/95	521700
Isosafrole	ND	10	SW846 8270A	08/05-08/21/95	521700
Methapyrilene	ND	100	SW846 8270A	08/05-08/21/95	521700
o-Toluidine	ND	20	SW846 8270A	08/05-08/21/95	521700
3-Methylcholanthrene	ND	100	SW846 8270A	08/05-08/21/95	521700
Methyl methanesulfonate	ND	10	SW846 8270A	08/05-08/21/95	521700
2-Methylnaphthalene	ND	10	SW846 8270A	08/05-08/21/95	521700
2-Methylphenol	ND	10	SW846 8270A	08/05-08/21/95	521700
3-Methylphenol	ND	10	SW846 8270A	08/05-08/21/95	521700
4-Methylphenol	ND	10	SW846 8270A	08/05-08/21/95	521700
Naphthalene	ND	10	SW846 8270A	08/05-08/21/95	521700
1,4-Naphthoquinone	ND	200	SW846 8270A	08/05-08/21/95	521700
1-Naphthylamine	ND	10	SW846 8270A	08/05-08/21/95	521700
2-Naphthylamine	ND	10	SW846 8270A	08/05-08/21/95	521700
2-Nitroaniline	ND	50	SW846 8270A	08/05-08/21/95	521700
3-Nitroaniline	ND	50	SW846 8270A	08/05-08/21/95	521700
4-Nitroaniline	ND	50	SW846 8270A	08/05-08/21/95	521700
Nitrobenzene	ND	10	SW846 8270A	08/05-08/21/95	521700
2-Nitrophenol	ND	10	SW846 8270A	08/05-08/21/95	521700
4-Nitrophenol	ND	50	SW846 8270A	08/05-08/21/95	521700
4-Nitroquinoline-1-oxide	ND	100	SW846 8270A	08/05-08/21/95	521700

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	74	(36 - 148)
2-Fluorobiphenyl	78	(38 - 106)
Terphenyl-d14	40	(10 - 169)
Phenol-d5	56	(15 - 126)
2-Fluorophenol	34	(17 - 106)
2,4,6-Tribromophenol	93	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW9D (MS/MSD)

WO #: C0H12105
LAB #: A5H030125-004
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 14:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
N-Nitrosodi-n-butylamine	ND	10	SW846 8270A	08/05-08/21/95	521700
N-Nitrosodiethylamine	ND	10	SW846 8270A	08/05-08/21/95	521700
N-Nitrosodimethylamine	ND	10	SW846 8270A	08/05-08/21/95	521700
N-Nitrosodi-n-propylamine	ND	10	SW846 8270A	08/05-08/21/95	521700
N-Nitrosodiphenylamine	ND	10	SW846 8270A	08/05-08/21/95	521700
N-Nitrosomethylethylamine	ND	10	SW846 8270A	08/05-08/21/95	521700
N-Nitrosomorpholine	ND	10	SW846 8270A	08/05-08/21/95	521700
N-Nitrosopiperidine	ND	10	SW846 8270A	08/05-08/21/95	521700
N-Nitrosopyrrolidine	ND	10	SW846 8270A	08/05-08/21/95	521700
5-Nitro-o-toluidine	ND	20	SW846 8270A	08/05-08/21/95	521700
Pentachlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	521700
Pentachloroethane	ND	50	SW846 8270A	08/05-08/21/95	521700
Pentachloronitrobenzene	ND	50	SW846 8270A	08/05-08/21/95	521700
Pentachlorophenol	ND	50	SW846 8270A	08/05-08/21/95	521700
Phenanthrene	ND	10	SW846 8270A	08/05-08/21/95	521700
Phenol	ND	10	SW846 8270A	08/05-08/21/95	521700
p-Phenylene diamine	ND	50	SW846 8270A	08/05-08/21/95	521700
2-Picoline	ND	20	SW846 8270A	08/05-08/21/95	521700
Pyrene	ND	10	SW846 8270A	08/05-08/21/95	521700
Pyridine	ND	10	SW846 8270A	08/05-08/21/95	521700
Safrole	ND	10	SW846 8270A	08/05-08/21/95	521700

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	74	(36 - 148)
2-Fluorobiphenyl	78	(38 - 106)
Terphenyl-d14	40	(10 - 169)
Phenol-d5	56	(15 - 126)
2-Fluorophenol	34	(17 - 106)
2,4,6-Tribromophenol	93	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW9D (MS/MSD)

WO #: C0H12105 | DATE SAMPLED: 8/02/95
LAB #: A5H030125-004 | TIME SAMPLED: 14:00
MATRIX: WATER | DATE RECEIVED: 8/03/95
DILUTION FACTOR: 1.00

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,2,4,5-Tetrachlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	5217003
2,3,4,6-Tetrachlorophenol	ND	50	SW846 8270A	08/05-08/21/95	5217003
1,2,4-Trichlorobenzene	ND	10	SW846 8270A	08/05-08/21/95	5217003
2,4,5-Trichlorophenol	ND	10	SW846 8270A	08/05-08/21/95	5217003
2,4,6-Trichlorophenol	ND	10	SW846 8270A	08/05-08/21/95	5217003
1,3,5-Trinitrobenzene	ND	50	SW846 8270A	08/05-08/21/95	5217003
Aramite	--		**SW846 8270A**	**08/05-08/21/95**	**5217003**

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	74	(36 - 148)
2-Fluorobiphenyl	78	(38 - 106)
Terphenyl-d14	40	(10 - 169)
Phenol-d5	56	(15 - 126)
2-Fluorophenol	34	(17 - 106)
2,4,6-Tribromophenol	93	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
-- (NOT ANALYZED)

GERAGHTY & MILLER

FMGWMW9D (MS/MSD)

WO #: C0H12105
LAB #: A5H030125-004
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
DATE RECEIVED: 8/03/95
DATE EXTRACTED: 8/05/95
DATE ANALYZED: 8/21/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
Base/Neutrals and Acids (8270)			
Unknown	**20**	**ug/L**	**5217003**

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
Base/Neutrals and Acids (8270)			
None		**ug/L**	**5217003**

ORGANOPHOSPHORUS PESTICIDE SAMPLE DATA

GERAGHTY & MILLER

FMGWMW60

WO #: C0H0E102
LAB #: A5H030125-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 8:00
DATE RECEIVED: 8/03/95

- GC Semi-Volatiles - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Dimethoate	ND	0.50	SW846 8141	08/07-08/17/95	521900
Disulfoton	ND	0.50	SW846 8141	08/07-08/17/95	521900
Famphur	ND	0.50	SW846 8141	08/07-08/17/95	521900
Methyl parathion	ND	0.50	SW846 8141	08/07-08/17/95	521900
Parathion	ND	0.50	SW846 8141	08/07-08/17/95	521900
Phorate	ND	0.50	SW846 8141	08/07-08/17/95	521900
Tetraethyldithiopyrophosphate	ND	0.50	SW846 8141	08/07-08/17/95	521900
O,O,O-Triethylphosphorothioate	ND	0.50	SW846 8141	08/07-08/17/95	521900

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Triphenyl phosphate	63	(38 - 146)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW9S

WO #: C0H0K102
LAB #: A5H030125-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

- GC Semi-Volatiles - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Dimethoate	ND	0.50	SW846 8141	08/07-08/16/95	5219002
Disulfoton	ND	0.50	SW846 8141	08/07-08/16/95	5219002
Famphur	ND	0.50	SW846 8141	08/07-08/16/95	5219002
Methyl parathion	ND	0.50	SW846 8141	08/07-08/16/95	5219002
Parathion	ND	0.50	SW846 8141	08/07-08/16/95	5219002
Phorate	ND	0.50	SW846 8141	08/07-08/16/95	5219002
Tetraethyldithiopyrophosphate	ND	0.50	SW846 8141	08/07-08/16/95	5219002
O,O,O-Triethylphosphorothioate	ND	0.50	SW846 8141	08/07-08/16/95	5219002

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Triphenyl phosphate	66	(38 - 146)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW61

WO #: C0H0P102
LAB #: A5H030125-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

- GC Semi-Volatiles -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Dimethoate	ND	0.50	SW846 8141	08/07-08/17/95	521900
Disulfoton	ND	0.50	SW846 8141	08/07-08/17/95	521900
Famphur	ND	0.50	SW846 8141	08/07-08/17/95	521900
Methyl parathion	ND	0.50	SW846 8141	08/07-08/17/95	521900
Parathion	ND	0.50	SW846 8141	08/07-08/17/95	521900
Phorate	ND	0.50	SW846 8141	08/07-08/17/95	521900
Tetraethyldithiopyro-phosphate	ND	0.50	SW846 8141	08/07-08/17/95	521900
O,O,O-Triethylphosphoro-thioate	ND	0.50	SW846 8141	08/07-08/17/95	521900

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Triphenyl phosphate	64	(38 - 146)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW9D (MS/MSD)

WO #: C0H12102
LAB #: A5H030125-004
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 14:00
DATE RECEIVED: 8/03/95

- GC Semi-Volatiles - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Dimethoate	ND	0.50	SW846 8141	08/07-08/17/95	521900
Disulfoton	ND	0.50	SW846 8141	08/07-08/17/95	521900
Famphur	ND	0.50	SW846 8141	08/07-08/17/95	521900
Methyl parathion	ND	0.50	SW846 8141	08/07-08/17/95	521900
Parathion	ND	0.50	SW846 8141	08/07-08/17/95	521900
Phorate	ND	0.50	SW846 8141	08/07-08/17/95	521900
Tetraethyldithiopyrophosphate	ND	0.50	SW846 8141	08/07-08/17/95	521900
O,O,O-Triethylphosphorothioate	ND	0.50	SW846 8141	08/07-08/17/95	521900

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Triphenyl phosphate	57	(38 - 146)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

PESTICIDE/PCB SAMPLE DATA

GERAGHTY & MILLER

FMGWMW60

WO #: C0H0E101
LAB #: A5H030125-001
MATRIX: WATER

DATE SAMPLED: 8/02/95
TIME SAMPLED: 8:00
DATE RECEIVED: 8/03/95

GC Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Aldrin	ND	0.050	SW846 8080	08/08-08/19/95	5220024
Aroclor 1016	ND	0.50	SW846 8080	08/08-08/19/95	5220024
Aroclor 1221	ND	0.50	SW846 8080	08/08-08/19/95	5220024
Aroclor 1232	ND	0.50	SW846 8080	08/08-08/19/95	5220024
Aroclor 1242	ND	0.50	SW846 8080	08/08-08/19/95	5220024
Aroclor 1248	ND	0.50	SW846 8080	08/08-08/19/95	5220024
Aroclor 1254	ND	1.0	SW846 8080	08/08-08/19/95	5220024
Aroclor 1260	ND	1.0	SW846 8080	08/08-08/19/95	5220024
alpha-BHC	ND	0.050	SW846 8080	08/08-08/19/95	5220024
beta-BHC	ND	0.050	SW846 8080	08/08-08/19/95	5220024
delta-BHC	ND	0.050	SW846 8080	08/08-08/19/95	5220024
gamma-BHC (Lindane)	ND	0.050	SW846 8080	08/08-08/19/95	5220024
Chlordane (technical)	ND	0.50	SW846 8080	08/08-08/19/95	5220024
4,4'-DDD	ND	0.10	SW846 8080	08/08-08/19/95	5220024
4,4'-DDE	ND	0.10	SW846 8080	08/08-08/19/95	5220024
4,4'-DDT	ND	0.10	SW846 8080	08/08-08/19/95	5220024
Dieldrin	ND	0.10	SW846 8080	08/08-08/19/95	5220024
Endosulfan I	ND	0.050	SW846 8080	08/08-08/19/95	5220024
Endosulfan II	ND	0.10	SW846 8080	08/08-08/19/95	5220024
Endosulfan sulfate	ND	0.10	SW846 8080	08/08-08/19/95	5220024
Endrin	ND	0.10	SW846 8080	08/08-08/19/95	5220024
Endrin aldehyde	ND	0.10	SW846 8080	08/08-08/19/95	5220024
Heptachlor	ND	0.050	SW846 8080	08/08-08/19/95	5220024

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Tetrachloro-m-xylene	116	(14 - 155)
Dibutylchlorendate	116	(10 - 155)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW60

WO #: C0H0E101
LAB #: A5H030125-001
MATRIX: WATER

DATE SAMPLED: 8/02/95
TIME SAMPLED: 8:00
DATE RECEIVED: 8/03/95

- GC Semi-Volatiles - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Heptachlor epoxide	ND	0.050	SW846 8080	08/08-08/19/95	522002
Isodrin	ND	0.050	SW846 8080	08/08-08/19/95	522002
Kepone	ND	1.0	SW846 8080	08/08-08/19/95	522002
Methoxychlor	ND	0.50	SW846 8080	08/08-08/19/95	522002
Toxaphene	ND	1.0	SW846 8080	08/08-08/19/95	522002

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Tetrachloro-m-xylene	116	(14 - 155)
Dibutylchlorendate	116	(10 - 155)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW9S

WO #: C0H0K101
LAB #: A5H030125-002
MATRIX: WATER

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

GC Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Aldrin	ND	0.050	SW846 8080	08/08-08/19/95	522002
Aroclor 1016	ND	0.50	SW846 8080	08/08-08/19/95	522002
Aroclor 1221	ND	0.50	SW846 8080	08/08-08/19/95	522002
Aroclor 1232	ND	0.50	SW846 8080	08/08-08/19/95	522002
Aroclor 1242	ND	0.50	SW846 8080	08/08-08/19/95	522002
Aroclor 1248	ND	0.50	SW846 8080	08/08-08/19/95	522002
Aroclor 1254	ND	1.0	SW846 8080	08/08-08/19/95	522002
Aroclor 1260	ND	1.0	SW846 8080	08/08-08/19/95	522002
alpha-BHC	ND	0.050	SW846 8080	08/08-08/19/95	522002
beta-BHC	ND	0.050	SW846 8080	08/08-08/19/95	522002
delta-BHC	ND	0.050	SW846 8080	08/08-08/19/95	522002
gamma-BHC (Lindane)	ND	0.050	SW846 8080	08/08-08/19/95	522002
Chlordane (technical)	ND	0.50	SW846 8080	08/08-08/19/95	522002
4,4'-DDD	ND	0.10	SW846 8080	08/08-08/19/95	522002
4,4'-DDE	ND	0.10	SW846 8080	08/08-08/19/95	522002
4,4'-DDT	ND	0.10	SW846 8080	08/08-08/19/95	522002
Dieldrin	ND	0.10	SW846 8080	08/08-08/19/95	522002
Endosulfan I	ND	0.050	SW846 8080	08/08-08/19/95	522002
Endosulfan II	ND	0.10	SW846 8080	08/08-08/19/95	522002
Endosulfan sulfate	ND	0.10	SW846 8080	08/08-08/19/95	522002
Endrin	ND	0.10	SW846 8080	08/08-08/19/95	522002
Endrin aldehyde	ND	0.10	SW846 8080	08/08-08/19/95	522002
Heptachlor	ND	0.050	SW846 8080	08/08-08/19/95	522002

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Tetrachloro-m-xylene	79	(14 - 155)
Dibutylchlorendate	48	(10 - 155)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW9S

WO #: C0H0K101
LAB #: A5H030125-002
MATRIX: WATER

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

GC Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Heptachlor epoxide	ND	0.050	SW846 8080	08/08-08/19/95	522002
Isodrin	ND	0.050	SW846 8080	08/08-08/19/95	522002
Kepone	ND	1.0	SW846 8080	08/08-08/19/95	522002
Methoxychlor	ND	0.50	SW846 8080	08/08-08/19/95	522002
Toxaphene	ND	1.0	SW846 8080	08/08-08/19/95	522002

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Tetrachloro-m-xylene	79	(14 - 155)
Dibutylchlorendate	48	(10 - 155)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW61

WO #: C0H0P101
LAB #: A5H030125-003
MATRIX: WATER

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

GC Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Aldrin	ND	0.050	SW846 8080	08/08-08/19/95	522002
Aroclor 1016	ND	0.50	SW846 8080	08/08-08/19/95	522002
Aroclor 1221	ND	0.50	SW846 8080	08/08-08/19/95	522002
Aroclor 1232	ND	0.50	SW846 8080	08/08-08/19/95	522002
Aroclor 1242	ND	0.50	SW846 8080	08/08-08/19/95	522002
Aroclor 1248	ND	0.50	SW846 8080	08/08-08/19/95	522002
Aroclor 1254	ND	1.0	SW846 8080	08/08-08/19/95	522002
Aroclor 1260	ND	1.0	SW846 8080	08/08-08/19/95	522002
alpha-BHC	ND	0.050	SW846 8080	08/08-08/19/95	522002
beta-BHC	ND	0.050	SW846 8080	08/08-08/19/95	522002
delta-BHC	ND	0.050	SW846 8080	08/08-08/19/95	522002
gamma-BHC (Lindane)	ND	0.050	SW846 8080	08/08-08/19/95	522002
Chlordane (technical)	ND	0.50	SW846 8080	08/08-08/19/95	522002
4,4'-DDD	ND	0.10	SW846 8080	08/08-08/19/95	522002
4,4'-DDE	ND	0.10	SW846 8080	08/08-08/19/95	522002
4,4'-DDT	ND	0.10	SW846 8080	08/08-08/19/95	522002
Dieldrin	ND	0.10	SW846 8080	08/08-08/19/95	522002
Endosulfan I	ND	0.050	SW846 8080	08/08-08/19/95	522002
Endosulfan II	ND	0.10	SW846 8080	08/08-08/19/95	522002
Endosulfan sulfate	ND	0.10	SW846 8080	08/08-08/19/95	522002
Endrin	ND	0.10	SW846 8080	08/08-08/19/95	522002
Endrin aldehyde	ND	0.10	SW846 8080	08/08-08/19/95	522002
Heptachlor	ND	0.050	SW846 8080	08/08-08/19/95	522002

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Tetrachloro-m-xylene	115	(14 - 155)
Dibutylchlorendate	79	(10 - 155)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW61

WO #: C0H0P101
LAB #: A5H030125-003
MATRIX: WATER

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

- GC Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Heptachlor epoxide	ND	0.050	SW846 8080	08/08-08/19/95	52200
Isodrin	ND	0.050	SW846 8080	08/08-08/19/95	52200
Kepone	ND	1.0	SW846 8080	08/08-08/19/95	52200
Methoxychlor	ND	0.50	SW846 8080	08/08-08/19/95	52200
Toxaphene	ND	1.0	SW846 8080	08/08-08/19/95	52200

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Tetrachloro-m-xylene	115	(14 - 155)
Dibutylchlorendate	79	(10 - 155)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW9D (MS/MSD)

WO #: C0H12101
LAB #: A5H030125-004
MATRIX: WATER

DATE SAMPLED: 8/02/95
TIME SAMPLED: 14:00
DATE RECEIVED: 8/03/95

GC Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Aldrin	ND	0.050	SW846 8080	08/08-08/19/95	5220024
Aroclor 1016	ND	0.50	SW846 8080	08/08-08/19/95	5220024
Aroclor 1221	ND	0.50	SW846 8080	08/08-08/19/95	5220024
Aroclor 1232	ND	0.50	SW846 8080	08/08-08/19/95	5220024
Aroclor 1242	ND	0.50	SW846 8080	08/08-08/19/95	5220024
Aroclor 1248	ND	0.50	SW846 8080	08/08-08/19/95	5220024
Aroclor 1254	ND	1.0	SW846 8080	08/08-08/19/95	5220024
Aroclor 1260	ND	1.0	SW846 8080	08/08-08/19/95	5220024
alpha-BHC	ND	0.050	SW846 8080	08/08-08/19/95	5220024
beta-BHC	ND	0.050	SW846 8080	08/08-08/19/95	5220024
delta-BHC	ND	0.050	SW846 8080	08/08-08/19/95	5220024
gamma-BHC (Lindane)	ND	0.050	SW846 8080	08/08-08/19/95	5220024
Chlordane (technical)	ND	0.50	SW846 8080	08/08-08/19/95	5220024
4,4'-DDD	ND	0.10	SW846 8080	08/08-08/19/95	5220024
4,4'-DDE	ND	0.10	SW846 8080	08/08-08/19/95	5220024
4,4'-DDT	ND	0.10	SW846 8080	08/08-08/19/95	5220024
Dieldrin	ND	0.10	SW846 8080	08/08-08/19/95	5220024
Endosulfan I	ND	0.050	SW846 8080	08/08-08/19/95	5220024
Endosulfan II	ND	0.10	SW846 8080	08/08-08/19/95	5220024
Endosulfan sulfate	ND	0.10	SW846 8080	08/08-08/19/95	5220024
Endrin	ND	0.10	SW846 8080	08/08-08/19/95	5220024
Endrin aldehyde	ND	0.10	SW846 8080	08/08-08/19/95	5220024
Heptachlor	ND	0.050	SW846 8080	08/08-08/19/95	5220024

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Tetrachloro-m-xylene	89	(14 - 155)
Dibutylchlorendate	48	(10 - 155)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW9D (MS/MSD)

WO #: C0H12101
LAB #: A5H030125-004
MATRIX: WATER

DATE SAMPLED: 8/02/95
TIME SAMPLED: 14:00
DATE RECEIVED: 8/03/95

GC Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Heptachlor epoxide	ND	0.050	SW846 8080	08/08-08/19/95	52200
Isodrin	ND	0.050	SW846 8080	08/08-08/19/95	52200
Kepone	ND	1.0	SW846 8080	08/08-08/19/95	52200
Methoxychlor	ND	0.50	SW846 8080	08/08-08/19/95	52200
Toxaphene	ND	1.0	SW846 8080	08/08-08/19/95	52200

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Tetrachloro-m-xylene	89	(14 - 155)
Dibutylchlorendate	48	(10 - 155)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

HERBICIDE SAMPLE DATA

GERAGHTY & MILLER

FMGWMW60

WO #: C0H0E103
LAB #: A5H030125-001
MATRIX: WATER
DILUTION FACTOR: .00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 8:00
DATE RECEIVED: 8/03/95

- GC Semi-Volatiles - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
2,4-D	ND	0.50	SW846 8150A	08/08-08/15/95	5220001
2,4,5-TP (Silvex)	ND	0.20	SW846 8150A	08/08-08/15/95	5220001
2,4,5-T	ND	0.10	SW846 8150A	08/08-08/15/95	5220001
Dinoseb	ND	1.0	SW846 8150A	08/08-08/15/95	5220001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2,4-Dichlorophenylacetic acid	67	(50 - 150)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW9S

WO #: C0H0K103
LAB #: A5H030125-002
MATRIX: WATER
DILUTION FACTOR: .00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

- GC Semi-Volatiles - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
2,4-D	ND	0.50	SW846 8150A	08/08-08/15/95	5220001
2,4,5-TP (Silvex)	ND	0.20	SW846 8150A	08/08-08/15/95	5220001
2,4,5-T	ND	0.10	SW846 8150A	08/08-08/15/95	5220001
Dinoseb	ND	1.0	SW846 8150A	08/08-08/15/95	5220001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2,4-Dichlorophenylacetic acid	74	(50 - 150)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW61

WO #: C0H0P103
LAB #: A5H030125-003
MATRIX: WATER
DILUTION FACTOR: .00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

- GC Semi-Volatiles - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
2,4-D	ND	0.50	SW846 8150A	08/08-08/15/95	52200(
2,4,5-TP (Silvex)	ND	0.20	SW846 8150A	08/08-08/15/95	52200(
2,4,5-T	ND	0.10	SW846 8150A	08/08-08/15/95	52200(
Dinoseb	ND	1.0	SW846 8150A	08/08-08/15/95	52200(

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2,4-Dichlorophenylacetic acid	75	(50 - 150)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW9D (MS/MSD)

WO #: C0H12103
LAB #: A5H030125-004
MATRIX: WATER
DILUTION FACTOR: .00

DATE SAMPLED: 8/02/95
TIME SAMPLED: 14:00
DATE RECEIVED: 8/03/95

- GC Semi-Volatiles - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
2,4-D	ND	0.50	SW846 8150A	08/08-08/15/95	5220001
2,4,5-TP (Silvex)	ND	0.20	SW846 8150A	08/08-08/15/95	5220001
2,4,5-T	ND	0.10	SW846 8150A	08/08-08/15/95	5220001
Dinoseb	ND	1.0	SW846 8150A	08/08-08/15/95	5220001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2,4-Dichlorophenylacetic acid	143	(50 - 150)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

INORGANIC SAMPLE DATA

GERAGHTY & MILLER

FMGWMW60

WO #: C0H0E
LAB #: A5H030125-001
MATRIX: WATER

DATE SAMPLED: 8/02/95
TIME SAMPLED: 8:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - REQUESTED METALS - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Silver	ND	10.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Barium	ND	10.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Beryllium	ND	5.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Cadmium	ND	10.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Cobalt	ND	50.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Chromium	ND	20.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Copper	ND	10.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Iron	ND	100	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Manganese	ND	15.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Sodium	ND	5,000	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Nickel	ND	40.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Antimony	ND	300	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Tin	ND	1,000	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Vanadium	ND	50.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Zinc	ND	50.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Arsenic	ND	5.0	ug/L	SW846 7060	8/17- 8/22/95	5229008
Lead	ND	3.0	ug/L	SW846 7421	8/17- 8/18/95	5229008
Mercury	ND	0.20	ug/L	SW846 7470	8/17- 8/18/95	5229008
Selenium	ND	5.0	ug/L	SW846 7740	8/17- 8/22/95	5229008
Thallium	ND	10.0	ug/L	SW846 7841	8/17- 8/18/95	5229008

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW60

WO #: C0H0E
LAB #: A5H030125-001
MATRIX: WATER

DATE SAMPLED: 8/02/95
TIME SAMPLED: 8:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - - REQUESTED METALS - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
- - DISSOLVED METALS - -						
Silver	ND	10.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Barium	ND	10.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Beryllium	ND	5.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Cadmium	ND	10.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Cobalt	ND	50.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Chromium	ND	20.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Copper	ND	10.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Iron	ND	100	ug/L	SW846 6010A	8/17- 9/13/95	522900
Manganese	ND	15.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Sodium	ND	5,000	ug/L	SW846 6010A	8/17- 9/13/95	522900
Nickel	ND	40.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Antimony	ND	300	ug/L	SW846 6010A	8/17- 9/13/95	522900
Tin	ND	1,000	ug/L	SW846 6010A	8/17- 9/13/95	522900
Vanadium	ND	50.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Zinc	ND	50.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Arsenic	ND	5.0	ug/L	SW846 7060	8/17- 8/22/95	522900
Lead	ND	3.0	ug/L	SW846 7421	8/17- 8/18/95	522900
Mercury	ND	0.20	ug/L	SW846 7470	8/17- 8/18/95	522900
Selenium	ND	5.0	ug/L	SW846 7740	8/17- 8/22/95	522900
Thallium	ND	10.0	ug/L	SW846 7841	8/17- 8/18/95	522900

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW9 S

WO #: C0H0K
LAB #: A5H030125-002
MATRIX: WATER

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - - REQUESTED METALS -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Silver	ND	10.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Barium	815	10.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Beryllium	ND	5.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Cadmium	12.5	10.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Cobalt	ND	50.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Chromium	40.2	20.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Copper	3,800	10.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Iron	68,700	100	ug/L	SW846 6010A	8/17- 9/13/95	522900
Manganese	1,590	15.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Sodium	138,000	5,000	ug/L	SW846 6010A	8/17- 9/13/95	522900
Nickel	90.7	40.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Antimony	ND	300	ug/L	SW846 6010A	8/17- 9/13/95	522900
Tin	ND	1,000	ug/L	SW846 6010A	8/17- 9/13/95	522900
Vanadium	60.6	50.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Zinc	3,780	50.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Arsenic	128	20.0	ug/L	SW846 7060	8/17- 8/23/95	522900
Lead	3,940	270	ug/L	SW846 7421	8/17- 8/18/95	522900
Mercury	0.44	0.20	ug/L	SW846 7470	8/17- 8/18/95	522900
Selenium	*ND W	10.0	ug/L	SW846 7740	8/17- 8/22/95	522900
Thallium	ND	10.0	ug/L	SW846 7841	8/17- 8/18/95	522900

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
W - POST DIGESTION SPIKE RECOVERY FELL BETWEEN 40 - 85% WHILE SAMPLE RESULT WAS LESS THAN ONE-HALF THE REPORTING LIMIT.
* ELEVATED DETECTION LIMIT DUE TO MATRIX INTERFERENCE.

GERAGHTY & MILLER

FMGWMW9S

WO #: C0H0K
LAB #: A5H030125-002
MATRIX: WATER

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - - REQUESTED METALS - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
- - DISSOLVED METALS - -						
Silver	ND	10.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Barium	**120**	**10.0**	**ug/L**	**SW846 6010A**	**8/17- 9/13/95**	**5229008**
Beryllium	ND	5.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Cadmium	ND	10.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Cobalt	ND	50.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Chromium	ND	20.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Copper	ND	10.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Iron	**320**	**100**	**ug/L**	**SW846 6010A**	**8/17- 9/13/95**	**5229008**
Manganese	**315**	**15.0**	**ug/L**	**SW846 6010A**	**8/17- 9/13/95**	**5229008**
Sodium	**151,000**	**5,000**	**ug/L**	**SW846 6010A**	**8/17- 9/13/95**	**5229008**
Nickel	ND	40.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Antimony	ND	300	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Tin	ND	1,000	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Vanadium	ND	50.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Zinc	ND	50.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Arsenic	**62.8**	**10.0**	**ug/L**	**SW846 7060**	**8/17- 8/23/95**	**5229008**
Lead	**8.8**	**3.0**	**ug/L**	**SW846 7421**	**8/17- 8/18/95**	**5229008**
Mercury	ND	0.20	ug/L	SW846 7470	8/17- 8/18/95	5229008
Selenium	ND W	5.0	ug/L	SW846 7740	8/17- 8/22/95	5229008
Thallium	ND	10.0	ug/L	SW846 7841	8/17- 8/18/95	5229008

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
W - POST DIGESTION SPIKE RECOVERY FELL BETWEEN 40 - 85% WHILE SAMPLE RESULT WAS LESS THAN ONE-HALF THE REPORTING LIMIT.

GERAGHTY & MILLER

FMGWMW61

WO #: C0H0P
LAB #: A5H030125-003
MATRIX: WATER

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - - REQUESTED METALS - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Silver	ND	10.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Barium	652	10.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Beryllium	ND	5.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Cadmium	10.5	10.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Cobalt	ND	50.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Chromium	37.0	20.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Copper	3,220	10.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Iron	56,500	100	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Manganese	1,370	15.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Sodium	126,000	5,000	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Nickel	70.4	40.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Antimony	ND	300	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Tin	ND	1,000	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Vanadium	ND	50.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Zinc	3,050	50.0	ug/L	SW846 6010A	8/17- 9/13/95	5229008
Arsenic	142	25.0	ug/L	SW846 7060	8/17- 8/23/95	5229008
Lead	4,310	270	ug/L	SW846 7421	8/17- 8/18/95	5229008
Mercury	0.33	0.20	ug/L	SW846 7470	8/17- 8/18/95	5229008
Selenium	ND W	5.0	ug/L	SW846 7740	8/17- 8/22/95	5229008
Thallium	ND	10.0	ug/L	SW846 7841	8/17- 8/18/95	5229008

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
W - POST DIGESTION SPIKE RECOVERY FELL BETWEEN 40 - 85% WHILE SAMPLE RESULT WAS LESS THAN ONE-HALF THE REPORTING LIMIT.

GERAGHTY & MILLER

FMGWMW61

WO #: C0H0P
LAB #: A5H030125-003
MATRIX: WATER

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - - REQUESTED METALS - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
- - DISSOLVED METALS - -						
Silver	ND	10.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Barium	111	10.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Beryllium	ND	5.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Cadmium	ND	10.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Cobalt	ND	50.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Chromium	ND	20.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Copper	ND	10.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Iron	246	100	ug/L	SW846 6010A	8/17- 9/13/95	522900
Manganese	301	15.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Sodium	147,000	5,000	ug/L	SW846 6010A	8/17- 9/13/95	522900
Nickel	ND	40.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Antimony	ND	300	ug/L	SW846 6010A	8/17- 9/13/95	522900
Tin	ND	1,000	ug/L	SW846 6010A	8/17- 9/13/95	522900
Vanadium	ND	50.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Zinc	61.3	50.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Arsenic	67.7	5.0	ug/L	SW846 7060	8/17- 8/22/95	522900
Lead	9.4	3.0	ug/L	SW846 7421	8/17- 8/18/95	522900
Mercury	ND	0.20	ug/L	SW846 7470	8/17- 8/18/95	522900
Selenium	ND W	5.0	ug/L	SW846 7740	8/17- 8/22/95	5229008
Thallium	ND	10.0	ug/L	SW846 7841	8/17- 8/18/95	5229008

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
W - POST DIGESTION SPIKE RECOVERY FELL BETWEEN 40 - 85% WHILE SAMPLE RESULT WAS LESS THAN ONE-HALF THE REPORTING LIMIT.

GERAGHTY & MILLER

FMGWMW9D (MS/MSD)

WO #: C0H12
LAB #: A5H030125-004
MATRIX: WATER

DATE SAMPLED: 8/02/95
TIME SAMPLED: 14:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - - REQUESTED METALS - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Silver	ND	10.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Barium	264	10.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Beryllium	ND	5.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Cadmium	ND	10.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Cobalt	ND	50.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Chromium	64.4	20.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Copper	118	10.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Iron	49,600	100	ug/L	SW846 6010A	8/17- 9/13/95	522900
Manganese	1,260	15.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Sodium	361,000	5,000	ug/L	SW846 6010A	8/17- 9/13/95	522900
Nickel	73.8	40.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Antimony	ND	300	ug/L	SW846 6010A	8/17- 9/13/95	522900
Tin	ND	1,000	ug/L	SW846 6010A	8/17- 9/13/95	522900
Vanadium	85.5	50.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Zinc	484	50.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Arsenic	32.0	10.0	ug/L	SW846 7060	8/17- 8/23/95	522900
Lead	76.9	6.0	ug/L	SW846 7421	8/17- 8/18/95	522900
Mercury	ND	0.20	ug/L	SW846 7470	8/17- 8/18/95	522900
Selenium	*ND W	10.0	ug/L	SW846 7740	8/17- 8/22/95	522900
Thallium	ND W	10.0	ug/L	SW846 7841	8/17- 8/18/95	522900

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
* ELEVATED DETECTION LIMIT DUE TO MATRIX INTERFERENCE.
W - POST DIGESTION SPIKE RECOVERY FELL BETWEEN 40 - 85% WHILE SAMPLE RESULT WAS LESS THAN ONE-HALF THE REPORTING LIMIT.

GERAGHTY & MILLER

FMGWMW9D (MS/MSD)

WO #: C0H12
LAB #: A5H030125-004
MATRIX: WATER

DATE SAMPLED: 8/02/95
TIME SAMPLED: 14:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - - REQUESTED METALS - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
- - DISSOLVED METALS - -						
Silver	ND	10.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Barium	97.9	10.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Beryllium	ND	5.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Cadmium	ND	10.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Cobalt	ND	50.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Chromium	ND	20.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Copper	ND	10.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Iron	575	100	ug/L	SW846 6010A	8/17- 9/13/95	522900
Manganese	90.6	15.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Sodium	441,000	5,000	ug/L	SW846 6010A	8/17- 9/13/95	522900
Nickel	ND	40.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Antimony	ND	300	ug/L	SW846 6010A	8/17- 9/13/95	522900
Tin	ND	1,000	ug/L	SW846 6010A	8/17- 9/13/95	522900
Vanadium	ND	50.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Zinc	ND	50.0	ug/L	SW846 6010A	8/17- 9/13/95	522900
Arsenic	13.3	5.0	ug/L	SW846 7060	8/17- 8/22/95	522900
Lead	7.0	3.0	ug/L	SW846 7421	8/17- 8/18/95	522900
Mercury	ND	0.20	ug/L	SW846 7470	8/22- 8/23/95	523400
Selenium	*ND W	10.0	ug/L	SW846 7740	8/23- 8/24/95	523500
Thallium	ND	10.0	ug/L	SW846 7841	8/17- 8/18/95	522900

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
* ELEVATED DETECTION LIMIT DUE TO MATRIX INTERFERENCE.
W - POST DIGESTION SPIKE RECOVERY FELL BETWEEN 40 - 85% WHILE SAMPLE RESULT WAS LESS THAN ONE-HALF THE REPORTING LIMIT.

WET CHEMISTRY SAMPLE DATA

GERAGHTY & MILLER

FMGWMW60

WO #: C0H0E
LAB #: A5H030125-001
MATRIX: WATER

DATE SAMPLED: 8/02/95
TIME SAMPLED: 8:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - INORGANIC ANALYTICAL REPORT - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Fluoride (Colorimetric, Ion Selective Electrode)	ND	1.2	mg/L	MCAWW 340.2	8/15/95	522702
Sulfide	ND	1.0	mg/L	MCAWW 376.1	8/04/95	521902
Total Cyanide	ND	5.0	ug/L	SW846 9012	8/14/95	522604

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW9S

WO #: C0H0K
LAB #: A5H030125-002
MATRIX: WATER

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - INORGANIC ANALYTICAL REPORT - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Fluoride (Colorimetric, Ion Selective Electrode)	17	12	mg/L	MCAWW 340.2	8/15/95	52270:
Sulfide	ND	1.0	mg/L	MCAWW 376.1	8/04/95	521902
Total Cyanide	ND	5.0	ug/L	SW846 9012	8/14/95	52260:

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW61

WO #: C0H0P
LAB #: A5H030125-003
MATRIX: WATER

DATE SAMPLED: 8/02/95
TIME SAMPLED: 10:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - INORGANIC ANALYTICAL REPORT - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Fluoride (Colorimetric, Ion Selective Electrode)	18	5.8	mg/L	MCAWW 340.2	8/15/95	522702
Sulfide	ND	1.0	mg/L	MCAWW 376.1	8/04/95	521902
Total Cyanide	ND	5.0	ug/L	SW846 9012	8/14/95	522604

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW9D (MS/MSD)

WO #: C0H12
LAB #: A5H030125-004
MATRIX: WATER

DATE SAMPLED: 8/02/95
TIME SAMPLED: 14:00
DATE RECEIVED: 8/03/95

- - - - - - - - - - - - - - - - - - INORGANIC ANALYTICAL REPORT - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Fluoride (Colorimetric, Ion Selective Electrode)	24	12	mg/L	MCAWW 340.2	8/15/95	522702
Sulfide	1.1	1.0	mg/L	MCAWW 376.1	8/04/95	521902
Total Cyanide	ND	5.0	ug/L	SW846 9012	8/14/95	522610

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

CHAIN-OF-CUSTODY

GERAGHTY & MI[illegible], INC.
Environ[illegible] Services
a heidemij company

Laboratory Task Order No._____

CHAIN-OF-CUSTODY RECORD

Page 1 of 2

Project Number IN0144109

Project Location Federated Metals. Hammond

Laboratory Quanterra

Sampler(s)/Affiliation Jamie Yater / GHM
Blake Fahl /

SAMPLE BOTTLES/CONTAINER DESCRIPTION

SAMPLE IDENTITY	Code	Date/Time Sampled	Lab ID	VOCs 8240 HCl 40ml vials	BNAs 8270 1L glass	Total Metals incl. Fe, Mn, Na 1L plas HNO3	Dissolved Metals incl Fe, Mn, Na 1 L plas HNO3	Sulfide NaOH + Zinc Ac 1 L plas	CN 250ml NaOH	Fluoride 250ml	O-P-Pest 1L glass	Pest/PCB 1L glass	TOTAL
FMGWMW60	L	8.2.95 8A		3	2	1	1	1	1	1	2	2	14
FMGWMW95	L	8.2.95 10A		3	2	1	1	1	1	1	2	2	14
FMGWMW61	L	8.2.95 10A		3	2	1	1	1	1	1	2	2	14
* FMGWMW90	L	8.2.95 2P		9	6	1	1	1	1	1	6	6	32
TRIP BLANK		8.2.95		1									1
													75
													75
													75
													75
													75
													75
													75
													75
													75
													75

Sample Code: L = Liquid; S = Solid; A = Air

Total No. of Bottles/Containers 75

Relinquished by: Jamie Yater	Organization: GHM	Date 8.2.95 Time 830 P	Seal Intact? Yes No N/A
Received by:	Organization:	Date / / Time	
Relinquished by:	Organization:	Date / / Time	Seal Intact?
Received by: Jessica M. Rzepka	Organization: Quanterra	Date 8/3/95 Time 12:00P	Yes No N/A

Special Instructions/Remarks: *RUN MS/MSD on samples FMGWMW95

1577

Delivery Method: ☐ In Person ☐ Common Carrier _____ ☐ Lab Courier ☐ Other

GERAGHTY & MILLER, INC.
Environmental Services
a Heidemij company

Laboratory Task Order No.________

CHAIN-OF-CUSTODY RECORD

Project Number IN0144.109

Project Location Federated Metals Hmd

Laboratory Quanterra

Sampler(s)/Affiliation Jamie Yater G&M
Blake Fahl

SAMPLE IDENTITY	Code	Date/Time Sampled	Lab ID	Herbs 1L glass									TOTAL
FMGWMW60	L	8.2.95 8A		2									2
FMGWMW95	L	8.2.95 10A		2									2
FMGWMW61	L	8.2.95 10A		2									2
FMGWMW9D	L	8.2.95 2P		6									6

87 total

Sample Code: L = Liquid; S = Solid; A = Air

Total No. of Bottles/Containers 12

Relinquished by: Jamie Yater	Organization: G&M	Date 8/2/95	Time 830P	Seal Intact? Yes No N/A
Received by:	Organization:	Date / /	Time	
Relinquished by:	Organization:	Date / /	Time	Seal Intact? (Yes) No N/A
Received by: Jessica M. Rigdon	Organization: Quanterra	Date 8/3/95	Time 12:00P	

Special Instructions/Remarks:

1578

Delivery Method: ☐ In Person ☐ Common Carrier ☐ Lab Courier ☐ Other

7/6-95

Quanterra
Environmental Services

Quanterra Incorporated
4101 Shuffel Drive, NW
North Canton, Ohio 44720

216 497-9396 Telephone
216 497-0772 Fax

RECEIVED
OCT 25 1995
GERAGHTY & MILLER, INC.
INDIANAPOLIS, INDIANA

ANALYTICAL REPORT

PROJECT NO. IN0144.109

FEDERATED METALS/HAMMOND, IN

Tim Northam

GERAGHTY & MILLER

QUANTERRA INCORPORATED

Thomas M. Himes
Project Manager

October 24, 1995

TABLE OF CONTENTS

Case Narrative

Sample Summary

Method Reference

GC/MS Volatile QC Summary Data

GC/MS Volatile Sample Data

GC/MS Volatile Standard Data

GC/MS Volatile Raw QC Data

GC/MS Semivolatile QC Summary Data

GC/MS Semivolatile Sample Data

GC/MS Semivolatile Standard Data

GC/MS Semivolatile Raw QC Data

Organophosphorus Pesticide QC Summary Data

Organophosphorus Pesticide Sample Data

Organophosphorus Initial Calibration Data

Organophosphorus Continuing Calibration Data

Organophosphorus Pesticide Raw QC Data

Pesticide/PCB QC Summary Data

Pesticide/PCB Sample Data

Pesticide/PCB Initial Calibration Data

TABLE OF CONTENTS (CONT'D)

Pesticide/PCB Continuing Calibration Data

Pesticide/PCB Raw QC Data

Herbicide QC Summary Data

Herbicide Sample Data

Herbicide Initial Calibration Data

Herbicide Continuing Calibration Data

Herbicide Raw QC Data

Inorganic QC Summary Data

Inorganic Sample Data

Inorganic Calibration Data

Inorganic Instrument Print-Out

Inorganic Prep Logs

Wet Chemistry QC Data

Wet Chemistry Sample Data

Wet Chemistry Log Sheets

Organic Instrument Log Sheets

Organic Extraction Log Sheets

Internal Chain-of-Custody

Chain-of-Custody

CASE NARRATIVE

CASE NARRATIVE

The following report contains the analytical results for two water samples submitted to Quanterra-North Canton by Geraghty & Miller from the Federated Metals/Hammond, IN Site, project number IN0144.109. The samples were received August 2, 1995, according to documented sample acceptance procedures.

Quanterra-North Canton utilizes only USEPA approved methods and instrumentation in all analytical work. The samples presented in this report were analyzed for the parameters listed on the method reference page in accordance with the methods indicated.

At the time of sample receipt, it was determined that the following sample containers had been compromised during shipment:

Sample ID	Condition Upon Receipt
FMGWMW 8S	- 2 x 1 Liter glass received broken - Lids broken on 2 x 1 Liter glass - 1 Liter plastic w/ NP received with lid off - sample compromised

all analyses were able to be completed in leu of the damaged sample containers listed above.

The results included in this report have been reviewed for compliance with the laboratory QA/QC plan. All data have been found to be compliant with the exception of those items noted.

"DIL" in the analytical report means that due to high concentrations of analytes in the sample, a dilution was made and the surrogates or spiking compounds could not be quantitated.

The AD/RPD for the Nickel and Antimony MS/MSD performed on sample A5H030106-002 was outside laboratory acceptance criteria. Remaining elements spiked from the same spiking solution and from the same prep were within laboratory acceptance criteria. Matrix effect was demonstrated and associated results were accepted.

SAMPLE SUMMARY

SAMPLE SUMMARY

The analytical results of the samples listed below are presented on the following pages.

WO #	LABORATORY ID	SAMPLE IDENTIFICATION	DATE/TIME SAMPI
C0GMP	A5H030106-001	FMGWMW8D	8/01/95 9:1
C0GMT	A5H030106-002	FMGWMW8S (MS/MSD)	8/01/95 11:5
C0GN5	A5H030106-003	TRIP BLANK	8/01/95

METHOD REFERENCE

ANALYTICAL METHODS SUMMARY

A5H030106

Parameters	Methods
Organophosphorous Compounds by GC	SW846 8141
Organochlorine Pesticides and PCB's	SW846 8080
Chlorinated Herbicides by GC	SW846 8150A
Volatile Organics by GC/MS	SW846 8240A
Semivolatile Organic Compounds by GC/MS	SW846 8270A
Fluoride (Potentiometric, Ion Selective Electrode)	MCAWW 340.2
Sulfide	MCAWW 376.1
Inductively Coupled Plasma (ICP) Metals	SW846 6010A
Dissolved ICP Metals	SW846 6010A
Arsenic (AA, Furnace Technique)	SW846 7060
Dissolved Arsenic (GFAA)	SW846 7060
Lead (AA, Furnace Technique)	SW846 7421
Dissolved Lead (GFAA)	SW846 7421
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470
Dissolved Mercury (CVAA)	SW846 7470
Selenium (AA, Furnace Technique)	SW846 7740
Dissolved Selenium (GFAA)	SW846 7740
Thallium (AA, Furnace Technique)	SW846 7841
Dissolved Thallium (GFAA)	SW846 7841
Total Cyanide	SW846 9012

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and Final Update I (7/92).

GC/MS VOLATILE SAMPLE DATA

GERAGHTY & MILLER

FMGWMW8S (MS/MSD)

WO #: C0GMT10A
LAB #: A5H030106-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/01/95
TIME SAMPLED: 11:50
DATE RECEIVED: 8/02/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Acetone	ND	50	SW846 8240A	08/07/95	52260
Acetonitrile	ND	50	SW846 8240A	08/07/95	52260
Acrolein	ND	100	SW846 8240A	08/07/95	52260
Acrylonitrile	ND	50	SW846 8240A	08/07/95	52260
Benzene	ND	5.0	SW846 8240A	08/07/95	52260
Bromodichloromethane	ND	5.0	SW846 8240A	08/07/95	52260
Bromoform	ND	10	SW846 8240A	08/07/95	52260
Bromomethane	ND	10	SW846 8240A	08/07/95	52260
Carbon disulfide	ND	5.0	SW846 8240A	08/07/95	52260
Carbon tetrachloride	ND	10	SW846 8240A	08/07/95	52260
Chlorobenzene	ND	5.0	SW846 8240A	08/07/95	52260
Chloroprene	ND	5.0	SW846 8240A	08/07/95	52260
Dibromochloromethane	ND	5.0	SW846 8240A	08/07/95	52260
1,2-Dibromo-3-chloro-propane	ND	10	SW846 8240A	08/07/95	52260
Chloroethane	ND	10	SW846 8240A	08/07/95	52260
Chloroform	ND	5.0	SW846 8240A	08/07/95	52260
Chloromethane	ND	10	SW846 8240A	08/07/95	52260
Allyl chloride	ND	5.0	SW846 8240A	08/07/95	52260
Dibromomethane	ND	5.0	SW846 8240A	08/07/95	52260
trans-1,4-Dichloro-2-butene	ND	5.0	SW846 8240A	08/07/95	52260
Dichlorodifluoromethane	ND	20	SW846 8240A	08/07/95	52260
1,1-Dichloroethane	ND	5.0	SW846 8240A	08/07/95	52260
1,2-Dichloroethane	ND	5.0	SW846 8240A	08/07/95	52260

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	105	(76 - 114)
Toluene-d8	102	(88 - 110)
Bromofluorobenzene	99	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW8S (MS/MSD)

WO #: C0GMT10A
LAB #: A5H030106-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/01/9
TIME SAMPLED: 11:5
DATE RECEIVED: 8/02/9

- GC/MS Volatiles - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATC
1,1-Dichloroethene	ND	5.0	SW846 8240A	08/07/95	5226
1,2-Dichloroethene (total)	ND	5.0	SW846 8240A	08/07/95	5226
1,2-Dichloropropane	ND	5.0	SW846 8240A	08/07/95	5226
cis-1,3-Dichloropropene	ND	5.0	SW846 8240A	08/07/95	5226
trans-1,3-Dichloropropene	ND	5.0	SW846 8240A	08/07/95	5226
1,4-Dioxane	ND	1,000	SW846 8240A	08/07/95	5226
Ethylbenzene	ND	5.0	SW846 8240A	08/07/95	5226
Ethyl methacrylate	ND	5.0	SW846 8240A	08/07/95	5226
Trichlorofluoromethane	ND	5.0	SW846 8240A	08/07/95	5226
2-Hexanone	ND	50	SW846 8240A	08/07/95	5226
Iodomethane	ND	5.0	SW846 8240A	08/07/95	5226
Isobutyl alcohol	ND	500	SW846 8240A	08/07/95	5226
Methacrylonitrile	ND	20	SW846 8240A	08/07/95	5226
Methylene chloride	ND	5.0	SW846 8240A	08/07/95	5226
Methyl methacrylate	ND	5.0	SW846 8240A	08/07/95	5226
Propionitrile	ND	20	SW846 8240A	08/07/95	5226
Styrene	ND	5.0	SW846 8240A	08/07/95	5226
1,1,1,2-Tetrachloroethane	ND	5.0	SW846 8240A	08/07/95	5226
1,1,2,2-Tetrachloroethane	ND	5.0	SW846 8240A	08/07/95	5226
Tetrachloroethene	ND	5.0	SW846 8240A	08/07/95	5226
Toluene	ND	5.0	SW846 8240A	08/07/95	5226
1,1,1-Trichloroethane	ND	5.0	SW846 8240A	08/07/95	5226
1,1,2-Trichloroethane	ND	5.0	SW846 8240A	08/07/95	5226

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	105	(76 - 114)
Toluene-d8	102	(88 - 110)
Bromofluorobenzene	99	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW8S (MS/MSD)

WO #: C0GMT10A
LAB #: A5H030106-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/01/95
TIME SAMPLED: 11:50
DATE RECEIVED: 8/02/95

- GC/MS Volatiles -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Trichloroethene	ND	5.0	SW846 8240A	08/07/95	522606
1,2,3-Trichloropropane	ND	5.0	SW846 8240A	08/07/95	522606
Vinyl acetate	ND	50	SW846 8240A	08/07/95	522606
Vinyl chloride	ND	10	SW846 8240A	08/07/95	522606
Xylenes (total)	ND	5.0	SW846 8240A	08/07/95	522606
1,2-Dibromoethane (EDB)	ND	5.0	SW846 8240A	08/07/95	522606
2-Butanone (MEK)	ND	50	SW846 8240A	08/07/95	522606
4-Methyl-2-pentanone (MIBK)	ND	50	SW846 8240A	08/07/95	522606

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	105	(76 - 114)
Toluene-d8	102	(88 - 110)
Bromofluorobenzene	99	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW8S (MS/MSD)

WO #: C0GMT10A
LAB #: A5H030106-002
MATRIX: WATER

DATE SAMPLED: 8/01/9
DATE RECEIVED: 8/02/9
DATE EXTRACTED: 8/07/9
DATE ANALYZED: 8/07/9

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	522606

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	522606

GERAGHTY & MILLER

TRIP BLANK

WO #: C0GN5101
LAB #: A5H030106-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/01/95
TIME SAMPLED:
DATE RECEIVED: 8/02/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Acetone	**14 J**	**50**	**SW846 8240A**	**08/07/95**	**52200**
Acetonitrile	ND	50	SW846 8240A	08/07/95	52200
Acrolein	ND	100	SW846 8240A	08/07/95	52200
Acrylonitrile	ND	50	SW846 8240A	08/07/95	52200
Benzene	ND	5.0	SW846 8240A	08/07/95	52200
Bromodichloromethane	ND	5.0	SW846 8240A	08/07/95	52200
Bromoform	ND	10	SW846 8240A	08/07/95	52200
Bromomethane	ND	10	SW846 8240A	08/07/95	52200
Carbon disulfide	ND	5.0	SW846 8240A	08/07/95	52200
Carbon tetrachloride	ND	10	SW846 8240A	08/07/95	52200
Chlorobenzene	ND	5.0	SW846 8240A	08/07/95	52200
Chloroprene	ND	5.0	SW846 8240A	08/07/95	52200
Dibromochloromethane	ND	5.0	SW846 8240A	08/07/95	52200
1,2-Dibromo-3-chloro-propane	ND	10	SW846 8240A	08/07/95	52200
Chloroethane	ND	10	SW846 8240A	08/07/95	52200
Chloroform	ND	5.0	SW846 8240A	08/07/95	52200
Chloromethane	ND	10	SW846 8240A	08/07/95	52200
Allyl chloride	ND	5.0	SW846 8240A	08/07/95	52200
Dibromomethane	ND	5.0	SW846 8240A	08/07/95	52200
trans-1,4-Dichloro-2-butene	ND	5.0	SW846 8240A	08/07/95	52200
Dichlorodifluoromethane	ND	20	SW846 8240A	08/07/95	52200
1,1-Dichloroethane	ND	5.0	SW846 8240A	08/07/95	52200
1,2-Dichloroethane	ND	5.0	SW846 8240A	08/07/95	52200

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	100	(76 - 114)
Toluene-d8	103	(88 - 110)
Bromofluorobenzene	99	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
J ESTIMATED VALUE. (DETECTED), BUT BELOW QUANTITATION LIMIT.

GERAGHTY & MILLER

TRIP BLANK

WO #: C0GN5101
LAB #: A5H030106-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/01/9
TIME SAMPLED:
DATE RECEIVED: 8/02/9

GC/MS Volatiles

2 OF 3

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATC
1,1-Dichloroethene	ND	5.0	SW846 8240A	08/07/95	5220
1,2-Dichloroethene (total)	ND	5.0	SW846 8240A	08/07/95	5220
1,2-Dichloropropane	ND	5.0	SW846 8240A	08/07/95	5220
cis-1,3-Dichloropropene	ND	5.0	SW846 8240A	08/07/95	5220
trans-1,3-Dichloropropene	ND	5.0	SW846 8240A	08/07/95	5220
1,4-Dioxane	ND	1,000	SW846 8240A	08/07/95	5220
Ethylbenzene	ND	5.0	SW846 8240A	08/07/95	5220
Ethyl methacrylate	ND	5.0	SW846 8240A	08/07/95	5220
Trichlorofluoromethane	ND	5.0	SW846 8240A	08/07/95	5220
2-Hexanone	ND	50	SW846 8240A	08/07/95	5220
Iodomethane	ND	5.0	SW846 8240A	08/07/95	5220
Isobutyl alcohol	ND	500	SW846 8240A	08/07/95	5220
Methacrylonitrile	ND	20	SW846 8240A	08/07/95	5220
Methylene chloride	ND	5.0	SW846 8240A	08/07/95	5220
Methyl methacrylate	ND	5.0	SW846 8240A	08/07/95	5220
Propionitrile	ND	20	SW846 8240A	08/07/95	5220
Styrene	ND	5.0	SW846 8240A	08/07/95	5220
1,1,1,2-Tetrachloroethane	ND	5.0	SW846 8240A	08/07/95	5220
1,1,2,2-Tetrachloroethane	ND	5.0	SW846 8240A	08/07/95	5220
Tetrachloroethene	ND	5.0	SW846 8240A	08/07/95	5220
Toluene	ND	5.0	SW846 8240A	08/07/95	5220
1,1,1-Trichloroethane	ND	5.0	SW846 8240A	08/07/95	5220
1,1,2-Trichloroethane	ND	5.0	SW846 8240A	08/07/95	5220

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	100	(76 - 114)
Toluene-d8	103	(88 - 110)
Bromofluorobenzene	99	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

TRIP BLANK

WO #: C0GN5101
LAB #: A5H030106-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/01/95
TIME SAMPLED:
DATE RECEIVED: 8/02/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Trichloroethene	ND	5.0	SW846 8240A	08/07/95	52200
1,2,3-Trichloropropane	ND	5.0	SW846 8240A	08/07/95	52200
Vinyl acetate	ND	50	SW846 8240A	08/07/95	52200
Vinyl chloride	ND	10	SW846 8240A	08/07/95	52200
Xylenes (total)	ND	5.0	SW846 8240A	08/07/95	52200
1,2-Dibromoethane (EDB)	ND	5.0	SW846 8240A	08/07/95	52200
2-Butanone (MEK)	ND	50	SW846 8240A	08/07/95	52200
4-Methyl-2-pentanone (MIBK)	ND	50	SW846 8240A	08/07/95	52200

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	100	(76 - 114)
Toluene-d8	103	(88 - 110)
Bromofluorobenzene	99	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

TRIP BLANK

WO #: C0GN5101
LAB #: A5H030106-003
MATRIX: WATER

DATE SAMPLED: 8/01/95
DATE RECEIVED: 8/02/95
DATE EXTRACTED: 8/07/95
DATE ANALYZED: 8/07/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5220091

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5220091

GC/MS SEMIVOLATILE SAMPLE DATA

GERAGHTY & MILLER

FMGWMW8S (MS/MSD)

WO #: C0GMT10E
LAB #: A5H030106-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/01/9
TIME SAMPLED: 11:5
DATE RECEIVED: 8/02/9

- - - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATC
4-Aminobiphenyl	ND	50	SW846 8270A	08/08-08/17/95	522C
p-Dimethylaminoazobenzene	ND	10	SW846 8270A	08/08-08/17/95	522C
7,12-Dimethylbenz(a)-anthracene	ND	20	SW846 8270A	08/08-08/17/95	522C
Hexachloropropene	ND	100	SW846 8270A	08/08-08/17/95	522C
Phenacetin	ND	50	SW846 8270A	08/08-08/17/95	522C
Pronamide	ND	20	SW846 8270A	08/08-08/17/95	522C
a,a-Dimethylphenethylamine	ND	50	SW846 8270A	08/08-08/17/95	522C
Diallate	ND	10	SW846 8270A	08/08-08/17/95	522C
Chlorobenzilate	ND	10	SW846 8270A	08/08-08/17/95	522C
Acenaphthene	ND	10	SW846 8270A	08/08-08/17/95	522C
Acenaphthylene	ND	10	SW846 8270A	08/08-08/17/95	522C
Acetophenone	ND	10	SW846 8270A	08/08-08/17/95	522C
2-Acetylaminofluorene	ND	20	SW846 8270A	08/08-08/17/95	522C
Aniline	ND	10	SW846 8270A	08/08-08/17/95	522C
Anthracene	ND	10	SW846 8270A	08/08-08/17/95	522C
Benzo(a)anthracene	ND	10	SW846 8270A	08/08-08/17/95	522C
Benzo(b)fluoranthene	ND	10	SW846 8270A	08/08-08/17/95	522C
Benzo(k)fluoranthene	ND	10	SW846 8270A	08/08-08/17/95	522C
Benzo(ghi)perylene	ND	10	SW846 8270A	08/08-08/17/95	522C
Benzo(a)pyrene	ND	10	SW846 8270A	08/08-08/17/95	522C
Benzyl alcohol	ND	10	SW846 8270A	08/08-08/17/95	522C

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	63	(36 - 148)
2-Fluorobiphenyl	66	(38 - 106)
Terphenyl-d14	69	(10 - 169)
Phenol-d5	52	(15 - 126)
2-Fluorophenol	46	(17 - 106)
2,4,6-Tribromophenol	115	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW8S (MS/MSD)

WO #: C0GMT10E
LAB #: A5H030106-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/01/95
TIME SAMPLED: 11:50
DATE RECEIVED: 8/02/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
bis(2-Chloroethoxy)methane	ND	10	SW846 8270A	08/08-08/17/95	52200
bis(2-Chloroethyl) ether	ND	10	SW846 8270A	08/08-08/17/95	52200
bis(2-Chloro-1-methylethyl) et	ND	10	SW846 8270A	08/08-08/17/95	52200
bis(2-Ethylhexyl) phthalate	**6.6 J**	**10**	**SW846 8270A**	**08/08-08/17/95**	**52200**
4-Bromophenyl phenyl ether	ND	10	SW846 8270A	08/08-08/17/95	52200
Butyl benzyl phthalate	ND	10	SW846 8270A	08/08-08/17/95	52200
4-Chloroaniline	ND	10	SW846 8270A	08/08-08/17/95	52200
4-Chloro-3-methylphenol	ND	10	SW846 8270A	08/08-08/17/95	52200
2-Chloronaphthalene	ND	10	SW846 8270A	08/08-08/17/95	52200
2-Chlorophenol	ND	10	SW846 8270A	08/08-08/17/95	52200
4-Chlorophenyl phenyl ether	ND	10	SW846 8270A	08/08-08/17/95	52200
Chrysene	ND	10	SW846 8270A	08/08-08/17/95	52200
Dibenz(a,h)anthracene	ND	10	SW846 8270A	08/08-08/17/95	52200
Dibenzofuran	ND	10	SW846 8270A	08/08-08/17/95	52200
Di-n-butyl phthalate	ND	10	SW846 8270A	08/08-08/17/95	52200
1,2-Dichlorobenzene	ND	10	SW846 8270A	08/08-08/17/95	52200
1,3-Dichlorobenzene	ND	10	SW846 8270A	08/08-08/17/95	52200
1,4-Dichlorobenzene	ND	10	SW846 8270A	08/08-08/17/95	52200
3,3'-Dichlorobenzidine	ND	10	SW846 8270A	08/08-08/17/95	52200
2,4-Dichlorophenol	ND	10	SW846 8270A	08/08-08/17/95	52200
2,6-Dichlorophenol	ND	10	SW846 8270A	08/08-08/17/95	52200

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	63	(36 - 148)
2-Fluorobiphenyl	66	(38 - 106)
Terphenyl-d14	69	(10 - 169)
Phenol-d5	52	(15 - 126)
2-Fluorophenol	46	(17 - 106)
2,4,6-Tribromophenol	115	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
J. ESTIMATED VALUE. (DETECTED), BUT BELOW QUANTITATION LIMIT.

GERAGHTY & MILLER

FMGWMW8S (MS/MSD)

WO #: C0GMT10E
LAB #: A5H030106-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/01/95
TIME SAMPLED: 11:50
DATE RECEIVED: 8/02/95

GC/MS Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Diethyl phthalate	ND	10	SW846 8270A	08/08-08/17/95	52200
3,3'-Dimethylbenzidine	ND	20	SW846 8270A	08/08-08/17/95	52200
2,4-Dimethylphenol	ND	10	SW846 8270A	08/08-08/17/95	52200
Dimethyl phthalate	ND	10	SW846 8270A	08/08-08/17/95	52200
Di-n-octyl phthalate	ND	10	SW846 8270A	08/08-08/17/95	52200
1,3-Dinitrobenzene	ND	10	SW846 8270A	08/08-08/17/95	52200
4,6-Dinitro-2-methylphenol	ND	50	SW846 8270A	08/08-08/17/95	52200
2,4-Dinitrophenol	ND	50	SW846 8270A	08/08-08/17/95	52200
2,4-Dinitrotoluene	ND	10	SW846 8270A	08/08-08/17/95	52200
2,6-Dinitrotoluene	ND	10	SW846 8270A	08/08-08/17/95	52200
2-sec-Butyl-4,6-dinitro-phenol	ND	20	SW846 8270A	08/08-08/17/95	52200
Diphenylamine	ND	10	SW846 8270A	08/08-08/17/95	52200
Ethyl methanesulfonate	ND	10	SW846 8270A	08/08-08/17/95	52200
Fluoranthene	**1.1 J**	**10**	**SW846 8270A**	**08/08-08/17/95**	**52200**
Fluorene	ND	10	SW846 8270A	08/08-08/17/95	52200
Hexachlorobenzene	ND	10	SW846 8270A	08/08-08/17/95	52200
Hexachlorobutadiene	ND	10	SW846 8270A	08/08-08/17/95	52200
Hexachlorocyclopentadiene	ND	10	SW846 8270A	08/08-08/17/95	52200
Hexachloroethane	ND	10	SW846 8270A	08/08-08/17/95	52200
Hexachlorophene	**--**		**SW846 8270A**	**08/08-08/17/95**	**52200**
Indeno(1,2,3-cd)pyrene	ND	10	SW846 8270A	08/08-08/17/95	52200

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	63	(36 - 148)
2-Fluorobiphenyl	66	(38 - 106)
Terphenyl-d14	69	(10 - 169)
Phenol-d5	52	(15 - 126)
2-Fluorophenol	46	(17 - 106)
2,4,6-Tribromophenol	115	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
J ESTIMATED VALUE. (DETECTED). BUT BELOW QUANTITATION LIMIT.
-- (NOT ANALYZED)

GERAGHTY & MILLER

FMGWMW8S (MS/MSD)

WO #: C0GMT10E
LAB #: A5H030106-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/01/95
TIME SAMPLED: 11:50
DATE RECEIVED: 8/02/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Isophorone	ND	10	SW846 8270A	08/08-08/17/95	52200
Isosafrole	ND	10	SW846 8270A	08/08-08/17/95	52200
Methapyrilene	ND	100	SW846 8270A	08/08-08/17/95	52200
o-Toluidine	ND	20	SW846 8270A	08/08-08/17/95	52200
3-Methylcholanthrene	ND	100	SW846 8270A	08/08-08/17/95	52200
Methyl methanesulfonate	ND	10	SW846 8270A	08/08-08/17/95	52200
2-Methylnaphthalene	ND	10	SW846 8270A	08/08-08/17/95	52200
2-Methylphenol	ND	10	SW846 8270A	08/08-08/17/95	52200
3-Methylphenol	ND	10	SW846 8270A	08/08-08/17/95	52200
4-Methylphenol	ND	10	SW846 8270A	08/08-08/17/95	52200
Naphthalene	ND	10	SW846 8270A	08/08-08/17/95	52200
1,4-Naphthoquinone	ND	200	SW846 8270A	08/08-08/17/95	52200
1-Naphthylamine	ND	10	SW846 8270A	08/08-08/17/95	52200
2-Naphthylamine	ND	10	SW846 8270A	08/08-08/17/95	52200
2-Nitroaniline	ND	50	SW846 8270A	08/08-08/17/95	52200
3-Nitroaniline	ND	50	SW846 8270A	08/08-08/17/95	52200
4-Nitroaniline	ND	50	SW846 8270A	08/08-08/17/95	52200
Nitrobenzene	ND	10	SW846 8270A	08/08-08/17/95	52200
2-Nitrophenol	ND	10	SW846 8270A	08/08-08/17/95	52200
4-Nitrophenol	ND	50	SW846 8270A	08/08-08/17/95	52200
4-Nitroquinoline-1-oxide	ND	100	SW846 8270A	08/08-08/17/95	52200

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	63	(36 - 148)
2-Fluorobiphenyl	66	(38 - 106)
Terphenyl-d14	69	(10 - 169)
Phenol-d5	52	(15 - 126)
2-Fluorophenol	46	(17 - 106)
2,4,6-Tribromophenol	115	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW8S (MS/MSD)

WO #: C0GMT10E
LAB #: A5H030106-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/01/95
TIME SAMPLED: 11:50
DATE RECEIVED: 8/02/95

GC/MS Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
N-Nitrosodi-n-butylamine	ND	10	SW846 8270A	08/08-08/17/95	52200
N-Nitrosodiethylamine	ND	10	SW846 8270A	08/08-08/17/95	52200
N-Nitrosodimethylamine	ND	10	SW846 8270A	08/08-08/17/95	52200
N-Nitrosodi-n-propylamine	ND	10	SW846 8270A	08/08-08/17/95	52200
N-Nitrosodiphenylamine	ND	10	SW846 8270A	08/08-08/17/95	52200
N-Nitrosomethylethylamine	ND	10	SW846 8270A	08/08-08/17/95	52200
N-Nitrosomorpholine	ND	10	SW846 8270A	08/08-08/17/95	52200
N-Nitrosopiperidine	ND	10	SW846 8270A	08/08-08/17/95	52200
N-Nitrosopyrrolidine	ND	10	SW846 8270A	08/08-08/17/95	52200
5-Nitro-o-toluidine	ND	20	SW846 8270A	08/08-08/17/95	52200
Pentachlorobenzene	ND	10	SW846 8270A	08/08-08/17/95	52200
Pentachloroethane	ND	50	SW846 8270A	08/08-08/17/95	52200
Pentachloronitrobenzene	ND	50	SW846 8270A	08/08-08/17/95	52200
Pentachlorophenol	ND	50	SW846 8270A	08/08-08/17/95	52200
Phenanthrene	ND	10	SW846 8270A	08/08-08/17/95	52200
Phenol	ND	10	SW846 8270A	08/08-08/17/95	52200
p-Phenylene diamine	ND	50	SW846 8270A	08/08-08/17/95	52200
2-Picoline	ND	20	SW846 8270A	08/08-08/17/95	52200
Pyrene	**1.1 J**	**10**	**SW846 8270A**	**08/08-08/17/95**	**52200**
Pyridine	ND	10	SW846 8270A	08/08-08/17/95	52200
Safrole	ND	10	SW846 8270A	08/08-08/17/95	52200

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	63	(36 - 148)
2-Fluorobiphenyl	66	(38 - 106)
Terphenyl-d14	69	(10 - 169)
Phenol-d5	52	(15 - 126)
2-Fluorophenol	46	(17 - 106)
2,4,6-Tribromophenol	115	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
J ESTIMATED VALUE. (DETECTED), BUT BELOW QUANTITATION LIMIT.

GERAGHTY & MILLER

FMGWMW8S (MS/MSD)

WO #: C0GMT10E
LAB #: A5H030106-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/01/95
TIME SAMPLED: 11:50
DATE RECEIVED: 8/02/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,2,4,5-Tetrachlorobenzene	ND	10	SW846 8270A	08/08-08/17/95	52200
2,3,4,6-Tetrachlorophenol	ND	50	SW846 8270A	08/08-08/17/95	52200
1,2,4-Trichlorobenzene	ND	10	SW846 8270A	08/08-08/17/95	52200
2,4,5-Trichlorophenol	ND	10	SW846 8270A	08/08-08/17/95	52200
2,4,6-Trichlorophenol	ND	10	SW846 8270A	08/08-08/17/95	52200
1,3,5-Trinitrobenzene	ND	50	SW846 8270A	08/08-08/17/95	52200
Aramite	--		SW846 8270A	08/08-08/17/95	52200

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	63	(36 - 148)
2-Fluorobiphenyl	66	(38 - 106)
Terphenyl-d14	69	(10 - 169)
Phenol-d5	52	(15 - 126)
2-Fluorophenol	46	(17 - 106)
2,4,6-Tribromophenol	115	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
-- (NOT ANALYZED)

GERAGHTY & MILLER

FMGWMW8S (MS/MSD)

WO #: C0GMT10E
LAB #: A5H030106-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/01/95
DATE RECEIVED: 8/02/95
DATE EXTRACTED: 8/08/95
DATE ANALYZED: 8/17/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
Base/Neutrals and Acids (8270)			
Unknown	4	ug/L	5220032
Sulfur, mol. (S8)	4	ug/L	5220032

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
Base/Neutrals and Acids (8270)			
None		ug/L	5220032

ORGANOPHOSPHORUS PESTICIDE SAMPLE DATA

GERAGHTY & MILLER

FMGWMW8S (MS/MSD)

WO #: C0GMT104
LAB #: A5H030106-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/01/95
TIME SAMPLED: 11:50
DATE RECEIVED: 8/02/95

- GC Semi-Volatiles - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Dimethoate	ND	0.50	SW846 8141	08/07-08/16/95	52190
Disulfoton	ND	0.50	SW846 8141	08/07-08/16/95	52190
Famphur	ND	0.50	SW846 8141	08/07-08/16/95	52190
Methyl parathion	ND	0.50	SW846 8141	08/07-08/16/95	52190
Parathion	ND	0.50	SW846 8141	08/07-08/16/95	52190
Phorate	ND	0.50	SW846 8141	08/07-08/16/95	52190
Tetraethyldithiopyrophosphate	ND	0.50	SW846 8141	08/07-08/16/95	52190
O,O,O-Triethylphosphorothioate	ND	0.50	SW846 8141	08/07-08/16/95	52190

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Triphenyl phosphate	70	(38 - 146)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

PESTICIDE/PCB SAMPLE DATA

GERAGHTY & MILLER

FMGWMW8S (MS/MSD)

WO #: C0GMT101
LAB #: A5H030106-002
MATRIX: WATER

DATE SAMPLED: 8/01/95
TIME SAMPLED: 11:50
DATE RECEIVED: 8/02/95

GC Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Aldrin	ND	0.050	SW846 8080	08/08-08/18/95	52200
Aroclor 1016	ND	0.50	SW846 8080	08/08-08/18/95	52200
Aroclor 1221	ND	0.50	SW846 8080	08/08-08/18/95	52200
Aroclor 1232	ND	0.50	SW846 8080	08/08-08/18/95	52200
Aroclor 1242	ND	0.50	SW846 8080	08/08-08/18/95	52200
Aroclor 1248	ND	0.50	SW846 8080	08/08-08/18/95	52200
Aroclor 1254	ND	1.0	SW846 8080	08/08-08/18/95	52200
Aroclor 1260	ND	1.0	SW846 8080	08/08-08/18/95	52200
alpha-BHC	ND	0.050	SW846 8080	08/08-08/18/95	52200
beta-BHC	ND	0.050	SW846 8080	08/08-08/18/95	52200
delta-BHC	ND	0.050	SW846 8080	08/08-08/18/95	52200
gamma-BHC (Lindane)	ND	0.050	SW846 8080	08/08-08/18/95	52200
Chlordane (technical)	ND	0.50	SW846 8080	08/08-08/18/95	52200
4,4'-DDD	ND	0.10	SW846 8080	08/08-08/18/95	52200
4,4'-DDE	ND	0.10	SW846 8080	08/08-08/18/95	52200
4,4'-DDT	ND	0.10	SW846 8080	08/08-08/18/95	52200
Dieldrin	ND	0.10	SW846 8080	08/08-08/18/95	52200
Endosulfan I	ND	0.050	SW846 8080	08/08-08/18/95	52200
Endosulfan II	ND	0.10	SW846 8080	08/08-08/18/95	52200
Endosulfan sulfate	ND	0.10	SW846 8080	08/08-08/18/95	52200
Endrin	ND	0.10	SW846 8080	08/08-08/18/95	52200
Endrin aldehyde	ND	0.10	SW846 8080	08/08-08/18/95	52200
Heptachlor	ND	0.050	SW846 8080	08/08-08/18/95	52200

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Tetrachloro-m-xylene	117	(14 - 155)
Dibutylchlorendate	69	(10 - 155)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW8S (MS/MSD)

WO #: C0GMT101
LAB #: A5H030106-002
MATRIX: WATER

DATE SAMPLED: 8/01/
TIME SAMPLED: 11:
DATE RECEIVED: 8/02/

- GC Semi-Volatiles - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BAT
Heptachlor epoxide	ND	0.050	SW846 8080	08/08-08/18/95	522
Isodrin	ND	0.050	SW846 8080	08/08-08/18/95	522
Kepone	ND	1.0	SW846 8080	08/08-08/18/95	522
Methoxychlor	ND	0.50	SW846 8080	08/08-08/18/95	522
Toxaphene	ND	1.0	SW846 8080	08/08-08/18/95	522

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Tetrachloro-m-xylene	117	(14 - 155)
Dibutylchlorendate	69	(10 - 155)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

HERBICIDE SAMPLE DATA

GERAGHTY & MILLER

FMGWMW8S (MS/MSD)

WO #: C0GMT107
LAB #: A5H030106-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 8/01/95
TIME SAMPLED: 11:50
DATE RECEIVED: 8/02/95

- GC Semi-Volatiles - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
2,4-D	ND	0.50	SW846 8150A	08/08-08/15/95	52200(
2,4,5-TP (Silvex)	ND	0.20	SW846 8150A	08/08-08/15/95	52200(
2,4,5-T	ND	0.10	SW846 8150A	08/08-08/15/95	52200(
Dinoseb	ND	1.0	SW846 8150A	08/08-08/15/95	52200(

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2,4-Dichlorophenylacetic acid	72	(50 - 150)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

INORGANIC SAMPLE DATA

GERAGHTY & MILLER

FMGWMW8D

WO #: C0GMP
LAB #: A5H030106-001
MATRIX: WATER

DATE SAMPLED: 8/01/95
TIME SAMPLED: 9:15
DATE RECEIVED: 8/02/95

- - - - - - - - - - - - - - - - - - - REQUESTED METALS - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Iron	94,000	100	ug/L	SW846 6010A	8/17- 9/20/95	52290
Manganese	2,690	15.0	ug/L	SW846 6010A	8/17- 9/20/95	52290
Sodium	590,000	5,000	ug/L	SW846 6010A	8/17- 9/20/95	52290

NOTE: AS RECEIVED

GERAGHTY & MILLER

FMGWMW8D

WO #: C0GMP
LAB #: A5H030106-001
MATRIX: WATER

DATE SAMPLED: 8/01/95
TIME SAMPLED: 9:15
DATE RECEIVED: 8/02/95

- - - - - - - - - - - - - - - - - - - REQUESTED METALS - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
- - DISSOLVED METALS - -						
Silver	ND	10.0	ug/L	SW846 6010A	8/17- 9/20/95	5229
Barium	67.0	10.0	ug/L	SW846 6010A	8/17- 9/20/95	5229
Beryllium	ND	5.0	ug/L	SW846 6010A	8/17- 9/20/95	5229
Cadmium	ND	10.0	ug/L	SW846 6010A	8/17- 9/20/95	5229
Cobalt	ND	50.0	ug/L	SW846 6010A	8/17- 9/20/95	5229
Chromium	ND	20.0	ug/L	SW846 6010A	8/17- 9/20/95	5229
Copper	ND	10.0	ug/L	SW846 6010A	8/17- 9/20/95	5229
Iron	ND	100	ug/L	SW846 6010A	8/17- 9/20/95	5229
Manganese	20.0	15.0	ug/L	SW846 6010A	8/17- 9/20/95	5229
Sodium	607,000	5,000	ug/L	SW846 6010A	8/17- 9/20/95	5229
Nickel	ND	40.0	ug/L	SW846 6010A	8/17- 9/20/95	5229
Antimony	ND	300	ug/L	SW846 6010A	8/17- 9/20/95	5229
Tin	ND	1,000	ug/L	SW846 6010A	8/17- 9/20/95	5229
Vanadium	ND	50.0	ug/L	SW846 6010A	8/17- 9/20/95	5229
Zinc	ND	50.0	ug/L	SW846 6010A	8/17- 9/20/95	5229
Arsenic	28.0	10.0	ug/L	SW846 7060	8/17- 8/21/95	5229
Lead	ND	3.0	ug/L	SW846 7421	8/17- 8/18/95	5229
Mercury	ND	0.20	ug/L	SW846 7470	8/17- 8/18/95	5229
Selenium	ND W	5.0	ug/L	SW846 7740	8/17- 8/21/95	5229
Thallium	ND W	10.0	ug/L	SW846 7841	8/17- 8/18/95	5229

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
W - POST DIGESTION SPIKE RECOVERY FELL BETWEEN 40 - 85% WHILE SAMPLE RESULT WAS LESS THAN ONE-HALF THE REPORTING LIMIT.

GERAGHTY & MILLER

FMGWMW8S (MS/MSD)

WO #: C0GMT
LAB #: A5H030106-002
MATRIX: WATER

DATE SAMPLED: 8/01/9
TIME SAMPLED: 11:5
DATE RECEIVED: 8/02/9

- - - - - - - - - - - - - - - - - - - REQUESTED METALS - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATC
Silver	ND	10.0	ug/L	SW846 6010A	8/17- 9/20/95	5229
Barium	532	10.0	ug/L	SW846 6010A	8/17- 9/20/95	5229
Beryllium	ND	5.0	ug/L	SW846 6010A	8/17- 9/20/95	5229
Cadmium	42.0	10.0	ug/L	SW846 6010A	8/17- 9/20/95	5229
Cobalt	ND	50.0	ug/L	SW846 6010A	8/17- 9/20/95	5229
Chromium	90.0	20.0	ug/L	SW846 6010A	8/17- 9/20/95	5229
Copper	9,950	10.0	ug/L	SW846 6010A	8/17- 9/20/95	5229
Iron	68,200	100	ug/L	SW846 6010A	8/17- 9/20/95	5229
Manganese	2,280	15.0	ug/L	SW846 6010A	8/17- 9/20/95	5229
Sodium	31,200	5,000	ug/L	SW846 6010A	8/17- 9/20/95	5229
Nickel	1,240	40.0	ug/L	SW846 6010A	8/17- 9/20/95	5229
Antimony	714	300	ug/L	SW846 6010A	8/17- 9/20/95	5229
Tin	2,310	1,000	ug/L	SW846 6010A	8/17- 9/20/95	5229
Vanadium	73.0	50.0	ug/L	SW846 6010A	8/17- 9/20/95	5229
Zinc	16,100	50.0	ug/L	SW846 6010A	8/17- 9/20/95	5229
Arsenic	114	25.0	ug/L	SW846 7060	8/17- 8/21/95	5229
Lead	10,400	1,500	ug/L	SW846 7421	8/17- 8/22/95	5229
Mercury	ND	0.20	ug/L	SW846 7470	8/23- 8/24/95	5235
Selenium	ND W	5.0	ug/L	SW846 7740	8/17- 8/21/95	5229
Thallium	ND	10.0	ug/L	SW846 7841	8/17- 8/18/95	5229

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
W - POST DIGESTION SPIKE RECOVERY FELL BETWEEN 40 - 85% WHILE SAMPLE RESULT WAS LESS THAN ONE-HALF THE REPORTING LIMIT.

GERAGHTY & MILLER

FMGWMW8S (MS/MSD)

WO #: C0GMT
LAB #: A5H030106-002
MATRIX: WATER

DATE SAMPLED: 8/01/95
TIME SAMPLED: 11:50
DATE RECEIVED: 8/02/95

- - - - - - - - - - - - - - - - - - - REQUESTED METALS - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
- - DISSOLVED METALS - -						
Silver	ND	10.0	ug/L	SW846 6010A	8/17- 9/20/95	52290
Barium	87.0	10.0	ug/L	SW846 6010A	8/17- 9/20/95	52290
Beryllium	ND	5.0	ug/L	SW846 6010A	8/17- 9/20/95	52290
Cadmium	ND	10.0	ug/L	SW846 6010A	8/17- 9/20/95	52290
Cobalt	ND	50.0	ug/L	SW846 6010A	8/17- 9/20/95	52290
Chromium	ND	20.0	ug/L	SW846 6010A	8/17- 9/20/95	52290
Copper	ND	10.0	ug/L	SW846 6010A	8/17- 9/20/95	52290
Iron	ND	100	ug/L	SW846 6010A	8/17- 9/20/95	52290
Manganese	534	15.0	ug/L	SW846 6010A	8/17- 9/20/95	52290
Sodium	30,300	5,000	ug/L	SW846 6010A	8/17- 9/20/95	52290
Nickel	ND	40.0	ug/L	SW846 6010A	8/17- 9/20/95	52290
Antimony	ND	300	ug/L	SW846 6010A	8/17- 9/20/95	52290
Tin	ND	1,000	ug/L	SW846 6010A	8/17- 9/20/95	52290
Vanadium	ND	50.0	ug/L	SW846 6010A	8/17- 9/20/95	52290
Zinc	179	50.0	ug/L	SW846 6010A	8/17- 9/20/95	52290
Arsenic	6.2	5.0	ug/L	SW846 7060	8/17- 8/21/95	52290
Lead	11.8	3.0	ug/L	SW846 7421	8/17- 8/18/95	52290
Mercury	ND	0.20	ug/L	SW846 7470	8/17- 8/18/95	52290
Selenium	ND W	5.0	ug/L	SW846 7740	8/17- 8/21/95	52290
Thallium	ND	10.0	ug/L	SW846 7841	8/17- 8/18/95	52290

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
W - POST DIGESTION SPIKE RECOVERY FELL BETWEEN 40 - 85% WHILE SAMPLE RESULT WAS LESS THAN ONE-HALF THE REPORTING LIMIT.

WET CHEMISTRY SAMPLE DATA

GERAGHTY & MILLER

FMGWMW8S (MS/MSD)

WO #: C0GMT
LAB #: A5H030106-002
MATRIX: WATER

DATE SAMPLED: 8/01/95
TIME SAMPLED: 11:50
DATE RECEIVED: 8/02/95

- - - - - - - - - - - - - - - - - - INORGANIC ANALYTICAL REPORT - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Fluoride (Potentiometric, Ion Selective Electrode)	5,200	1,200	ug/L	MCAWW 340.2	8/15/95	52270
Sulfide	ND	1,000	ug/L	MCAWW 376.1	8/04/95	52190
Total Cyanide	ND	5.0	ug/L	SW846 9012	8/14/95	52260

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GE[illegible]HTY & M[illegible]R, INC.
Environmental Services
a heidemij company

Laboratory Task Order No. _____

CHAIN-OF-CUSTODY RECORD

Project Number IN0144.109

Project Location Federated Metals, Hammond

Laboratory Quanterra

Sampler(s)/Affiliation Jamie Yater GEM
Blake Fahl

SAMPLE IDENTITY	Code	Date/Time Sampled	Lab ID	VOCs 8240 HCl 40 ml vials	BNAs 8270 1L glass	Total Fe, Mn, Na HNO3 1L plas	App IX Metals plus Fe, Mn, Na (Dissolved) 1L plas HNO3	App IX Total Metals 1L plas HNO3 Plus total Fe, Mn, Na	Sulfide 1L plas NaOH + zinc acet.	CN NaOH 250 ml	Fluoride 250 ml	Pest/PCB 8080	TOTAL
FMGWMW8D		8/1/95 9:15A				1	1						2
FMGWMW8S		8/1/95 11:50A		3	2		1	1	1	1	1	2	12
FMGWMW8S		8/1/95 11:50A	*	6	4							4	14
TRIP BLANK		8/1/95		1									1

Sample Code: L = Liquid; S = Solid; A = Air

Total No. of Bottles/Containers 29

Relinquished by: Jamie Yater	Organization: GEM	Date 8/1/95	Time 630P	Seal Intact? Yes No N/A
Received by:	Organization:	Date / /	Time	
Relinquished by: Jessica M. Taylor	Organization:	Date / /	Time	Seal Intact? Yes No N/A
Received by:	Organization: Quanterra	Date 8/2/95	Time 10:00A	

Special Instructions/Remarks:

* Extra volume for MS/MSD - run MS/MS on MW8S samples

1491

GE[illegible]HTY & M[illegible]R, INC.
Environmental Services
a heidemij company

Laboratory Task Order No._____

CHAIN-OF-CUSTODY RECORD

Page 2 of 2

Project Number 1N0144.109

Project Location Federated Metals, Hammond

Laboratory Quanterra

Sampler(s)/Affiliation Jamie Yater G&M
Blake Fahl G&M

SAMPLE BOTTLE / CONTAINER DESCRIPTION

SAMPLE IDENTITY	Code	Date/Time Sampled	Lab ID	Herbs 8150 1L glass	O-P-Pest 8140 1L glass	#4 0.1µm 60.04g Post Filter Weight	#1 0.45µm 78.32g Post Filter Weight	#5 0.1µm 60.06g Post Filter Weight					TOTAL
FMGWMW8S		8/1/95 1150A		2	2								4
FMGWMW8D		8/1/95 915A				1	1	1					3
* FMGWMW8S		8/1/95 1150A		4	4								8

Sample Code: L = Liquid; S = Solid; A = Air

Total No. of Bottles/Containers 15

Relinquished by: Jamie Yater	Organization: G&M	Date 8/1/95	Time 630P	Seal Intact? Yes No N/A
Received by:	Organization:	Date / /	Time	
Relinquished by:	Organization:	Date / /	Time	Seal Intact? Yes No N/A
Received by: Jessica M. Hydon	Organization: Quanterra	Date 8/2/95	Time 10:00A	

Special Instructions/Remarks:
* Run MS/MSD on FMGWMW8S

1492

Quanterra Incorporated
4101 Shuffel Drive, NW
North Canton, Ohio 44720

216 497-9396 Telephone
216 497-0772 Fax

Quanterra
Environmental Services

RECEIVED
OCT 1 6 1995
GERAGHTY & MILLER, INC.
INDIANAPOLIS, INDIANA

ANALYTICAL REPORT

PROJECT NO. IN0144.109

FEDERATED METALS/HAMMOND

Tim Northam

GERAGHTY & MILLER

QUANTERRA INCORPORATED

Thomas M. Himes

Thomas M. Himes
Project Manager

October 17, 1995

TABLE OF CONTENTS

Case Narrative

Sample Summary

Method Reference

GC/MS Volatile QC Summary Data

GC/MS Volatile Sample Data

GC/MS Volatile Standard Data

GC/MS Volatile Raw QC Data

GC/MS Semivolatile QC Summary Data

GC/MS Semivolatile Sample Data

GC/MS Semivolatile Standard Data

GC/MS Semivolatile Raw QC Data

Organophosphorus Pesticide QC Summary Data

Organophosphorus Pesticide Sample Data

Organophosphorus Initial Calibration Data

Organophosphorus Continuing Calibration Data

Organophosphorus Pesticide Raw QC Data

Pesticide/PCB QC Summary Data

Pesticide/PCB Sample Data

Pesticide/PCB Initial Calibration Data

TABLE OF CONTENTS (CONT'D)

Pesticide/PCB Continuing Calibration Data

Pesticide/PCB Raw QC Data

Herbicide QC Summary Data

Herbicide Sample Data

Herbicide Initial Calibration Data

Herbicide Continuing Calibration Data

Herbicide Raw QC Data

Inorganic QC Summary Data

Inorganic Sample Data

Inorganic Calibration Data

Inorganic Instrument Print-Out

Inorganic Prep Logs

Wet Chemistry QC Data

Wet Chemistry Sample Data

Wet Chemistry Log Sheets

Organic Instrument Log Sheets

Organic Extraction Log Sheets

Internal Chain-of-Custody

Chain-of-Custody

CASE NARRATIVE

CASE NARRATIVE

The following report contains the analytical results for five water samples and one quality control sample submitted to Quanterra-North Canton by Geraghty & Miller from the Federated Metals/Hammond, IN Site, project number IN0144.109. The samples were received July 29, 1995, according to documented sample acceptance procedures.

Quanterra-North Canton utilizes only USEPA approved methods and instrumentation in all analytical work. The samples presented in this report were analyzed for the parameters listed on the method reference page in accordance with the methods indicated.

The results included in this report have been reviewed for compliance with the laboratory QA/QC plan. All data have been found to be compliant with the exception of those items noted.

The matrix spike and matrix spike duplicate (MS/MSD) contained in this quality control report were generated as part of the laboratory QA/QC program requirements. These requirements include the analysis of a MS/MSD on a one in twenty basis. Therefore, the associated batch number indicated on the MS/MSD reports may not reflect the same batch numbers as those of the samples contained in the analytical report.

The Volatile Organic Compounds standard V0701393 for Isobutanol was manually integrated due to poor automated integration.

The Base Neutral and Acid Compounds check sample associated with batch number 5215091 was outside the laboratory acceptance criteria. Upon re-extraction and re-analysis the check sample was within the acceptance criteria, however the recommended holding times had been exceeded.

The Pesticide/PCB Blank associated with batch number 5215003 shows the surrogate Tetrachloro-m-xylene to be outside the acceptable limits, however Dibutylchlorendate is within the acceptable limits. The surrogate criteria requires that one of the two surrogates must meet recovery limits.

The AD/RPD for the Manganese MS/MSD performed on sample A5H010101-001 (FMGWMW12S) was outside laboratory acceptance criteria. Remaining elements spiked form the same spiking solution and from the same prep were within laboratory acceptance criteria. Matrix effect was demonstrated and associated results were accepted.

QUALITY/TECHNOLOGY UPDATE

Update II to SW-846 was promulgated on January 13th, 1995 and became effective immediately. Amongst the many changes to existing methods Update II was the specification for acid first extraction when the determinative method is 8270. This specification is included in Table 1 of methods 3510B (Separatory Funnel Liquid/Liquid Extraction) and 3520B (Continuous Liquid/Liquid Extraction).

The reason for the change is that loss of phthalate esters, organochlorine pesticides and phenols may occur under the previously specified base first extraction conditions (Methods 3510A and 3520B).

The use of the latest revision of SW-846 methods is required for situations where regulations require the use of SW-846 methods.[1]

When new updates to SW-846 are promulgated, Quanterra will modify existing SOPs or develop new SOPs to incorporate the method revisions. The new SOPs will be used for all SW-846 analysis unless there is clear direction from the client to use older versions of SW-846. However, this use of older versions of SW-846 is contrary to the EPA's intent for the use of SW-846.

New SOPs for liquid/liquid extraction incorporating the acid first protocol have been developed and are currently in the process of implementation at Quanterra facilities.

---

[1] Response to Public Comments Background document, Promulgation of the Second Update to SW-846, Third Edition. (Docket No. F-94-WT2F-FFFFF), November 1994

SAMPLE SUMMARY

SAMPLE SUMMARY

The analytical results of the samples listed below are presented on the following pages.

WO #	LABORATORY ID	SAMPLE IDENTIFICATION	DATE/TIME SAMPLED	
C0FHK	A5H010101-001	FMGWMW12S	7/27/95	17:00
C0FHM	A5H010101-002	FMGWMW7S	7/28/95	8:30
C0FHN	A5H010101-003	FMGWMW58	7/28/95	8:30
C0FHP	A5H010101-004	FMGWMW7D	7/28/95	11:00
C0FHQ	A5H010101-005	FMGWMW59	7/28/95	13:45
C0FHR	A5H010101-006	TRIP BLANK	7/28/95	

METHOD REFERENCE

ANALYTICAL METHODS SUMMARY

A5H010101

Parameters	Methods
Organophosphorous Compounds by GC	SW846 8141
Organochlorine Pesticides and PCB's	SW846 8080
Chlorinated Herbicides by GC	SW846 8150A
Volatile Organics by GC/MS	SW846 8240A
Semivolatile Organic Compounds by GC/MS	SW846 8270A
Fluoride (Potentiometric, Ion Selective Electrode)	MCAWW 340.2
Sulfide	MCAWW 376.1
Inductively Coupled Plasma (ICP) Metals	SW846 6010A
Dissolved ICP Metals	SW846 6010A
Arsenic (AA, Furnace Technique)	SW846 7060
Dissolved Arsenic (GFAA)	SW846 7060
Lead (AA, Furnace Technique)	SW846 7421
Dissolved Lead (GFAA)	SW846 7421
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470
Dissolved Mercury (CVAA)	SW846 7470
Selenium (AA, Furnace Technique)	SW846 7740
Dissolved Selenium (GFAA)	SW846 7740
Thallium (AA, Furnace Technique)	SW846 7841
Dissolved Thallium (GFAA)	SW846 7841
Total Cyanide	SW846 9012

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and Final Update I (7/92).

GC/MS VOLATILE SAMPLE DATA

GERAGHTY & MILLER

FMGWMW12S

WO #: C0FHK101
LAB #: A5H010101-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/27/95
TIME SAMPLED: 17:00
DATE RECEIVED: 7/29/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Acetone	**3.4 J**	**50**	**SW846 8240A**	**08/07/95**	**522108**
Acetonitrile	ND	50	SW846 8240A	08/07/95	522108
Acrolein	ND	100	SW846 8240A	08/07/95	522108
Acrylonitrile	ND	50	SW846 8240A	08/07/95	522108
Benzene	ND	5.0	SW846 8240A	08/07/95	522108
Bromodichloromethane	ND	5.0	SW846 8240A	08/07/95	522108
Bromoform	ND	10	SW846 8240A	08/07/95	522108
Bromomethane	ND	10	SW846 8240A	08/07/95	522108
Carbon disulfide	ND	5.0	SW846 8240A	08/07/95	522108
Carbon tetrachloride	ND	10	SW846 8240A	08/07/95	522108
Chlorobenzene	ND	5.0	SW846 8240A	08/07/95	522108
Chloroprene	ND	5.0	SW846 8240A	08/07/95	522108
Dibromochloromethane	ND	5.0	SW846 8240A	08/07/95	522108
1,2-Dibromo-3-chloro-propane	ND	10	SW846 8240A	08/07/95	522108
Chloroethane	ND	10	SW846 8240A	08/07/95	522108
Chloroform	ND	5.0	SW846 8240A	08/07/95	522108
Chloromethane	ND	10	SW846 8240A	08/07/95	522108
Allyl chloride	ND	5.0	SW846 8240A	08/07/95	522108
Dibromomethane	ND	5.0	SW846 8240A	08/07/95	522108
trans-1,4-Dichloro-2-butene	ND	5.0	SW846 8240A	08/07/95	522108
Dichlorodifluoromethane	ND	20	SW846 8240A	08/07/95	522108
1,1-Dichloroethane	ND	5.0	SW846 8240A	08/07/95	522108
1,2-Dichloroethane	ND	5.0	SW846 8240A	08/07/95	522108

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	103	(76 - 114)
Toluene-d8	100	(88 - 110)
Bromofluorobenzene	101	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
J ESTIMATED VALUE. (DETECTED), BUT BELOW QUANTITATION LIMIT.

GERAGHTY & MILLER

FMGWMW12S

WO #: C0FHK101
LAB #: A5H010101-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/27/95
TIME SAMPLED: 17:00
DATE RECEIVED: 7/29/95

- **GC/MS Volatiles** -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,1-Dichloroethene	ND	5.0	SW846 8240A	08/07/95	5221089
1,2-Dichloroethene (total)	**100**	**5.0**	**SW846 8240A**	**08/07/95**	**5221089**
1,2-Dichloropropane	ND	5.0	SW846 8240A	08/07/95	5221089
cis-1,3-Dichloropropene	ND	5.0	SW846 8240A	08/07/95	5221089
trans-1,3-Dichloropropene	ND	5.0	SW846 8240A	08/07/95	5221089
1,4-Dioxane	ND	1,000	SW846 8240A	08/07/95	5221089
Ethylbenzene	ND	5.0	SW846 8240A	08/07/95	5221089
Ethyl methacrylate	ND	5.0	SW846 8240A	08/07/95	5221089
Trichlorofluoromethane	ND	5.0	SW846 8240A	08/07/95	5221089
2-Hexanone	ND	50	SW846 8240A	08/07/95	5221089
Iodomethane	ND	5.0	SW846 8240A	08/07/95	5221089
Isobutyl alcohol	ND	500	SW846 8240A	08/07/95	5221089
Methacrylonitrile	ND	20	SW846 8240A	08/07/95	5221089
Methylene chloride	ND	5.0	SW846 8240A	08/07/95	5221089
Methyl methacrylate	ND	5.0	SW846 8240A	08/07/95	5221089
Propionitrile	ND	20	SW846 8240A	08/07/95	5221089
Styrene	ND	5.0	SW846 8240A	08/07/95	5221089
1,1,1,2-Tetrachloroethane	ND	5.0	SW846 8240A	08/07/95	5221089
1,1,2,2-Tetrachloroethane	ND	5.0	SW846 8240A	08/07/95	5221089
Tetrachloroethene	ND	5.0	SW846 8240A	08/07/95	5221089
Toluene	ND	5.0	SW846 8240A	08/07/95	5221089
1,1,1-Trichloroethane	ND	5.0	SW846 8240A	08/07/95	5221089
1,1,2-Trichloroethane	ND	5.0	SW846 8240A	08/07/95	5221089

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	103	(76 - 114)
Toluene-d8	100	(88 - 110)
Bromofluorobenzene	101	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW12S

WO #: C0FHK101
LAB #: A5H010101-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/27/95
TIME SAMPLED: 17:00
DATE RECEIVED: 7/29/95

GC/MS Volatiles

3 OF 3

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Trichloroethene	**22**	**5.0**	**SW846 8240A**	**08/07/95**	**5221089**
1,2,3-Trichloropropane	ND	5.0	SW846 8240A	08/07/95	5221089
Vinyl acetate	ND	50	SW846 8240A	08/07/95	5221089
Vinyl chloride	ND	10	SW846 8240A	08/07/95	5221089
Xylenes (total)	ND	5.0	SW846 8240A	08/07/95	5221089
1,2-Dibromoethane (EDB)	ND	5.0	SW846 8240A	08/07/95	5221089
2-Butanone (MEK)	ND	50	SW846 8240A	08/07/95	5221089
4-Methyl-2-pentanone (MIBK)	ND	50	SW846 8240A	08/07/95	5221089

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	103	(76 - 114)
Toluene-d8	100	(88 - 110)
Bromofluorobenzene	101	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW12S

WO #: C0FHK101
LAB #: A5H010101-001
MATRIX: WATER

DATE SAMPLED: 7/27/95
DATE RECEIVED: 7/29/95
DATE EXTRACTED: 8/07/95
DATE ANALYZED: 8/07/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
None		**ug/L**	**5221089**

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
None		**ug/L**	**5221089**

GERAGHTY & MILLER

FMGWMW7S

WO #: C0FHM104
LAB #: A5H010101-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Acetone	ND	50	SW846 8240A	08/07/95	5221089
Acetonitrile	ND	50	SW846 8240A	08/07/95	5221089
Acrolein	ND	100	SW846 8240A	08/07/95	5221089
Acrylonitrile	ND	50	SW846 8240A	08/07/95	5221089
Benzene	ND	5.0	SW846 8240A	08/07/95	5221089
Bromodichloromethane	ND	5.0	SW846 8240A	08/07/95	5221089
Bromoform	ND	10	SW846 8240A	08/07/95	5221089
Bromomethane	ND	10	SW846 8240A	08/07/95	5221089
Carbon disulfide	ND	5.0	SW846 8240A	08/07/95	5221089
Carbon tetrachloride	ND	10	SW846 8240A	08/07/95	5221089
Chlorobenzene	ND	5.0	SW846 8240A	08/07/95	5221089
Chloroprene	ND	5.0	SW846 8240A	08/07/95	5221089
Dibromochloromethane	ND	5.0	SW846 8240A	08/07/95	5221089
1,2-Dibromo-3-chloro-propane	ND	10	SW846 8240A	08/07/95	5221089
Chloroethane	ND	10	SW846 8240A	08/07/95	5221089
Chloroform	ND	5.0	SW846 8240A	08/07/95	5221089
Chloromethane	ND	10	SW846 8240A	08/07/95	5221089
Allyl chloride	ND	5.0	SW846 8240A	08/07/95	5221089
Dibromomethane	ND	5.0	SW846 8240A	08/07/95	5221089
trans-1,4-Dichloro-2-butene	ND	5.0	SW846 8240A	08/07/95	5221089
Dichlorodifluoromethane	ND	20	SW846 8240A	08/07/95	5221089
1,1-Dichloroethane	ND	5.0	SW846 8240A	08/07/95	5221089
1,2-Dichloroethane	ND	5.0	SW846 8240A	08/07/95	5221089

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	103	(76 - 114)
Toluene-d8	100	(88 - 110)
Bromofluorobenzene	101	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW7S

WO #: C0FHM104
LAB #: A5H010101-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,1-Dichloroethene	ND	5.0	SW846 8240A	08/07/95	5221089
1,2-Dichloroethene (total)	ND	5.0	SW846 8240A	08/07/95	5221089
1,2-Dichloropropane	ND	5.0	SW846 8240A	08/07/95	5221089
cis-1,3-Dichloropropene	ND	5.0	SW846 8240A	08/07/95	5221089
trans-1,3-Dichloropropene	ND	5.0	SW846 8240A	08/07/95	5221089
1,4-Dioxane	ND	1,000	SW846 8240A	08/07/95	5221089
Ethylbenzene	ND	5.0	SW846 8240A	08/07/95	5221089
Ethyl methacrylate	ND	5.0	SW846 8240A	08/07/95	5221089
Trichlorofluoromethane	ND	5.0	SW846 8240A	08/07/95	5221089
2-Hexanone	ND	50	SW846 8240A	08/07/95	5221089
Iodomethane	ND	5.0	SW846 8240A	08/07/95	5221089
Isobutyl alcohol	ND	500	SW846 8240A	08/07/95	5221089
Methacrylonitrile	ND	20	SW846 8240A	08/07/95	5221089
Methylene chloride	ND	5.0	SW846 8240A	08/07/95	5221089
Methyl methacrylate	ND	5.0	SW846 8240A	08/07/95	5221089
Propionitrile	ND	20	SW846 8240A	08/07/95	5221089
Styrene	ND	5.0	SW846 8240A	08/07/95	5221089
1,1,1,2-Tetrachloroethane	ND	5.0	SW846 8240A	08/07/95	5221089
1,1,2,2-Tetrachloroethane	ND	5.0	SW846 8240A	08/07/95	5221089
Tetrachloroethene	ND	5.0	SW846 8240A	08/07/95	5221089
Toluene	ND	5.0	SW846 8240A	08/07/95	5221089
1,1,1-Trichloroethane	ND	5.0	SW846 8240A	08/07/95	5221089
1,1,2-Trichloroethane	ND	5.0	SW846 8240A	08/07/95	5221089

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	103	(76 - 114)
Toluene-d8	100	(88 - 110)
Bromofluorobenzene	101	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW7S

WO #: C0FHM104
LAB #: A5H010101-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Trichloroethene	ND	5.0	SW846 8240A	08/07/95	5221089
1,2,3-Trichloropropane	ND	5.0	SW846 8240A	08/07/95	5221089
Vinyl acetate	ND	50	SW846 8240A	08/07/95	5221089
Vinyl chloride	ND	10	SW846 8240A	08/07/95	5221089
Xylenes (total)	ND	5.0	SW846 8240A	08/07/95	5221089
1,2-Dibromoethane (EDB)	ND	5.0	SW846 8240A	08/07/95	5221089
2-Butanone (MEK)	ND	50	SW846 8240A	08/07/95	5221089
4-Methyl-2-pentanone (MIBK)	ND	50	SW846 8240A	08/07/95	5221089

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	103	(76 - 114)
Toluene-d8	100	(88 - 110)
Bromofluorobenzene	101	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW7S

WO #: C0FHM104
LAB #: A5H010101-002
MATRIX: WATER

DATE SAMPLED: 7/28/95
DATE RECEIVED: 7/29/95
DATE EXTRACTED: 8/07/95
DATE ANALYZED: 8/07/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5221089

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5221089

GERAGHTY & MILLER

FMGWMW58

WO #: C0FHN104
LAB #: A5H010101-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Acetone	ND	50	SW846 8240A	08/07/95	5221089
Acetonitrile	ND	50	SW846 8240A	08/07/95	5221089
Acrolein	ND	100	SW846 8240A	08/07/95	5221089
Acrylonitrile	ND	50	SW846 8240A	08/07/95	5221089
Benzene	ND	5.0	SW846 8240A	08/07/95	5221089
Bromodichloromethane	ND	5.0	SW846 8240A	08/07/95	5221089
Bromoform	ND	10	SW846 8240A	08/07/95	5221089
Bromomethane	ND	10	SW846 8240A	08/07/95	5221089
Carbon disulfide	ND	5.0	SW846 8240A	08/07/95	5221089
Carbon tetrachloride	ND	10	SW846 8240A	08/07/95	5221089
Chlorobenzene	ND	5.0	SW846 8240A	08/07/95	5221089
Chloroprene	ND	5.0	SW846 8240A	08/07/95	5221089
Dibromochloromethane	ND	5.0	SW846 8240A	08/07/95	5221089
1,2-Dibromo-3-chloro-propane	ND	10	SW846 8240A	08/07/95	5221089
Chloroethane	ND	10	SW846 8240A	08/07/95	5221089
Chloroform	ND	5.0	SW846 8240A	08/07/95	5221089
Chloromethane	ND	10	SW846 8240A	08/07/95	5221089
Allyl chloride	ND	5.0	SW846 8240A	08/07/95	5221089
Dibromomethane	ND	5.0	SW846 8240A	08/07/95	5221089
trans-1,4-Dichloro-2-butene	ND	5.0	SW846 8240A	08/07/95	5221089
Dichlorodifluoromethane	ND	20	SW846 8240A	08/07/95	5221089
1,1-Dichloroethane	ND	5.0	SW846 8240A	08/07/95	5221089
1,2-Dichloroethane	ND	5.0	SW846 8240A	08/07/95	5221089

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	102	(76 - 114)
Toluene-d8	100	(88 - 110)
Bromofluorobenzene	101	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW58

WO #: C0FHN104
LAB #: A5H010101-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,1-Dichloroethene	ND	5.0	SW846 8240A	08/07/95	5221089
1,2-Dichloroethene (total)	ND	5.0	SW846 8240A	08/07/95	5221089
1,2-Dichloropropane	ND	5.0	SW846 8240A	08/07/95	5221089
cis-1,3-Dichloropropene	ND	5.0	SW846 8240A	08/07/95	5221089
trans-1,3-Dichloropropene	ND	5.0	SW846 8240A	08/07/95	5221089
1,4-Dioxane	ND	1,000	SW846 8240A	08/07/95	5221089
Ethylbenzene	ND	5.0	SW846 8240A	08/07/95	5221089
Ethyl methacrylate	ND	5.0	SW846 8240A	08/07/95	5221089
Trichlorofluoromethane	ND	5.0	SW846 8240A	08/07/95	5221089
2-Hexanone	ND	50	SW846 8240A	08/07/95	5221089
Iodomethane	ND	5.0	SW846 8240A	08/07/95	5221089
Isobutyl alcohol	ND	500	SW846 8240A	08/07/95	5221089
Methacrylonitrile	ND	20	SW846 8240A	08/07/95	5221089
Methylene chloride	ND	5.0	SW846 8240A	08/07/95	5221089
Methyl methacrylate	ND	5.0	SW846 8240A	08/07/95	5221089
Propionitrile	ND	20	SW846 8240A	08/07/95	5221089
Styrene	ND	5.0	SW846 8240A	08/07/95	5221089
1,1,1,2-Tetrachloroethane	ND	5.0	SW846 8240A	08/07/95	5221089
1,1,2,2-Tetrachloroethane	ND	5.0	SW846 8240A	08/07/95	5221089
Tetrachloroethene	ND	5.0	SW846 8240A	08/07/95	5221089
Toluene	ND	5.0	SW846 8240A	08/07/95	5221089
1,1,1-Trichloroethane	ND	5.0	SW846 8240A	08/07/95	5221089
1,1,2-Trichloroethane	ND	5.0	SW846 8240A	08/07/95	5221089

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	102	(76 - 114)
Toluene-d8	100	(88 - 110)
Bromofluorobenzene	101	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW58

WO #: C0FHN104
LAB #: A5H010101-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Trichloroethene	ND	5.0	SW846 8240A	08/07/95	5221089
1,2,3-Trichloropropane	ND	5.0	SW846 8240A	08/07/95	5221089
Vinyl acetate	ND	50	SW846 8240A	08/07/95	5221089
Vinyl chloride	ND	10	SW846 8240A	08/07/95	5221089
Xylenes (total)	ND	5.0	SW846 8240A	08/07/95	5221089
1,2-Dibromoethane (EDB)	ND	5.0	SW846 8240A	08/07/95	5221089
2-Butanone (MEK)	ND	50	SW846 8240A	08/07/95	5221089
4-Methyl-2-pentanone (MIBK)	ND	50	SW846 8240A	08/07/95	5221089

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	102	(76 - 114)
Toluene-d8	100	(88 - 110)
Bromofluorobenzene	101	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW58

WO #: C0FHN104
LAB #: A5H010101-003
MATRIX: WATER

DATE SAMPLED: 7/28/95
DATE RECEIVED: 7/29/95
DATE EXTRACTED: 8/07/95
DATE ANALYZED: 8/07/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5221089

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5221089

GERAGHTY & MILLER

FMGWMW7D

WO #: C0FHP104
LAB #: A5H010101-004
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 11:00
DATE RECEIVED: 7/29/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Acetone	**3.7 J**	**50**	**SW846 8240A**	**08/07/95**	**5221089**
Acetonitrile	ND	50	SW846 8240A	08/07/95	5221089
Acrolein	ND	100	SW846 8240A	08/07/95	5221089
Acrylonitrile	ND	50	SW846 8240A	08/07/95	5221089
Benzene	ND	5.0	SW846 8240A	08/07/95	5221089
Bromodichloromethane	ND	5.0	SW846 8240A	08/07/95	5221089
Bromoform	ND	10	SW846 8240A	08/07/95	5221089
Bromomethane	ND	10	SW846 8240A	08/07/95	5221089
Carbon disulfide	ND	5.0	SW846 8240A	08/07/95	5221089
Carbon tetrachloride	ND	10	SW846 8240A	08/07/95	5221089
Chlorobenzene	ND	5.0	SW846 8240A	08/07/95	5221089
Chloroprene	ND	5.0	SW846 8240A	08/07/95	5221089
Dibromochloromethane	ND	5.0	SW846 8240A	08/07/95	5221089
1,2-Dibromo-3-chloro-propane	ND	10	SW846 8240A	08/07/95	5221089
Chloroethane	ND	10	SW846 8240A	08/07/95	5221089
Chloroform	ND	5.0	SW846 8240A	08/07/95	5221089
Chloromethane	ND	10	SW846 8240A	08/07/95	5221089
Allyl chloride	ND	5.0	SW846 8240A	08/07/95	5221089
Dibromomethane	ND	5.0	SW846 8240A	08/07/95	5221089
trans-1,4-Dichloro-2-butene	ND	5.0	SW846 8240A	08/07/95	5221089
Dichlorodifluoromethane	ND	20	SW846 8240A	08/07/95	5221089
1,1-Dichloroethane	ND	5.0	SW846 8240A	08/07/95	5221089
1,2-Dichloroethane	ND	5.0	SW846 8240A	08/07/95	5221089

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	104	(76 - 114)
Toluene-d8	99	(88 - 110)
Bromofluorobenzene	100	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
J ESTIMATED VALUE. (DETECTED), BUT BELOW QUANTITATION LIMIT.

GERAGHTY & MILLER

FMGWMW7D

WO #: C0FHP104
LAB #: A5H010101-004
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 11:00
DATE RECEIVED: 7/29/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,1-Dichloroethene	ND	5.0	SW846 8240A	08/07/95	5221089
1,2-Dichloroethene (total)	ND	5.0	SW846 8240A	08/07/95	5221089
1,2-Dichloropropane	ND	5.0	SW846 8240A	08/07/95	5221089
cis-1,3-Dichloropropene	ND	5.0	SW846 8240A	08/07/95	5221089
trans-1,3-Dichloropropene	ND	5.0	SW846 8240A	08/07/95	5221089
1,4-Dioxane	ND	1,000	SW846 8240A	08/07/95	5221089
Ethylbenzene	ND	5.0	SW846 8240A	08/07/95	5221089
Ethyl methacrylate	ND	5.0	SW846 8240A	08/07/95	5221089
Trichlorofluoromethane	ND	5.0	SW846 8240A	08/07/95	5221089
2-Hexanone	ND	50	SW846 8240A	08/07/95	5221089
Iodomethane	ND	5.0	SW846 8240A	08/07/95	5221089
Isobutyl alcohol	ND	500	SW846 8240A	08/07/95	5221089
Methacrylonitrile	ND	20	SW846 8240A	08/07/95	5221089
Methylene chloride	ND	5.0	SW846 8240A	08/07/95	5221089
Methyl methacrylate	ND	5.0	SW846 8240A	08/07/95	5221089
Propionitrile	ND	20	SW846 8240A	08/07/95	5221089
Styrene	ND	5.0	SW846 8240A	08/07/95	5221089
1,1,1,2-Tetrachloroethane	ND	5.0	SW846 8240A	08/07/95	5221089
1,1,2,2-Tetrachloroethane	ND	5.0	SW846 8240A	08/07/95	5221089
Tetrachloroethene	ND	5.0	SW846 8240A	08/07/95	5221089
Toluene	ND	5.0	SW846 8240A	08/07/95	5221089
1,1,1-Trichloroethane	ND	5.0	SW846 8240A	08/07/95	5221089
1,1,2-Trichloroethane	ND	5.0	SW846 8240A	08/07/95	5221089

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	104	(76 - 114)
Toluene-d8	99	(88 - 110)
Bromofluorobenzene	100	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW7D

WO #: C0FHP104
LAB #: A5H010101-004
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 11:00
DATE RECEIVED: 7/29/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Trichloroethene	ND	5.0	SW846 8240A	08/07/95	5221089
1,2,3-Trichloropropane	ND	5.0	SW846 8240A	08/07/95	5221089
Vinyl acetate	ND	50	SW846 8240A	08/07/95	5221089
Vinyl chloride	ND	10	SW846 8240A	08/07/95	5221089
Xylenes (total)	ND	5.0	SW846 8240A	08/07/95	5221089
1,2-Dibromoethane (EDB)	ND	5.0	SW846 8240A	08/07/95	5221089
2-Butanone (MEK)	ND	50	SW846 8240A	08/07/95	5221089
4-Methyl-2-pentanone (MIBK)	ND	50	SW846 8240A	08/07/95	5221089

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	104	(76 - 114)
Toluene-d8	99	(88 - 110)
Bromofluorobenzene	100	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW7D

WO #: C0FHP104
LAB #: A5H010101-004
MATRIX: WATER

DATE SAMPLED: 7/28/95
DATE RECEIVED: 7/29/95
DATE EXTRACTED: 8/07/95
DATE ANALYZED: 8/07/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5221089

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5221089

GERAGHTY & MILLER

FMGWMW59

WO #: C0FHQ104
LAB #: A5H010101-005
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 13:45
DATE RECEIVED: 7/29/95

- GC/MS Volatiles -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Acetone	**2.2 J**	**50**	**SW846 8240A**	**08/07/95**	**5221089**
Acetonitrile	ND	50	SW846 8240A	08/07/95	5221089
Acrolein	ND	100	SW846 8240A	08/07/95	5221089
Acrylonitrile	ND	50	SW846 8240A	08/07/95	5221089
Benzene	ND	5.0	SW846 8240A	08/07/95	5221089
Bromodichloromethane	ND	5.0	SW846 8240A	08/07/95	5221089
Bromoform	ND	10	SW846 8240A	08/07/95	5221089
Bromomethane	ND	10	SW846 8240A	08/07/95	5221089
Carbon disulfide	ND	5.0	SW846 8240A	08/07/95	5221089
Carbon tetrachloride	ND	10	SW846 8240A	08/07/95	5221089
Chlorobenzene	ND	5.0	SW846 8240A	08/07/95	5221089
Chloroprene	ND	5.0	SW846 8240A	08/07/95	5221089
Dibromochloromethane	ND	5.0	SW846 8240A	08/07/95	5221089
1,2-Dibromo-3-chloro-propane	ND	10	SW846 8240A	08/07/95	5221089
Chloroethane	ND	10	SW846 8240A	08/07/95	5221089
Chloroform	ND	5.0	SW846 8240A	08/07/95	5221089
Chloromethane	ND	10	SW846 8240A	08/07/95	5221089
Allyl chloride	ND	5.0	SW846 8240A	08/07/95	5221089
Dibromomethane	ND	5.0	SW846 8240A	08/07/95	5221089
trans-1,4-Dichloro-2-butene	ND	5.0	SW846 8240A	08/07/95	5221089
Dichlorodifluoromethane	ND	20	SW846 8240A	08/07/95	5221089
1,1-Dichloroethane	ND	5.0	SW846 8240A	08/07/95	5221089
1,2-Dichloroethane	ND	5.0	SW846 8240A	08/07/95	5221089

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	103	(76 - 114)
Toluene-d8	100	(88 - 110)
Bromofluorobenzene	101	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
J ESTIMATED VALUE. (DETECTED), BUT BELOW QUANTITATION LIMIT.

GERAGHTY & MILLER

FMGWMW59

WO #: C0FHQ104
LAB #: A5H010101-005
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 13:45
DATE RECEIVED: 7/29/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,1-Dichloroethene	ND	5.0	SW846 8240A	08/07/95	5221089
1,2-Dichloroethene (total)	ND	5.0	SW846 8240A	08/07/95	5221089
1,2-Dichloropropane	ND	5.0	SW846 8240A	08/07/95	5221089
cis-1,3-Dichloropropene	ND	5.0	SW846 8240A	08/07/95	5221089
trans-1,3-Dichloropropene	ND	5.0	SW846 8240A	08/07/95	5221089
1,4-Dioxane	ND	1,000	SW846 8240A	08/07/95	5221089
Ethylbenzene	ND	5.0	SW846 8240A	08/07/95	5221089
Ethyl methacrylate	ND	5.0	SW846 8240A	08/07/95	5221089
Trichlorofluoromethane	ND	5.0	SW846 8240A	08/07/95	5221089
2-Hexanone	ND	50	SW846 8240A	08/07/95	5221089
Iodomethane	ND	5.0	SW846 8240A	08/07/95	5221089
Isobutyl alcohol	ND	500	SW846 8240A	08/07/95	5221089
Methacrylonitrile	ND	20	SW846 8240A	08/07/95	5221089
Methylene chloride	ND	5.0	SW846 8240A	08/07/95	5221089
Methyl methacrylate	ND	5.0	SW846 8240A	08/07/95	5221089
Propionitrile	ND	20	SW846 8240A	08/07/95	5221089
Styrene	ND	5.0	SW846 8240A	08/07/95	5221089
1,1,1,2-Tetrachloroethane	ND	5.0	SW846 8240A	08/07/95	5221089
1,1,2,2-Tetrachloroethane	ND	5.0	SW846 8240A	08/07/95	5221089
Tetrachloroethene	ND	5.0	SW846 8240A	08/07/95	5221089
Toluene	ND	5.0	SW846 8240A	08/07/95	5221089
1,1,1-Trichloroethane	ND	5.0	SW846 8240A	08/07/95	5221089
1,1,2-Trichloroethane	ND	5.0	SW846 8240A	08/07/95	5221089

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	103	(76 - 114)
Toluene-d8	100	(88 - 110)
Bromofluorobenzene	101	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW59

WO #: C0FHQ104
LAB #: A5H010101-005
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 13:45
DATE RECEIVED: 7/29/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Trichloroethene	ND	5.0	SW846 8240A	08/07/95	5221089
1,2,3-Trichloropropane	ND	5.0	SW846 8240A	08/07/95	5221089
Vinyl acetate	ND	50	SW846 8240A	08/07/95	5221089
Vinyl chloride	ND	10	SW846 8240A	08/07/95	5221089
Xylenes (total)	ND	5.0	SW846 8240A	08/07/95	5221089
1,2-Dibromoethane (EDB)	ND	5.0	SW846 8240A	08/07/95	5221089
2-Butanone (MEK)	ND	50	SW846 8240A	08/07/95	5221089
4-Methyl-2-pentanone (MIBK)	ND	50	SW846 8240A	08/07/95	5221089

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	103	(76 - 114)
Toluene-d8	100	(88 - 110)
Bromofluorobenzene	101	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW59

WO #: C0FHQ104
LAB #: A5H010101-005
MATRIX: WATER

DATE SAMPLED: 7/28/95
DATE RECEIVED: 7/29/95
DATE EXTRACTED: 8/07/95
DATE ANALYZED: 8/07/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5221089

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5221089

GERAGHTY & MILLER

TRIP BLANK

WO #: C0FHR101
LAB #: A5H010101-006
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED:
DATE RECEIVED: 7/29/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Acetone	ND	50	SW846 8240A	08/07/95	5221089
Acetonitrile	ND	50	SW846 8240A	08/07/95	5221089
Acrolein	ND	100	SW846 8240A	08/07/95	5221089
Acrylonitrile	ND	50	SW846 8240A	08/07/95	5221089
Benzene	ND	5.0	SW846 8240A	08/07/95	5221089
Bromodichloromethane	ND	5.0	SW846 8240A	08/07/95	5221089
Bromoform	ND	10	SW846 8240A	08/07/95	5221089
Bromomethane	ND	10	SW846 8240A	08/07/95	5221089
Carbon disulfide	ND	5.0	SW846 8240A	08/07/95	5221089
Carbon tetrachloride	ND	10	SW846 8240A	08/07/95	5221089
Chlorobenzene	ND	5.0	SW846 8240A	08/07/95	5221089
Chloroprene	ND	5.0	SW846 8240A	08/07/95	5221089
Dibromochloromethane	ND	5.0	SW846 8240A	08/07/95	5221089
1,2-Dibromo-3-chloro-propane	ND	10	SW846 8240A	08/07/95	5221089
Chloroethane	ND	10	SW846 8240A	08/07/95	5221089
Chloroform	ND	5.0	SW846 8240A	08/07/95	5221089
Chloromethane	ND	10	SW846 8240A	08/07/95	5221089
Allyl chloride	ND	5.0	SW846 8240A	08/07/95	5221089
Dibromomethane	ND	5.0	SW846 8240A	08/07/95	5221089
trans-1,4-Dichloro-2-butene	ND	5.0	SW846 8240A	08/07/95	5221089
Dichlorodifluoromethane	ND	20	SW846 8240A	08/07/95	5221089
1,1-Dichloroethane	ND	5.0	SW846 8240A	08/07/95	5221089
1,2-Dichloroethane	ND	5.0	SW846 8240A	08/07/95	5221089

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	101	(76 - 114)
Toluene-d8	99	(88 - 110)
Bromofluorobenzene	100	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

TRIP BLANK

WO #: C0FHR101
LAB #: A5H010101-006
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED:
DATE RECEIVED: 7/29/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,1-Dichloroethene	ND	5.0	SW846 8240A	08/07/95	5221089
1,2-Dichloroethene (total)	ND	5.0	SW846 8240A	08/07/95	5221089
1,2-Dichloropropane	ND	5.0	SW846 8240A	08/07/95	5221089
cis-1,3-Dichloropropene	ND	5.0	SW846 8240A	08/07/95	5221089
trans-1,3-Dichloropropene	ND	5.0	SW846 8240A	08/07/95	5221089
1,4-Dioxane	ND	1,000	SW846 8240A	08/07/95	5221089
Ethylbenzene	ND	5.0	SW846 8240A	08/07/95	5221089
Ethyl methacrylate	ND	5.0	SW846 8240A	08/07/95	5221089
Trichlorofluoromethane	ND	5.0	SW846 8240A	08/07/95	5221089
2-Hexanone	ND	50	SW846 8240A	08/07/95	5221089
Iodomethane	ND	5.0	SW846 8240A	08/07/95	5221089
Isobutyl alcohol	ND	500	SW846 8240A	08/07/95	5221089
Methacrylonitrile	ND	20	SW846 8240A	08/07/95	5221089
Methylene chloride	ND	5.0	SW846 8240A	08/07/95	5221089
Methyl methacrylate	ND	5.0	SW846 8240A	08/07/95	5221089
Propionitrile	ND	20	SW846 8240A	08/07/95	5221089
Styrene	ND	5.0	SW846 8240A	08/07/95	5221089
1,1,1,2-Tetrachloroethane	ND	5.0	SW846 8240A	08/07/95	5221089
1,1,2,2-Tetrachloroethane	ND	5.0	SW846 8240A	08/07/95	5221089
Tetrachloroethene	ND	5.0	SW846 8240A	08/07/95	5221089
Toluene	ND	5.0	SW846 8240A	08/07/95	5221089
1,1,1-Trichloroethane	ND	5.0	SW846 8240A	08/07/95	5221089
1,1,2-Trichloroethane	ND	5.0	SW846 8240A	08/07/95	5221089

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	101	(76 - 114)
Toluene-d8	99	(88 - 110)
Bromofluorobenzene	100	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

TRIP BLANK

WO #: C0FHR101
LAB #: A5H010101-006
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED:
DATE RECEIVED: 7/29/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Trichloroethene	ND	5.0	SW846 8240A	08/07/95	5221089
1,2,3-Trichloropropane	ND	5.0	SW846 8240A	08/07/95	5221089
Vinyl acetate	ND	50	SW846 8240A	08/07/95	5221089
Vinyl chloride	ND	10	SW846 8240A	08/07/95	5221089
Xylenes (total)	ND	5.0	SW846 8240A	08/07/95	5221089
1,2-Dibromoethane (EDB)	ND	5.0	SW846 8240A	08/07/95	5221089
2-Butanone (MEK)	ND	50	SW846 8240A	08/07/95	5221089
4-Methyl-2-pentanone (MIBK)	ND	50	SW846 8240A	08/07/95	5221089

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	101	(76 - 114)
Toluene-d8	99	(88 - 110)
Bromofluorobenzene	100	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

TRIP BLANK

WO #: C0FHR101
LAB #: A5H010101-006
MATRIX: WATER

DATE SAMPLED: 7/28/95
DATE RECEIVED: 7/29/95
DATE EXTRACTED: 8/07/95
DATE ANALYZED: 8/07/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5221089

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5221089

GC/MS SEMIVOLATILE SAMPLE DATA

GERAGHTY & MILLER

FMGWMW12S

WO #: C0FHK102
LAB #: A5H010101-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/27/95
TIME SAMPLED: 17:00
DATE RECEIVED: 7/29/95

GC/MS Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
4-Aminobiphenyl	ND	50	SW846 8270A	08/03-08/16/95	521509
p-Dimethylaminoazobenzene	ND	10	SW846 8270A	08/03-08/16/95	521509
7,12-Dimethylbenz(a)-anthracene	ND	20	SW846 8270A	08/03-08/16/95	521509
Hexachloropropene	ND	100	SW846 8270A	08/03-08/16/95	521509
Phenacetin	ND	50	SW846 8270A	08/03-08/16/95	521509
Pronamide	ND	20	SW846 8270A	08/03-08/16/95	521509
a,a-Dimethylphenethylamine	ND	50	SW846 8270A	08/03-08/16/95	521509
Diallate	ND	10	SW846 8270A	08/03-08/16/95	521509
Chlorobenzilate	ND	10	SW846 8270A	08/03-08/16/95	521509
Acenaphthene	ND	10	SW846 8270A	08/03-08/16/95	521509
Acenaphthylene	ND	10	SW846 8270A	08/03-08/16/95	521509
Acetophenone	ND	10	SW846 8270A	08/03-08/16/95	521509
2-Acetylaminofluorene	ND	20	SW846 8270A	08/03-08/16/95	521509
Aniline	ND	10	SW846 8270A	08/03-08/16/95	521509
Anthracene	ND	10	SW846 8270A	08/03-08/16/95	521509
Benzo(a)anthracene	ND	10	SW846 8270A	08/03-08/16/95	521509
Benzo(b)fluoranthene	ND	10	SW846 8270A	08/03-08/16/95	521509
Benzo(k)fluoranthene	ND	10	SW846 8270A	08/03-08/16/95	521509
Benzo(ghi)perylene	ND	10	SW846 8270A	08/03-08/16/95	521509
Benzo(a)pyrene	ND	10	SW846 8270A	08/03-08/16/95	521509
Benzyl alcohol	ND	10	SW846 8270A	08/03-08/16/95	521509

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	39	(36 - 148)
2-Fluorobiphenyl	49	(38 - 106)
Terphenyl-d14	42	(10 - 169)
Phenol-d5	38	(15 - 126)
2-Fluorophenol	32	(17 - 106)
2,4,6-Tribromophenol	87	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW12S

WO #: C0FHK102 **DATE SAMPLED:** 7/27/95
LAB #: A5H010101-001 **TIME SAMPLED:** 17:00
MATRIX: WATER **DATE RECEIVED:** 7/29/95
DILUTION FACTOR: 1.00

GC/MS Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
bis(2-Chloroethoxy)methane	ND	10	SW846 8270A	08/03-08/16/95	521509
bis(2-Chloroethyl) ether	ND	10	SW846 8270A	08/03-08/16/95	521509
bis(2-Chloro-1-methylethyl) et	ND	10	SW846 8270A	08/03-08/16/95	521509
bis(2-Ethylhexyl) phthalate	ND	10	SW846 8270A	08/03-08/16/95	521509
4-Bromophenyl phenyl ether	ND	10	SW846 8270A	08/03-08/16/95	521509
Butyl benzyl phthalate	ND	10	SW846 8270A	08/03-08/16/95	521509
4-Chloroaniline	ND	10	SW846 8270A	08/03-08/16/95	521509
4-Chloro-3-methylphenol	ND	10	SW846 8270A	08/03-08/16/95	521509
2-Chloronaphthalene	ND	10	SW846 8270A	08/03-08/16/95	521509
2-Chlorophenol	ND	10	SW846 8270A	08/03-08/16/95	521509
4-Chlorophenyl phenyl ether	ND	10	SW846 8270A	08/03-08/16/95	521509
Chrysene	ND	10	SW846 8270A	08/03-08/16/95	521509
Dibenz(a,h)anthracene	ND	10	SW846 8270A	08/03-08/16/95	521509
Dibenzofuran	ND	10	SW846 8270A	08/03-08/16/95	521509
Di-n-butyl phthalate	ND	10	SW846 8270A	08/03-08/16/95	521509
1,2-Dichlorobenzene	ND	10	SW846 8270A	08/03-08/16/95	521509
1,3-Dichlorobenzene	ND	10	SW846 8270A	08/03-08/16/95	521509
1,4-Dichlorobenzene	ND	10	SW846 8270A	08/03-08/16/95	521509
3,3'-Dichlorobenzidine	ND	10	SW846 8270A	08/03-08/16/95	521509
2,4-Dichlorophenol	ND	10	SW846 8270A	08/03-08/16/95	521509
2,6-Dichlorophenol	ND	10	SW846 8270A	08/03-08/16/95	521509

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	39	(36 - 148)
2-Fluorobiphenyl	49	(38 - 106)
Terphenyl-d14	42	(10 - 169)
Phenol-d5	38	(15 - 126)
2-Fluorophenol	32	(17 - 106)
2,4,6-Tribromophenol	87	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW12S

WO #: C0FHK102
LAB #: A5H010101-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/27/95
TIME SAMPLED: 17:00
DATE RECEIVED: 7/29/95

GC/MS Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Diethyl phthalate	ND	10	SW846 8270A	08/03-08/16/95	521509
3,3'-Dimethylbenzidine	ND	20	SW846 8270A	08/03-08/16/95	521509
2,4-Dimethylphenol	ND	10	SW846 8270A	08/03-08/16/95	521509
Dimethyl phthalate	ND	10	SW846 8270A	08/03-08/16/95	521509
Di-n-octyl phthalate	ND	10	SW846 8270A	08/03-08/16/95	521509
1,3-Dinitrobenzene	ND	10	SW846 8270A	08/03-08/16/95	521509
4,6-Dinitro-2-methylphenol	ND	50	SW846 8270A	08/03-08/16/95	521509
2,4-Dinitrophenol	ND	50	SW846 8270A	08/03-08/16/95	521509
2,4-Dinitrotoluene	ND	10	SW846 8270A	08/03-08/16/95	521509
2,6-Dinitrotoluene	ND	10	SW846 8270A	08/03-08/16/95	521509
2-sec-Butyl-4,6-dinitro-phenol	ND	20	SW846 8270A	08/03-08/16/95	521509
Diphenylamine	ND	10	SW846 8270A	08/03-08/16/95	521509
Ethyl methanesulfonate	ND	10	SW846 8270A	08/03-08/16/95	521509
Fluoranthene	ND	10	SW846 8270A	08/03-08/16/95	521509
Fluorene	ND	10	SW846 8270A	08/03-08/16/95	521509
Hexachlorobenzene	ND	10	SW846 8270A	08/03-08/16/95	521509
Hexachlorobutadiene	ND	10	SW846 8270A	08/03-08/16/95	521509
Hexachlorocyclopentadiene	ND	10	SW846 8270A	08/03-08/16/95	521509
Hexachloroethane	ND	10	SW846 8270A	08/03-08/16/95	521509
Hexachlorophene	--		**SW846 8270A**	**08/03-08/16/95**	**521509**
Indeno(1,2,3-cd)pyrene	ND	10	SW846 8270A	08/03-08/16/95	521509

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	39	(36 - 148)
2-Fluorobiphenyl	49	(38 - 106)
Terphenyl-d14	42	(10 - 169)
Phenol-d5	38	(15 - 126)
2-Fluorophenol	32	(17 - 106)
2,4,6-Tribromophenol	87	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
-- (NOT ANALYZED)

GERAGHTY & MILLER

FMGWMW12S

WO #: C0FHK102
LAB #: A5H010101-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/27/95
TIME SAMPLED: 17:00
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Isophorone	ND	10	SW846 8270A	08/03-08/16/95	5215091
Isosafrole	ND	10	SW846 8270A	08/03-08/16/95	5215091
Methapyrilene	ND	100	SW846 8270A	08/03-08/16/95	5215091
o-Toluidine	ND	20	SW846 8270A	08/03-08/16/95	5215091
3-Methylcholanthrene	ND	100	SW846 8270A	08/03-08/16/95	5215091
Methyl methanesulfonate	ND	10	SW846 8270A	08/03-08/16/95	5215091
2-Methylnaphthalene	ND	10	SW846 8270A	08/03-08/16/95	5215091
2-Methylphenol	ND	10	SW846 8270A	08/03-08/16/95	5215091
3-Methylphenol	ND	10	SW846 8270A	08/03-08/16/95	5215091
4-Methylphenol	ND	10	SW846 8270A	08/03-08/16/95	5215091
Naphthalene	ND	10	SW846 8270A	08/03-08/16/95	5215091
1,4-Naphthoquinone	ND	200	SW846 8270A	08/03-08/16/95	5215091
1-Naphthylamine	ND	10	SW846 8270A	08/03-08/16/95	5215091
2-Naphthylamine	ND	10	SW846 8270A	08/03-08/16/95	5215091
2-Nitroaniline	ND	50	SW846 8270A	08/03-08/16/95	5215091
3-Nitroaniline	ND	50	SW846 8270A	08/03-08/16/95	5215091
4-Nitroaniline	ND	50	SW846 8270A	08/03-08/16/95	5215091
Nitrobenzene	ND	10	SW846 8270A	08/03-08/16/95	5215091
2-Nitrophenol	ND	10	SW846 8270A	08/03-08/16/95	5215091
4-Nitrophenol	ND	50	SW846 8270A	08/03-08/16/95	5215091
4-Nitroquinoline-1-oxide	ND	100	SW846 8270A	08/03-08/16/95	5215091

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	39	(36 - 148)
2-Fluorobiphenyl	49	(38 - 106)
Terphenyl-d14	42	(10 - 169)
Phenol-d5	38	(15 - 126)
2-Fluorophenol	32	(17 - 106)
2,4,6-Tribromophenol	87	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW12S

WO #: C0FHK102
LAB #: A5H010101-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/27/95
TIME SAMPLED: 17:00
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
N-Nitrosodi-n-butylamine	ND	10	SW846 8270A	08/03-08/16/95	5215091
N-Nitrosodiethylamine	ND	10	SW846 8270A	08/03-08/16/95	5215091
N-Nitrosodimethylamine	ND	10	SW846 8270A	08/03-08/16/95	5215091
N-Nitrosodi-n-propylamine	ND	10	SW846 8270A	08/03-08/16/95	5215091
N-Nitrosodiphenylamine	ND	10	SW846 8270A	08/03-08/16/95	5215091
N-Nitrosomethylethylamine	ND	10	SW846 8270A	08/03-08/16/95	5215091
N-Nitrosomorpholine	ND	10	SW846 8270A	08/03-08/16/95	5215091
N-Nitrosopiperidine	ND	10	SW846 8270A	08/03-08/16/95	5215091
N-Nitrosopyrrolidine	ND	10	SW846 8270A	08/03-08/16/95	5215091
5-Nitro-o-toluidine	ND	20	SW846 8270A	08/03-08/16/95	5215091
Pentachlorobenzene	ND	10	SW846 8270A	08/03-08/16/95	5215091
Pentachloroethane	ND	50	SW846 8270A	08/03-08/16/95	5215091
Pentachloronitrobenzene	ND	50	SW846 8270A	08/03-08/16/95	5215091
Pentachlorophenol	**3.8 J**	**50**	**SW846 8270A**	**08/03-08/16/95**	**5215091**
Phenanthrene	ND	10	SW846 8270A	08/03-08/16/95	5215091
Phenol	ND	10	SW846 8270A	08/03-08/16/95	5215091
p-Phenylene diamine	ND	50	SW846 8270A	08/03-08/16/95	5215091
2-Picoline	ND	20	SW846 8270A	08/03-08/16/95	5215091
Pyrene	ND	10	SW846 8270A	08/03-08/16/95	5215091
Pyridine	ND	10	SW846 8270A	08/03-08/16/95	5215091
Safrole	ND	10	SW846 8270A	08/03-08/16/95	5215091

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	39	(36 - 148)
2-Fluorobiphenyl	49	(38 - 106)
Terphenyl-d14	42	(10 - 169)
Phenol-d5	38	(15 - 126)
2-Fluorophenol	32	(17 - 106)
2,4,6-Tribromophenol	87	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
J ESTIMATED VALUE. (DETECTED), BUT BELOW QUANTITATION LIMIT.

GERAGHTY & MILLER

FMGWMW12S

WO #: C0FHK102
LAB #: A5H010101-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/27/95
TIME SAMPLED: 17:00
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,2,4,5-Tetrachlorobenzene	ND	10	SW846 8270A	08/03-08/16/95	5215091
2,3,4,6-Tetrachlorophenol	ND	50	SW846 8270A	08/03-08/16/95	5215091
1,2,4-Trichlorobenzene	ND	10	SW846 8270A	08/03-08/16/95	5215091
2,4,5-Trichlorophenol	ND	10	SW846 8270A	08/03-08/16/95	5215091
2,4,6-Trichlorophenol	ND	10	SW846 8270A	08/03-08/16/95	5215091
1,3,5-Trinitrobenzene	ND	50	SW846 8270A	08/03-08/16/95	5215091
Aramite	--		SW846 8270A	08/03-08/16/95	5215091

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	39	(36 - 148)
2-Fluorobiphenyl	49	(38 - 106)
Terphenyl-d14	42	(10 - 169)
Phenol-d5	38	(15 - 126)
2-Fluorophenol	32	(17 - 106)
2,4,6-Tribromophenol	87	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
– (NOT ANALYZED)

GERAGHTY & MILLER

FMGWMW12S

WO #: C0FHK102
LAB #: A5H010101-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/27/95
DATE RECEIVED: 7/29/95
DATE EXTRACTED: 8/03/95
DATE ANALYZED: 8/16/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
Base/Neutrals and Acids (8270)			
None		**ug/L**	**5215091**

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
Base/Neutrals and Acids (8270)			
None		**ug/L**	**5215091**

GERAGHTY & MILLER

FMGWMW7S

WO #: C0FHM105
LAB #: A5H010101-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
4-Aminobiphenyl	ND	50	SW846 8270A	08/04-08/14/95	5216001
p-Dimethylaminoazobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
7,12-Dimethylbenz(a)-anthracene	ND	20	SW846 8270A	08/04-08/14/95	5216001
Hexachloropropene	ND	100	SW846 8270A	08/04-08/14/95	5216001
Phenacetin	ND	50	SW846 8270A	08/04-08/14/95	5216001
Pronamide	ND	20	SW846 8270A	08/04-08/14/95	5216001
a,a-Dimethylphenethylamine	ND	50	SW846 8270A	08/04-08/14/95	5216001
Diallate	ND	10	SW846 8270A	08/04-08/14/95	5216001
Chlorobenzilate	ND	10	SW846 8270A	08/04-08/14/95	5216001
Acenaphthene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Acenaphthylene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Acetophenone	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Acetylaminofluorene	ND	20	SW846 8270A	08/04-08/14/95	5216001
Aniline	ND	10	SW846 8270A	08/04-08/14/95	5216001
Anthracene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Benzo(a)anthracene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Benzo(b)fluoranthene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Benzo(k)fluoranthene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Benzo(ghi)perylene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Benzo(a)pyrene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Benzyl alcohol	ND	10	SW846 8270A	08/04-08/14/95	5216001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	82	(36 - 148)
2-Fluorobiphenyl	89	(38 - 106)
Terphenyl-d14	89	(10 - 169)
Phenol-d5	63	(15 - 126)
2-Fluorophenol	37	(17 - 106)
2,4,6-Tribromophenol	129	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW7S

WO #: C0FHM105
LAB #: A5H010101-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
bis(2-Chloroethoxy)methane	ND	10	SW846 8270A	08/04-08/14/95	5216001
bis(2-Chloroethyl) ether	ND	10	SW846 8270A	08/04-08/14/95	5216001
bis(2-Chloro-1-methylethyl) et	ND	10	SW846 8270A	08/04-08/14/95	5216001
bis(2-Ethylhexyl) phthalate	ND	10	SW846 8270A	08/04-08/14/95	5216001
4-Bromophenyl phenyl ether	ND	10	SW846 8270A	08/04-08/14/95	5216001
Butyl benzyl phthalate	ND	10	SW846 8270A	08/04-08/14/95	5216001
4-Chloroaniline	ND	10	SW846 8270A	08/04-08/14/95	5216001
4-Chloro-3-methylphenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Chloronaphthalene	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Chlorophenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
4-Chlorophenyl phenyl ether	ND	10	SW846 8270A	08/04-08/14/95	5216001
Chrysene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Dibenz(a,h)anthracene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Dibenzofuran	ND	10	SW846 8270A	08/04-08/14/95	5216001
Di-n-butyl phthalate	ND	10	SW846 8270A	08/04-08/14/95	5216001
1,2-Dichlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
1,3-Dichlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
1,4-Dichlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
3,3'-Dichlorobenzidine	ND	10	SW846 8270A	08/04-08/14/95	5216001
2,4-Dichlorophenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
2,6-Dichlorophenol	ND	10	SW846 8270A	08/04-08/14/95	5216001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	82	(36 - 148)
2-Fluorobiphenyl	89	(38 - 106)
Terphenyl-d14	89	(10 - 169)
Phenol-d5	63	(15 - 126)
2-Fluorophenol	37	(17 - 106)
2,4,6-Tribromophenol	129	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW7S

WO #: C0FHM105
LAB #: A5H010101-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Diethyl phthalate	ND	10	SW846 8270A	08/04-08/14/95	5216001
3,3'-Dimethylbenzidine	ND	20	SW846 8270A	08/04-08/14/95	5216001
2,4-Dimethylphenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
Dimethyl phthalate	ND	10	SW846 8270A	08/04-08/14/95	5216001
Di-n-octyl phthalate	ND	10	SW846 8270A	08/04-08/14/95	5216001
1,3-Dinitrobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
4,6-Dinitro-2-methylphenol	ND	50	SW846 8270A	08/04-08/14/95	5216001
2,4-Dinitrophenol	ND	50	SW846 8270A	08/04-08/14/95	5216001
2,4-Dinitrotoluene	ND	10	SW846 8270A	08/04-08/14/95	5216001
2,6-Dinitrotoluene	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-sec-Butyl-4,6-dinitro-phenol	ND	20	SW846 8270A	08/04-08/14/95	5216001
Diphenylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
Ethyl methanesulfonate	ND	10	SW846 8270A	08/04-08/14/95	5216001
Fluoranthene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Fluorene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Hexachlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Hexachlorobutadiene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Hexachlorocyclopentadiene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Hexachloroethane	ND	10	SW846 8270A	08/04-08/14/95	5216001
Hexachlorophene	--		**SW846 8270A**	**08/04-08/14/95**	**5216001**
Indeno(1,2,3-cd)pyrene	ND	10	SW846 8270A	08/04-08/14/95	5216001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	82	(36 - 148)
2-Fluorobiphenyl	89	(38 - 106)
Terphenyl-d14	89	(10 - 169)
Phenol-d5	63	(15 - 126)
2-Fluorophenol	37	(17 - 106)
2,4,6-Tribromophenol	129	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
– (NOT ANALYZED)

GERAGHTY & MILLER

FMGWMW7S

WO #: C0FHM105
LAB #: A5H010101-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Isophorone	ND	10	SW846 8270A	08/04-08/14/95	5216001
Isosafrole	ND	10	SW846 8270A	08/04-08/14/95	5216001
Methapyrilene	ND	100	SW846 8270A	08/04-08/14/95	5216001
o-Toluidine	ND	20	SW846 8270A	08/04-08/14/95	5216001
3-Methylcholanthrene	ND	100	SW846 8270A	08/04-08/14/95	5216001
Methyl methanesulfonate	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Methylnaphthalene	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Methylphenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
3-Methylphenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
4-Methylphenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
Naphthalene	ND	10	SW846 8270A	08/04-08/14/95	5216001
1,4-Naphthoquinone	ND	200	SW846 8270A	08/04-08/14/95	5216001
1-Naphthylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Naphthylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Nitroaniline	ND	50	SW846 8270A	08/04-08/14/95	5216001
3-Nitroaniline	ND	50	SW846 8270A	08/04-08/14/95	5216001
4-Nitroaniline	ND	50	SW846 8270A	08/04-08/14/95	5216001
Nitrobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Nitrophenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
4-Nitrophenol	ND	50	SW846 8270A	08/04-08/14/95	5216001
4-Nitroquinoline-1-oxide	ND	100	SW846 8270A	08/04-08/14/95	5216001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	82	(36 - 148)
2-Fluorobiphenyl	89	(38 - 106)
Terphenyl-d14	89	(10 - 169)
Phenol-d5	63	(15 - 126)
2-Fluorophenol	37	(17 - 106)
2,4,6-Tribromophenol	129	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW7S

WO #: C0FHM105
LAB #: A5H010101-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
N-Nitrosodi-n-butylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosodiethylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosodimethylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosodi-n-propylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosodiphenylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosomethylethylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosomorpholine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosopiperidine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosopyrrolidine	ND	10	SW846 8270A	08/04-08/14/95	5216001
5-Nitro-o-toluidine	ND	20	SW846 8270A	08/04-08/14/95	5216001
Pentachlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Pentachloroethane	ND	50	SW846 8270A	08/04-08/14/95	5216001
Pentachloronitrobenzene	ND	50	SW846 8270A	08/04-08/14/95	5216001
Pentachlorophenol	ND	50	SW846 8270A	08/04-08/14/95	5216001
Phenanthrene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Phenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
p-Phenylene diamine	ND	50	SW846 8270A	08/04-08/14/95	5216001
2-Picoline	ND	20	SW846 8270A	08/04-08/14/95	5216001
Pyrene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Pyridine	ND	10	SW846 8270A	08/04-08/14/95	5216001
Safrole	ND	10	SW846 8270A	08/04-08/14/95	5216001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	82	(36 - 148)
2-Fluorobiphenyl	89	(38 - 106)
Terphenyl-d14	89	(10 - 169)
Phenol-d5	63	(15 - 126)
2-Fluorophenol	37	(17 - 106)
2,4,6-Tribromophenol	129	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW7S

WO #: C0FHM105
LAB #: A5H010101-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,2,4,5-Tetrachlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
2,3,4,6-Tetrachlorophenol	ND	50	SW846 8270A	08/04-08/14/95	5216001
1,2,4-Trichlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
2,4,5-Trichlorophenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
2,4,6-Trichlorophenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
1,3,5-Trinitrobenzene	ND	50	SW846 8270A	08/04-08/14/95	5216001
Aramite	--		**SW846 8270A**	**08/04-08/14/95**	**5216001**

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	82	(36 - 148)
2-Fluorobiphenyl	89	(38 - 106)
Terphenyl-d14	89	(10 - 169)
Phenol-d5	63	(15 - 126)
2-Fluorophenol	37	(17 - 106)
2,4,6-Tribromophenol	129	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
-- (NOT ANALYZED)

GERAGHTY & MILLER

FMGWMW7S

WO #: C0FHM105
LAB #: A5H010101-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
DATE RECEIVED: 7/29/95
DATE EXTRACTED: 8/04/95
DATE ANALYZED: 8/14/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
Base/Neutrals and Acids (8270)			
Unknown	29	ug/L	5216001
Unknown	10	ug/L	5216001

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
Base/Neutrals and Acids (8270)			
None		ug/L	5216001

GERAGHTY & MILLER

FMGWMW58

WO #: C0FHN105
LAB #: A5H010101-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
4-Aminobiphenyl	ND	50	SW846 8270A	08/04-08/14/95	5216001
p-Dimethylaminoazobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
7,12-Dimethylbenz(a)-anthracene	ND	20	SW846 8270A	08/04-08/14/95	5216001
Hexachloropropene	ND	100	SW846 8270A	08/04-08/14/95	5216001
Phenacetin	ND	50	SW846 8270A	08/04-08/14/95	5216001
Pronamide	ND	20	SW846 8270A	08/04-08/14/95	5216001
a,a-Dimethylphenethylamine	ND	50	SW846 8270A	08/04-08/14/95	5216001
Diallate	ND	10	SW846 8270A	08/04-08/14/95	5216001
Chlorobenzilate	ND	10	SW846 8270A	08/04-08/14/95	5216001
Acenaphthene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Acenaphthylene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Acetophenone	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Acetylaminofluorene	ND	20	SW846 8270A	08/04-08/14/95	5216001
Aniline	ND	10	SW846 8270A	08/04-08/14/95	5216001
Anthracene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Benzo(a)anthracene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Benzo(b)fluoranthene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Benzo(k)fluoranthene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Benzo(ghi)perylene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Benzo(a)pyrene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Benzyl alcohol	ND	10	SW846 8270A	08/04-08/14/95	5216001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	85	(36 - 148)
2-Fluorobiphenyl	93	(38 - 106)
Terphenyl-d14	82	(10 - 169)
Phenol-d5	46	(15 - 126)
2-Fluorophenol	20	(17 - 106)
2,4,6-Tribromophenol	104	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW58

WO #: C0FHN105
LAB #: A5H010101-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

GC/MS Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
bis(2-Chloroethoxy)methane	ND	10	SW846 8270A	08/04-08/14/95	5216001
bis(2-Chloroethyl) ether	ND	10	SW846 8270A	08/04-08/14/95	5216001
bis(2-Chloro-1-methylethyl) et	ND	10	SW846 8270A	08/04-08/14/95	5216001
bis(2-Ethylhexyl) phthalate	**2.4 J**	**10**	**SW846 8270A**	**08/04-08/14/95**	**5216001**
4-Bromophenyl phenyl ether	ND	10	SW846 8270A	08/04-08/14/95	5216001
Butyl benzyl phthalate	ND	10	SW846 8270A	08/04-08/14/95	5216001
4-Chloroaniline	ND	10	SW846 8270A	08/04-08/14/95	5216001
4-Chloro-3-methylphenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Chloronaphthalene	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Chlorophenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
4-Chlorophenyl phenyl ether	ND	10	SW846 8270A	08/04-08/14/95	5216001
Chrysene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Dibenz(a,h)anthracene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Dibenzofuran	ND	10	SW846 8270A	08/04-08/14/95	5216001
Di-n-butyl phthalate	ND	10	SW846 8270A	08/04-08/14/95	5216001
1,2-Dichlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
1,3-Dichlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
1,4-Dichlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
3,3'-Dichlorobenzidine	ND	10	SW846 8270A	08/04-08/14/95	5216001
2,4-Dichlorophenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
2,6-Dichlorophenol	ND	10	SW846 8270A	08/04-08/14/95	5216001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	85	(36 - 148)
2-Fluorobiphenyl	93	(38 - 106)
Terphenyl-d14	82	(10 - 169)
Phenol-d5	46	(15 - 126)
2-Fluorophenol	20	(17 - 106)
2,4,6-Tribromophenol	104	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
J ESTIMATED VALUE. (DETECTED), BUT BELOW QUANTITATION LIMIT.

GERAGHTY & MILLER

FMGWMW58

WO #: C0FHN105
LAB #: A5H010101-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Diethyl phthalate	ND	10	SW846 8270A	08/04-08/14/95	5216001
3,3'-Dimethylbenzidine	ND	20	SW846 8270A	08/04-08/14/95	5216001
2,4-Dimethylphenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
Dimethyl phthalate	ND	10	SW846 8270A	08/04-08/14/95	5216001
Di-n-octyl phthalate	ND	10	SW846 8270A	08/04-08/14/95	5216001
1,3-Dinitrobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
4,6-Dinitro-2-methylphenol	ND	50	SW846 8270A	08/04-08/14/95	5216001
2,4-Dinitrophenol	ND	50	SW846 8270A	08/04-08/14/95	5216001
2,4-Dinitrotoluene	ND	10	SW846 8270A	08/04-08/14/95	5216001
2,6-Dinitrotoluene	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-sec-Butyl-4,6-dinitro-phenol	ND	20	SW846 8270A	08/04-08/14/95	5216001
Diphenylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
Ethyl methanesulfonate	ND	10	SW846 8270A	08/04-08/14/95	5216001
Fluoranthene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Fluorene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Hexachlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Hexachlorobutadiene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Hexachlorocyclopentadiene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Hexachloroethane	ND	10	SW846 8270A	08/04-08/14/95	5216001
Hexachlorophene	--		**SW846 8270A**	**08/04-08/14/95**	**5216001**
Indeno(1,2,3-cd)pyrene	ND	10	SW846 8270A	08/04-08/14/95	5216001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	85	(36 - 148)
2-Fluorobiphenyl	93	(38 - 106)
Terphenyl-d14	82	(10 - 169)
Phenol-d5	46	(15 - 126)
2-Fluorophenol	20	(17 - 106)
2,4,6-Tribromophenol	104	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
-- (NOT ANALYZED)

GERAGHTY & MILLER

FMGWMW58

WO #: C0FHN105
LAB #: A5H010101-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Isophorone	ND	10	SW846 8270A	08/04-08/14/95	5216001
Isosafrole	ND	10	SW846 8270A	08/04-08/14/95	5216001
Methapyrilene	ND	100	SW846 8270A	08/04-08/14/95	5216001
o-Toluidine	ND	20	SW846 8270A	08/04-08/14/95	5216001
3-Methylcholanthrene	ND	100	SW846 8270A	08/04-08/14/95	5216001
Methyl methanesulfonate	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Methylnaphthalene	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Methylphenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
3-Methylphenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
4-Methylphenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
Naphthalene	ND	10	SW846 8270A	08/04-08/14/95	5216001
1,4-Naphthoquinone	ND	200	SW846 8270A	08/04-08/14/95	5216001
1-Naphthylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Naphthylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Nitroaniline	ND	50	SW846 8270A	08/04-08/14/95	5216001
3-Nitroaniline	ND	50	SW846 8270A	08/04-08/14/95	5216001
4-Nitroaniline	ND	50	SW846 8270A	08/04-08/14/95	5216001
Nitrobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Nitrophenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
4-Nitrophenol	ND	50	SW846 8270A	08/04-08/14/95	5216001
4-Nitroquinoline-1-oxide	ND	100	SW846 8270A	08/04-08/14/95	5216001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	85	(36 - 148)
2-Fluorobiphenyl	93	(38 - 106)
Terphenyl-d14	82	(10 - 169)
Phenol-d5	46	(15 - 126)
2-Fluorophenol	20	(17 - 106)
2,4,6-Tribromophenol	104	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW58

WO #: C0FHN105
LAB #: A5H010101-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

GC/MS Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
N-Nitrosodi-n-butylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosodiethylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosodimethylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosodi-n-propylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosodiphenylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosomethylethylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosomorpholine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosopiperidine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosopyrrolidine	ND	10	SW846 8270A	08/04-08/14/95	5216001
5-Nitro-o-toluidine	ND	20	SW846 8270A	08/04-08/14/95	5216001
Pentachlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Pentachloroethane	ND	50	SW846 8270A	08/04-08/14/95	5216001
Pentachloronitrobenzene	ND	50	SW846 8270A	08/04-08/14/95	5216001
Pentachlorophenol	ND	50	SW846 8270A	08/04-08/14/95	5216001
Phenanthrene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Phenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
p-Phenylene diamine	ND	50	SW846 8270A	08/04-08/14/95	5216001
2-Picoline	ND	20	SW846 8270A	08/04-08/14/95	5216001
Pyrene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Pyridine	ND	10	SW846 8270A	08/04-08/14/95	5216001
Safrole	ND	10	SW846 8270A	08/04-08/14/95	5216001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	85	(36 - 148)
2-Fluorobiphenyl	93	(38 - 106)
Terphenyl-d14	82	(10 - 169)
Phenol-d5	46	(15 - 126)
2-Fluorophenol	20	(17 - 106)
2,4,6-Tribromophenol	104	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW58

WO #: C0FHN105
LAB #: A5H010101-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,2,4,5-Tetrachlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	521600:
2,3,4,6-Tetrachlorophenol	ND	50	SW846 8270A	08/04-08/14/95	521600:
1,2,4-Trichlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	521600:
2,4,5-Trichlorophenol	ND	10	SW846 8270A	08/04-08/14/95	521600:
2,4,6-Trichlorophenol	ND	10	SW846 8270A	08/04-08/14/95	521600:
1,3,5-Trinitrobenzene	ND	50	SW846 8270A	08/04-08/14/95	521600:
Aramite	--		**SW846 8270A**	**08/04-08/14/95**	**521600:**

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	85	(36 - 148)
2-Fluorobiphenyl	93	(38 - 106)
Terphenyl-d14	82	(10 - 169)
Phenol-d5	46	(15 - 126)
2-Fluorophenol	20	(17 - 106)
2,4,6-Tribromophenol	104	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
-- (NOT ANALYZED)

GERAGHTY & MILLER

FMGWMW58

WO #: C0FHN105		**DATE SAMPLED:**	7/28/95
LAB #: A5H010101-003		**DATE RECEIVED:**	7/29/95
MATRIX: WATER		**DATE EXTRACTED:**	8/04/95
DILUTION FACTOR:	1.00	**DATE ANALYZED:**	8/14/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
Base/Neutrals and Acids (8270)			
Unknown	**11**	**ug/L**	**5216001**
Unknown	**4**	**ug/L**	**5216001**

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
Base/Neutrals and Acids (8270)			
None		**ug/L**	**5216001**

GERAGHTY & MILLER

FMGWMW7D

WO #: C0FHP105
LAB #: A5H010101-004
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 11:00
DATE RECEIVED: 7/29/95

GC/MS Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
4-Aminobiphenyl	ND	50	SW846 8270A	08/04-08/14/95	5216001
p-Dimethylaminoazobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
7,12-Dimethylbenz(a)-anthracene	ND	20	SW846 8270A	08/04-08/14/95	5216001
Hexachloropropene	ND	100	SW846 8270A	08/04-08/14/95	5216001
Phenacetin	ND	50	SW846 8270A	08/04-08/14/95	5216001
Pronamide	ND	20	SW846 8270A	08/04-08/14/95	5216001
a,a-Dimethylphenethylamine	ND	50	SW846 8270A	08/04-08/14/95	5216001
Diallate	ND	10	SW846 8270A	08/04-08/14/95	5216001
Chlorobenzilate	ND	10	SW846 8270A	08/04-08/14/95	5216001
Acenaphthene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Acenaphthylene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Acetophenone	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Acetylaminofluorene	ND	20	SW846 8270A	08/04-08/14/95	5216001
Aniline	ND	10	SW846 8270A	08/04-08/14/95	5216001
Anthracene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Benzo(a)anthracene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Benzo(b)fluoranthene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Benzo(k)fluoranthene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Benzo(ghi)perylene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Benzo(a)pyrene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Benzyl alcohol	ND	10	SW846 8270A	08/04-08/14/95	5216001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	74	(36 - 148)
2-Fluorobiphenyl	81	(38 - 106)
Terphenyl-d14	36	(10 - 169)
Phenol-d5	61	(15 - 126)
2-Fluorophenol	46	(17 - 106)
2,4,6-Tribromophenol	107	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW7D

WO #: C0FHP105
LAB #: A5H010101-004
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 11:00
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
bis(2-Chloroethoxy)methane	ND	10	SW846 8270A	08/04-08/14/95	5216001
bis(2-Chloroethyl) ether	ND	10	SW846 8270A	08/04-08/14/95	5216001
bis(2-Chloro-1-methylethyl) et	ND	10	SW846 8270A	08/04-08/14/95	5216001
bis(2-Ethylhexyl) phthalate	**1.7 J**	**10**	**SW846 8270A**	**08/04-08/14/95**	**5216001**
4-Bromophenyl phenyl ether	ND	10	SW846 8270A	08/04-08/14/95	5216001
Butyl benzyl phthalate	ND	10	SW846 8270A	08/04-08/14/95	5216001
4-Chloroaniline	ND	10	SW846 8270A	08/04-08/14/95	5216001
4-Chloro-3-methylphenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Chloronaphthalene	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Chlorophenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
4-Chlorophenyl phenyl ether	ND	10	SW846 8270A	08/04-08/14/95	5216001
Chrysene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Dibenz(a,h)anthracene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Dibenzofuran	ND	10	SW846 8270A	08/04-08/14/95	5216001
Di-n-butyl phthalate	ND	10	SW846 8270A	08/04-08/14/95	5216001
1,2-Dichlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
1,3-Dichlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
1,4-Dichlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
3,3'-Dichlorobenzidine	ND	10	SW846 8270A	08/04-08/14/95	5216001
2,4-Dichlorophenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
2,6-Dichlorophenol	ND	10	SW846 8270A	08/04-08/14/95	5216001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	74	(36 - 148)
2-Fluorobiphenyl	81	(38 - 106)
Terphenyl-d14	36	(10 - 169)
Phenol-d5	61	(15 - 126)
2-Fluorophenol	46	(17 - 106)
2,4,6-Tribromophenol	107	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
J ESTIMATED VALUE. (DETECTED), BUT BELOW QUANTITATION LIMIT.

GERAGHTY & MILLER

FMGWMW7D

WO #: C0FHP105
LAB #: A5H010101-004
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 11:00
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Diethyl phthalate	ND	10	SW846 8270A	08/04-08/14/95	5216001
3,3'-Dimethylbenzidine	ND	20	SW846 8270A	08/04-08/14/95	5216001
2,4-Dimethylphenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
Dimethyl phthalate	ND	10	SW846 8270A	08/04-08/14/95	5216001
Di-n-octyl phthalate	ND	10	SW846 8270A	08/04-08/14/95	5216001
1,3-Dinitrobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
4,6-Dinitro-2-methylphenol	ND	50	SW846 8270A	08/04-08/14/95	5216001
2,4-Dinitrophenol	ND	50	SW846 8270A	08/04-08/14/95	5216001
2,4-Dinitrotoluene	ND	10	SW846 8270A	08/04-08/14/95	5216001
2,6-Dinitrotoluene	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-sec-Butyl-4,6-dinitro-phenol	ND	20	SW846 8270A	08/04-08/14/95	5216001
Diphenylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
Ethyl methanesulfonate	ND	10	SW846 8270A	08/04-08/14/95	5216001
Fluoranthene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Fluorene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Hexachlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Hexachlorobutadiene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Hexachlorocyclopentadiene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Hexachloroethane	ND	10	SW846 8270A	08/04-08/14/95	5216001
Hexachlorophene	--		**SW846 8270A**	**08/04-08/14/95**	**5216001**
Indeno(1,2,3-cd)pyrene	ND	10	SW846 8270A	08/04-08/14/95	5216001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	74	(36 - 148)
2-Fluorobiphenyl	81	(38 - 106)
Terphenyl-d14	36	(10 - 169)
Phenol-d5	61	(15 - 126)
2-Fluorophenol	46	(17 - 106)
2,4,6-Tribromophenol	107	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
-- (NOT ANALYZED)

GERAGHTY & MILLER

FMGWMW7D

WO #: C0FHP105
LAB #: A5H010101-004
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 11:00
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Isophorone	ND	10	SW846 8270A	08/04-08/14/95	5216001
Isosafrole	ND	10	SW846 8270A	08/04-08/14/95	5216001
Methapyrilene	ND	100	SW846 8270A	08/04-08/14/95	5216001
o-Toluidine	ND	20	SW846 8270A	08/04-08/14/95	5216001
3-Methylcholanthrene	ND	100	SW846 8270A	08/04-08/14/95	5216001
Methyl methanesulfonate	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Methylnaphthalene	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Methylphenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
3-Methylphenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
4-Methylphenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
Naphthalene	ND	10	SW846 8270A	08/04-08/14/95	5216001
1,4-Naphthoquinone	ND	200	SW846 8270A	08/04-08/14/95	5216001
1-Naphthylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Naphthylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Nitroaniline	ND	50	SW846 8270A	08/04-08/14/95	5216001
3-Nitroaniline	ND	50	SW846 8270A	08/04-08/14/95	5216001
4-Nitroaniline	ND	50	SW846 8270A	08/04-08/14/95	5216001
Nitrobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Nitrophenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
4-Nitrophenol	ND	50	SW846 8270A	08/04-08/14/95	5216001
4-Nitroquinoline-1-oxide	ND	100	SW846 8270A	08/04-08/14/95	5216001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	74	(36 - 148)
2-Fluorobiphenyl	81	(38 - 106)
Terphenyl-d14	36	(10 - 169)
Phenol-d5	61	(15 - 126)
2-Fluorophenol	46	(17 - 106)
2,4,6-Tribromophenol	107	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW7D

WO #: C0FHP105
LAB #: A5H010101-004
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 11:00
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
N-Nitrosodi-n-butylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosodiethylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosodimethylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosodi-n-propylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosodiphenylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosomethylethylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosomorpholine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosopiperidine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosopyrrolidine	ND	10	SW846 8270A	08/04-08/14/95	5216001
5-Nitro-o-toluidine	ND	20	SW846 8270A	08/04-08/14/95	5216001
Pentachlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Pentachloroethane	ND	50	SW846 8270A	08/04-08/14/95	5216001
Pentachloronitrobenzene	ND	50	SW846 8270A	08/04-08/14/95	5216001
Pentachlorophenol	ND	50	SW846 8270A	08/04-08/14/95	5216001
Phenanthrene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Phenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
p-Phenylene diamine	ND	50	SW846 8270A	08/04-08/14/95	5216001
2-Picoline	ND	20	SW846 8270A	08/04-08/14/95	5216001
Pyrene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Pyridine	ND	10	SW846 8270A	08/04-08/14/95	5216001
Safrole	ND	10	SW846 8270A	08/04-08/14/95	5216001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	74	(36 - 148)
2-Fluorobiphenyl	81	(38 - 106)
Terphenyl-d14	36	(10 - 169)
Phenol-d5	61	(15 - 126)
2-Fluorophenol	46	(17 - 106)
2,4,6-Tribromophenol	107	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW7D

WO #: C0FHP105
LAB #: A5H010101-004
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 11:00
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,2,4,5-Tetrachlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
2,3,4,6-Tetrachlorophenol	ND	50	SW846 8270A	08/04-08/14/95	5216001
1,2,4-Trichlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
2,4,5-Trichlorophenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
2,4,6-Trichlorophenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
1,3,5-Trinitrobenzene	ND	50	SW846 8270A	08/04-08/14/95	5216001
Aramite	--		**SW846 8270A**	**08/04-08/14/95**	**5216001**

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	74	(36 - 148)
2-Fluorobiphenyl	81	(38 - 106)
Terphenyl-d14	36	(10 - 169)
Phenol-d5	61	(15 - 126)
2-Fluorophenol	46	(17 - 106)
2,4,6-Tribromophenol	107	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
– (NOT ANALYZED)

GERAGHTY & MILLER

FMGWMW7D

WO #: C0FHP105		**DATE SAMPLED:**	7/28/95
LAB #: A5H010101-004		**DATE RECEIVED:**	7/29/95
MATRIX: WATER		**DATE EXTRACTED:**	8/04/95
DILUTION FACTOR:	1.00	**DATE ANALYZED:**	8/14/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
Base/Neutrals and Acids (8270)			
Unknown	**16**	**ug/L**	**5216001**
Unknown	**7**	**ug/L**	**5216001**

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
Base/Neutrals and Acids (8270)			
None		**ug/L**	**5216001**

GERAGHTY & MILLER

FMGWMW59

WO #: C0FHQ105
LAB #: A5H010101-005
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 13:45
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
4-Aminobiphenyl	ND	50	SW846 8270A	08/04-08/14/95	521600
p-Dimethylaminoazobenzene	ND	10	SW846 8270A	08/04-08/14/95	521600
7,12-Dimethylbenz(a)-anthracene	ND	20	SW846 8270A	08/04-08/14/95	521600
Hexachloropropene	ND	100	SW846 8270A	08/04-08/14/95	521600
Phenacetin	ND	50	SW846 8270A	08/04-08/14/95	521600
Pronamide	ND	20	SW846 8270A	08/04-08/14/95	521600
a,a-Dimethylphenethylamine	ND	50	SW846 8270A	08/04-08/14/95	521600
Diallate	ND	10	SW846 8270A	08/04-08/14/95	521600
Chlorobenzilate	ND	10	SW846 8270A	08/04-08/14/95	521600
Acenaphthene	ND	10	SW846 8270A	08/04-08/14/95	521600
Acenaphthylene	ND	10	SW846 8270A	08/04-08/14/95	521600
Acetophenone	ND	10	SW846 8270A	08/04-08/14/95	521600
2-Acetylaminofluorene	ND	20	SW846 8270A	08/04-08/14/95	521600
Aniline	ND	10	SW846 8270A	08/04-08/14/95	521600
Anthracene	ND	10	SW846 8270A	08/04-08/14/95	521600
Benzo(a)anthracene	ND	10	SW846 8270A	08/04-08/14/95	521600
Benzo(b)fluoranthene	ND	10	SW846 8270A	08/04-08/14/95	521600
Benzo(k)fluoranthene	ND	10	SW846 8270A	08/04-08/14/95	521600
Benzo(ghi)perylene	ND	10	SW846 8270A	08/04-08/14/95	521600
Benzo(a)pyrene	ND	10	SW846 8270A	08/04-08/14/95	521600
Benzyl alcohol	ND	10	SW846 8270A	08/04-08/14/95	521600

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	91	(36 - 148)
2-Fluorobiphenyl	96	(38 - 106)
Terphenyl-d14	98	(10 - 169)
Phenol-d5	70	(15 - 126)
2-Fluorophenol	41	(17 - 106)
2,4,6-Tribromophenol	137	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW59

WO #: C0FHQ105
LAB #: A5H010101-005
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 13:45
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
bis(2-Chloroethoxy)methane	ND	10	SW846 8270A	08/04-08/14/95	5216001
bis(2-Chloroethyl) ether	ND	10	SW846 8270A	08/04-08/14/95	5216001
bis(2-Chloro-1-methylethyl) et	ND	10	SW846 8270A	08/04-08/14/95	5216001
bis(2-Ethylhexyl) phthalate	**0.73 J**	**10**	**SW846 8270A**	**08/04-08/14/95**	**5216001**
4-Bromophenyl phenyl ether	ND	10	SW846 8270A	08/04-08/14/95	5216001
Butyl benzyl phthalate	ND	10	SW846 8270A	08/04-08/14/95	5216001
4-Chloroaniline	ND	10	SW846 8270A	08/04-08/14/95	5216001
4-Chloro-3-methylphenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Chloronaphthalene	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Chlorophenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
4-Chlorophenyl phenyl ether	ND	10	SW846 8270A	08/04-08/14/95	5216001
Chrysene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Dibenz(a,h)anthracene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Dibenzofuran	ND	10	SW846 8270A	08/04-08/14/95	5216001
Di-n-butyl phthalate	ND	10	SW846 8270A	08/04-08/14/95	5216001
1,2-Dichlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
1,3-Dichlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
1,4-Dichlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
3,3'-Dichlorobenzidine	ND	10	SW846 8270A	08/04-08/14/95	5216001
2,4-Dichlorophenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
2,6-Dichlorophenol	ND	10	SW846 8270A	08/04-08/14/95	5216001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	91	(36 - 148)
2-Fluorobiphenyl	96	(38 - 106)
Terphenyl-d14	98	(10 - 169)
Phenol-d5	70	(15 - 126)
2-Fluorophenol	41	(17 - 106)
2,4,6-Tribromophenol	137	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
J ESTIMATED VALUE. (DETECTED), BUT BELOW QUANTITATION LIMIT.

GERAGHTY & MILLER

FMGWMW59

WO #: C0FHQ105
LAB #: A5H010101-005
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 13:45
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Diethyl phthalate	ND	10	SW846 8270A	08/04-08/14/95	5216001
3,3'-Dimethylbenzidine	ND	20	SW846 8270A	08/04-08/14/95	5216001
2,4-Dimethylphenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
Dimethyl phthalate	ND	10	SW846 8270A	08/04-08/14/95	5216001
Di-n-octyl phthalate	ND	10	SW846 8270A	08/04-08/14/95	5216001
1,3-Dinitrobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
4,6-Dinitro-2-methylphenol	ND	50	SW846 8270A	08/04-08/14/95	5216001
2,4-Dinitrophenol	ND	50	SW846 8270A	08/04-08/14/95	5216001
2,4-Dinitrotoluene	ND	10	SW846 8270A	08/04-08/14/95	5216001
2,6-Dinitrotoluene	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-sec-Butyl-4,6-dinitro-phenol	ND	20	SW846 8270A	08/04-08/14/95	5216001
Diphenylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
Ethyl methanesulfonate	ND	10	SW846 8270A	08/04-08/14/95	5216001
Fluoranthene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Fluorene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Hexachlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Hexachlorobutadiene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Hexachlorocyclopentadiene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Hexachloroethane	ND	10	SW846 8270A	08/04-08/14/95	5216001
Hexachlorophene	--		**SW846 8270A**	**08/04-08/14/95**	**5216001**
Indeno(1,2,3-cd)pyrene	ND	10	SW846 8270A	08/04-08/14/95	5216001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	91	(36 - 148)
2-Fluorobiphenyl	96	(38 - 106)
Terphenyl-d14	98	(10 - 169)
Phenol-d5	70	(15 - 126)
2-Fluorophenol	41	(17 - 106)
2,4,6-Tribromophenol	137	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
-- (NOT ANALYZED)

GERAGHTY & MILLER

FMGWMW59

WO #: C0FHQ105
LAB #: A5H010101-005
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 13:45
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Isophorone	ND	10	SW846 8270A	08/04-08/14/95	5216001
Isosafrole	ND	10	SW846 8270A	08/04-08/14/95	5216001
Methapyrilene	ND	100	SW846 8270A	08/04-08/14/95	5216001
o-Toluidine	ND	20	SW846 8270A	08/04-08/14/95	5216001
3-Methylcholanthrene	ND	100	SW846 8270A	08/04-08/14/95	5216001
Methyl methanesulfonate	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Methylnaphthalene	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Methylphenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
3-Methylphenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
4-Methylphenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
Naphthalene	ND	10	SW846 8270A	08/04-08/14/95	5216001
1,4-Naphthoquinone	ND	200	SW846 8270A	08/04-08/14/95	5216001
1-Naphthylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Naphthylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Nitroaniline	ND	50	SW846 8270A	08/04-08/14/95	5216001
3-Nitroaniline	ND	50	SW846 8270A	08/04-08/14/95	5216001
4-Nitroaniline	ND	50	SW846 8270A	08/04-08/14/95	5216001
Nitrobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
2-Nitrophenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
4-Nitrophenol	ND	50	SW846 8270A	08/04-08/14/95	5216001
4-Nitroquinoline-1-oxide	ND	100	SW846 8270A	08/04-08/14/95	5216001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	91	(36 - 148)
2-Fluorobiphenyl	96	(38 - 106)
Terphenyl-d14	98	(10 - 169)
Phenol-d5	70	(15 - 126)
2-Fluorophenol	41	(17 - 106)
2,4,6-Tribromophenol	137	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW59

WO #: C0FHQ105
LAB #: A5H010101-005
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 13:45
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
N-Nitrosodi-n-butylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosodiethylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosodimethylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosodi-n-propylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosodiphenylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosomethylethylamine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosomorpholine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosopiperidine	ND	10	SW846 8270A	08/04-08/14/95	5216001
N-Nitrosopyrrolidine	ND	10	SW846 8270A	08/04-08/14/95	5216001
5-Nitro-o-toluidine	ND	20	SW846 8270A	08/04-08/14/95	5216001
Pentachlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Pentachloroethane	ND	50	SW846 8270A	08/04-08/14/95	5216001
Pentachloronitrobenzene	ND	50	SW846 8270A	08/04-08/14/95	5216001
Pentachlorophenol	ND	50	SW846 8270A	08/04-08/14/95	5216001
Phenanthrene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Phenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
p-Phenylene diamine	ND	50	SW846 8270A	08/04-08/14/95	5216001
2-Picoline	ND	20	SW846 8270A	08/04-08/14/95	5216001
Pyrene	ND	10	SW846 8270A	08/04-08/14/95	5216001
Pyridine	ND	10	SW846 8270A	08/04-08/14/95	5216001
Safrole	ND	10	SW846 8270A	08/04-08/14/95	5216001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	91	(36 - 148)
2-Fluorobiphenyl	96	(38 - 106)
Terphenyl-d14	98	(10 - 169)
Phenol-d5	70	(15 - 126)
2-Fluorophenol	41	(17 - 106)
2,4,6-Tribromophenol	137	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW59

WO #: C0FHQ105
LAB #: A5H010101-005
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 13:45
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,2,4,5-Tetrachlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
2,3,4,6-Tetrachlorophenol	ND	50	SW846 8270A	08/04-08/14/95	5216001
1,2,4-Trichlorobenzene	ND	10	SW846 8270A	08/04-08/14/95	5216001
2,4,5-Trichlorophenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
2,4,6-Trichlorophenol	ND	10	SW846 8270A	08/04-08/14/95	5216001
1,3,5-Trinitrobenzene	ND	50	SW846 8270A	08/04-08/14/95	5216001
Aramite	--		**SW846 8270A**	**08/04-08/14/95**	**5216001**

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	91	(36 - 148)
2-Fluorobiphenyl	96	(38 - 106)
Terphenyl-d14	98	(10 - 169)
Phenol-d5	70	(15 - 126)
2-Fluorophenol	41	(17 - 106)
2,4,6-Tribromophenol	137	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
– (NOT ANALYZED)

GERAGHTY & MILLER

FMGWMW59

WO #: C0FHQ105		**DATE SAMPLED:**	7/28/95
LAB #: A5H010101-005		**DATE RECEIVED:**	7/29/95
MATRIX: WATER		**DATE EXTRACTED:**	8/04/95
DILUTION FACTOR:	1.00	**DATE ANALYZED:**	8/14/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
Base/Neutrals and Acids (8270)			
Unknown	**13**	**ug/L**	**5216001**
Unknown	**5**	**ug/L**	**5216001**

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
Base/Neutrals and Acids (8270)			
None		**ug/L**	**5216001**

ORGANOPHOSPHORUS PESTICIDE SAMPLE DATA

GERAGHTY & MILLER

FMGWMW7S

WO #: C0FHM102
LAB #: A5H010101-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

- GC Semi-Volatiles -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Dimethoate	ND	0.50	SW846 8141	08/03-08/09/95	521500
Disulfoton	ND	0.50	SW846 8141	08/03-08/09/95	521500
Famphur	ND	0.50	SW846 8141	08/03-08/09/95	521500
Methyl parathion	ND	0.50	SW846 8141	08/03-08/09/95	521500
Parathion	ND	0.50	SW846 8141	08/03-08/09/95	521500
Phorate	ND	0.50	SW846 8141	08/03-08/09/95	521500
Tetraethyldithiopyrophosphate	ND	0.50	SW846 8141	08/03-08/09/95	521500
O,O,O-Triethylphosphorothioate	ND	0.50	SW846 8141	08/03-08/09/95	521500

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Triphenyl phosphate	75	(38 - 146)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW59

WO #: C0FHQ102
LAB #: A5H010101-005
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 13:45
DATE RECEIVED: 7/29/95

- GC Semi-Volatiles - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Dimethoate	ND	0.50	SW846 8141	08/03-08/09/95	521500
Disulfoton	ND	0.50	SW846 8141	08/03-08/09/95	521500
Famphur	ND	0.50	SW846 8141	08/03-08/09/95	521500
Methyl parathion	ND	0.50	SW846 8141	08/03-08/09/95	521500
Parathion	ND	0.50	SW846 8141	08/03-08/09/95	521500
Phorate	ND	0.50	SW846 8141	08/03-08/09/95	521500
Tetraethyldithiopyrophosphate	ND	0.50	SW846 8141	08/03-08/09/95	521500
O,O,O-Triethylphosphorothioate	ND	0.50	SW846 8141	08/03-08/09/95	521500

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Triphenyl phosphate	50	(38 - 146)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW7D

WO #: C0FHP102
LAB #: A5H010101-004
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 11:00
DATE RECEIVED: 7/29/95

GC Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Dimethoate	ND	0.50	SW846 8141	08/03-08/09/95	52150
Disulfoton	ND	0.50	SW846 8141	08/03-08/09/95	52150
Famphur	ND	0.50	SW846 8141	08/03-08/09/95	52150
Methyl parathion	ND	0.50	SW846 8141	08/03-08/09/95	52150
Parathion	ND	0.50	SW846 8141	08/03-08/09/95	52150
Phorate	ND	0.50	SW846 8141	08/03-08/09/95	52150
Tetraethyldithiopyrophosphate	ND	0.50	SW846 8141	08/03-08/09/95	52150
O,O,O-Triethylphosphorothioate	ND	0.50	SW846 8141	08/03-08/09/95	52150

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Triphenyl phosphate	85	(38 - 146)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW58

WO #: C0FHN102
LAB #: A5H010101-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

- GC Semi-Volatiles -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Dimethoate	ND	0.50	SW846 8141	08/03-08/09/95	521500
Disulfoton	ND	0.50	SW846 8141	08/03-08/09/95	521500
Famphur	ND	0.50	SW846 8141	08/03-08/09/95	521500
Methyl parathion	ND	0.50	SW846 8141	08/03-08/09/95	521500
Parathion	ND	0.50	SW846 8141	08/03-08/09/95	521500
Phorate	ND	0.50	SW846 8141	08/03-08/09/95	521500
Tetraethyldithiopyrophosphate	ND	0.50	SW846 8141	08/03-08/09/95	521500
O,O,O-Triethylphosphorothioate	ND	0.50	SW846 8141	08/03-08/09/95	521500

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Triphenyl phosphate	72	(38 - 146)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

PESTICIDE/PCB SAMPLE DATA

GERAGHTY & MILLER

FMGWMW7S

WO #: C0FHM101
LAB #: A5H010101-002
MATRIX: WATER

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

- GC Semi-Volatiles -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Aldrin	ND	0.050	SW846 8080	08/03-08/18/95	521500
Aroclor 1016	ND	0.50	SW846 8080	08/03-08/18/95	521500
Aroclor 1221	ND	0.50	SW846 8080	08/03-08/18/95	521500
Aroclor 1232	ND	0.50	SW846 8080	08/03-08/18/95	521500
Aroclor 1242	ND	0.50	SW846 8080	08/03-08/18/95	521500
Aroclor 1248	ND	0.50	SW846 8080	08/03-08/18/95	521500
Aroclor 1254	ND	1.0	SW846 8080	08/03-08/18/95	521500
Aroclor 1260	ND	1.0	SW846 8080	08/03-08/18/95	521500
alpha-BHC	ND	0.050	SW846 8080	08/03-08/18/95	521500
beta-BHC	ND	0.050	SW846 8080	08/03-08/18/95	521500
delta-BHC	ND	0.050	SW846 8080	08/03-08/18/95	521500
gamma-BHC (Lindane)	ND	0.050	SW846 8080	08/03-08/18/95	521500
Chlordane (technical)	ND	0.50	SW846 8080	08/03-08/18/95	521500
4,4'-DDD	ND	0.10	SW846 8080	08/03-08/18/95	521500
4,4'-DDE	ND	0.10	SW846 8080	08/03-08/18/95	521500
4,4'-DDT	ND	0.10	SW846 8080	08/03-08/18/95	521500
Dieldrin	ND	0.10	SW846 8080	08/03-08/18/95	521500
Endosulfan I	ND	0.050	SW846 8080	08/03-08/18/95	521500
Endosulfan II	ND	0.10	SW846 8080	08/03-08/18/95	521500
Endosulfan sulfate	ND	0.10	SW846 8080	08/03-08/18/95	521500
Endrin	ND	0.10	SW846 8080	08/03-08/18/95	521500
Endrin aldehyde	ND	0.10	SW846 8080	08/03-08/18/95	521500
Heptachlor	ND	0.050	SW846 8080	08/03-08/18/95	521500

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Tetrachloro-m-xylene	122	(14 - 155)
Dibutylchlorendate	90	(10 - 155)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW7S

WO #: C0FHM101
LAB #: A5H010101-002
MATRIX: WATER

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

GC Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Heptachlor epoxide	ND	0.050	SW846 8080	08/03-08/18/95	521500
Isodrin	ND	0.050	SW846 8080	08/03-08/18/95	521500
Kepone	ND	1.0	SW846 8080	08/03-08/18/95	521500
Methoxychlor	ND	0.50	SW846 8080	08/03-08/18/95	521500
Toxaphene	ND	1.0	SW846 8080	08/03-08/18/95	521500

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Tetrachloro-m-xylene	122	(14 - 155)
Dibutylchlorendate	90	(10 - 155)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW58

WO #: C0FHN101
LAB #: A5H010101-003
MATRIX: WATER

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

GC Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Aldrin	ND	0.050	SW846 8080	08/03-08/18/95	52150(
Aroclor 1016	ND	0.50	SW846 8080	08/03-08/18/95	52150(
Aroclor 1221	ND	0.50	SW846 8080	08/03-08/18/95	52150(
Aroclor 1232	ND	0.50	SW846 8080	08/03-08/18/95	52150(
Aroclor 1242	ND	0.50	SW846 8080	08/03-08/18/95	52150(
Aroclor 1248	ND	0.50	SW846 8080	08/03-08/18/95	52150(
Aroclor 1254	ND	1.0	SW846 8080	08/03-08/18/95	52150(
Aroclor 1260	ND	1.0	SW846 8080	08/03-08/18/95	52150(
alpha-BHC	ND	0.050	SW846 8080	08/03-08/18/95	52150(
beta-BHC	ND	0.050	SW846 8080	08/03-08/18/95	52150(
delta-BHC	ND	0.050	SW846 8080	08/03-08/18/95	52150(
gamma-BHC (Lindane)	ND	0.050	SW846 8080	08/03-08/18/95	52150(
Chlordane (technical)	ND	0.50	SW846 8080	08/03-08/18/95	52150(
4,4'-DDD	ND	0.10	SW846 8080	08/03-08/18/95	52150(
4,4'-DDE	ND	0.10	SW846 8080	08/03-08/18/95	52150(
4,4'-DDT	ND	0.10	SW846 8080	08/03-08/18/95	52150(
Dieldrin	ND	0.10	SW846 8080	08/03-08/18/95	52150(
Endosulfan I	ND	0.050	SW846 8080	08/03-08/18/95	52150(
Endosulfan II	ND	0.10	SW846 8080	08/03-08/18/95	52150(
Endosulfan sulfate	ND	0.10	SW846 8080	08/03-08/18/95	52150(
Endrin	ND	0.10	SW846 8080	08/03-08/18/95	52150(
Endrin aldehyde	ND	0.10	SW846 8080	08/03-08/18/95	52150(
Heptachlor	ND	0.050	SW846 8080	08/03-08/18/95	52150(

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Tetrachloro-m-xylene	110	(14 - 155)
Dibutylchlorendate	87	(10 - 155)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW58

WO #: C0FHN101 | **DATE SAMPLED:** 7/28/95
LAB #: A5H010101-003 | **TIME SAMPLED:** 8:30
MATRIX: WATER | **DATE RECEIVED:** 7/29/95

GC Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Heptachlor epoxide	ND	0.050	SW846 8080	08/03-08/18/95	52150
Isodrin	ND	0.050	SW846 8080	08/03-08/18/95	52150
Kepone	ND	1.0	SW846 8080	08/03-08/18/95	52150
Methoxychlor	ND	0.50	SW846 8080	08/03-08/18/95	52150
Toxaphene	ND	1.0	SW846 8080	08/03-08/18/95	52150

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Tetrachloro-m-xylene	110	(14 - 155)
Dibutylchlorendate	87	(10 - 155)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW7D

WO #: C0FHP101 | **DATE SAMPLED:** 7/28/95
LAB #: A5H010101-004 | **TIME SAMPLED:** 11:00
MATRIX: WATER | **DATE RECEIVED:** 7/29/95

GC Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Aldrin	ND	0.050	SW846 8080	08/03-08/18/95	5215003
Aroclor 1016	ND	0.50	SW846 8080	08/03-08/18/95	5215003
Aroclor 1221	ND	0.50	SW846 8080	08/03-08/18/95	5215003
Aroclor 1232	ND	0.50	SW846 8080	08/03-08/18/95	5215003
Aroclor 1242	ND	0.50	SW846 8080	08/03-08/18/95	5215003
Aroclor 1248	ND	0.50	SW846 8080	08/03-08/18/95	5215003
Aroclor 1254	ND	1.0	SW846 8080	08/03-08/18/95	5215003
Aroclor 1260	ND	1.0	SW846 8080	08/03-08/18/95	5215003
alpha-BHC	ND	0.050	SW846 8080	08/03-08/18/95	5215003
beta-BHC	ND	0.050	SW846 8080	08/03-08/18/95	5215003
delta-BHC	ND	0.050	SW846 8080	08/03-08/18/95	5215003
gamma-BHC (Lindane)	ND	0.050	SW846 8080	08/03-08/18/95	5215003
Chlordane (technical)	ND	0.50	SW846 8080	08/03-08/18/95	5215003
4,4'-DDD	ND	0.10	SW846 8080	08/03-08/18/95	5215003
4,4'-DDE	ND	0.10	SW846 8080	08/03-08/18/95	5215003
4,4'-DDT	ND	0.10	SW846 8080	08/03-08/18/95	5215003
Dieldrin	ND	0.10	SW846 8080	08/03-08/18/95	5215003
Endosulfan I	ND	0.050	SW846 8080	08/03-08/18/95	5215003
Endosulfan II	ND	0.10	SW846 8080	08/03-08/18/95	5215003
Endosulfan sulfate	ND	0.10	SW846 8080	08/03-08/18/95	5215003
Endrin	ND	0.10	SW846 8080	08/03-08/18/95	5215003
Endrin aldehyde	ND	0.10	SW846 8080	08/03-08/18/95	5215003
Heptachlor	ND	0.050	SW846 8080	08/03-08/18/95	5215003

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Tetrachloro-m-xylene	102	(14 - 155)
Dibutylchlorendate	78	(10 - 155)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW7D

WO #: C0FHP101
LAB #: A5H010101-004
MATRIX: WATER

DATE SAMPLED: 7/28/95
TIME SAMPLED: 11:00
DATE RECEIVED: 7/29/95

GC Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Heptachlor epoxide	ND	0.050	SW846 8080	08/03-08/18/95	521500
Isodrin	ND	0.050	SW846 8080	08/03-08/18/95	521500
Kepone	ND	1.0	SW846 8080	08/03-08/18/95	521500
Methoxychlor	ND	0.50	SW846 8080	08/03-08/18/95	521500
Toxaphene	ND	1.0	SW846 8080	08/03-08/18/95	521500

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Tetrachloro-m-xylene	102	(14 - 155)
Dibutylchlorendate	78	(10 - 155)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW59

WO #: C0FHQ101
LAB #: A5H010101-005
MATRIX: WATER

DATE SAMPLED: 7/28/95
TIME SAMPLED: 13:45
DATE RECEIVED: 7/29/95

GC Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Aldrin	ND	0.050	SW846 8080	08/03-08/18/95	52150
Aroclor 1016	ND	0.50	SW846 8080	08/03-08/18/95	52150
Aroclor 1221	ND	0.50	SW846 8080	08/03-08/18/95	52150
Aroclor 1232	ND	0.50	SW846 8080	08/03-08/18/95	52150
Aroclor 1242	ND	0.50	SW846 8080	08/03-08/18/95	52150
Aroclor 1248	ND	0.50	SW846 8080	08/03-08/18/95	52150
Aroclor 1254	ND	1.0	SW846 8080	08/03-08/18/95	52150
Aroclor 1260	ND	1.0	SW846 8080	08/03-08/18/95	52150
alpha-BHC	ND	0.050	SW846 8080	08/03-08/18/95	52150
beta-BHC	ND	0.050	SW846 8080	08/03-08/18/95	52150
delta-BHC	ND	0.050	SW846 8080	08/03-08/18/95	52150
gamma-BHC (Lindane)	ND	0.050	SW846 8080	08/03-08/18/95	52150
Chlordane (technical)	ND	0.50	SW846 8080	08/03-08/18/95	52150
4,4'-DDD	ND	0.10	SW846 8080	08/03-08/18/95	52150
4,4'-DDE	ND	0.10	SW846 8080	08/03-08/18/95	52150
4,4'-DDT	ND	0.10	SW846 8080	08/03-08/18/95	52150
Dieldrin	ND	0.10	SW846 8080	08/03-08/18/95	52150
Endosulfan I	ND	0.050	SW846 8080	08/03-08/18/95	52150
Endosulfan II	ND	0.10	SW846 8080	08/03-08/18/95	52150
Endosulfan sulfate	ND	0.10	SW846 8080	08/03-08/18/95	52150
Endrin	ND	0.10	SW846 8080	08/03-08/18/95	52150
Endrin aldehyde	ND	0.10	SW846 8080	08/03-08/18/95	52150
Heptachlor	ND	0.050	SW846 8080	08/03-08/18/95	52150

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Tetrachloro-m-xylene	97	(14 - 155)
Dibutylchlorendate	86	(10 - 155)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW59

WO #: C0FHQ101
LAB #: A5H010101-005
MATRIX: WATER

DATE SAMPLED: 7/28/95
TIME SAMPLED: 13:45
DATE RECEIVED: 7/29/95

GC Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Heptachlor epoxide	ND	0.050	SW846 8080	08/03-08/18/95	521500
Isodrin	ND	0.050	SW846 8080	08/03-08/18/95	521500
Kepone	ND	1.0	SW846 8080	08/03-08/18/95	521500
Methoxychlor	ND	0.50	SW846 8080	08/03-08/18/95	521500
Toxaphene	ND	1.0	SW846 8080	08/03-08/18/95	521500

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Tetrachloro-m-xylene	97	(14 - 155)
Dibutylchlorendate	86	(10 - 155)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

HERBICIDE SAMPLE DATA

GERAGHTY & MILLER

FMGWMW7S

WO #: C0FHM103
LAB #: A5H010101-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

- GC Semi-Volatiles - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
2,4-D	ND	0.50	SW846 8150A	08/02-08/07/95	521407
2,4,5-TP (Silvex)	ND	0.20	SW846 8150A	08/02-08/07/95	521407
2,4,5-T	ND	0.10	SW846 8150A	08/02-08/07/95	521407
Dinoseb	ND	1.0	SW846 8150A	08/02-08/07/95	521407

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2,4-Dichlorophenylacetic acid	52	(50 - 150)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW58

WO #: C0FHN103
LAB #: A5H010101-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

- GC Semi-Volatiles - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
2,4-D	ND	0.50	SW846 8150A	08/02-08/07/95	52140
2,4,5-TP (Silvex)	ND	0.20	SW846 8150A	08/02-08/07/95	52140
2,4,5-T	ND	0.10	SW846 8150A	08/02-08/07/95	52140
Dinoseb	ND	1.0	SW846 8150A	08/02-08/07/95	52140

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2,4-Dichlorophenylacetic acid	63	(50 - 150)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW7D

WO #: C0FHP103
LAB #: A5H010101-004
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 11:00
DATE RECEIVED: 7/29/95

- GC Semi-Volatiles - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
2,4-D	ND	0.50	SW846 8150A	08/02-08/07/95	52140
2,4,5-TP (Silvex)	ND	0.20	SW846 8150A	08/02-08/07/95	52140
2,4,5-T	ND	0.10	SW846 8150A	08/02-08/07/95	52140
Dinoseb	ND	1.0	SW846 8150A	08/02-08/07/95	52140

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2,4-Dichlorophenylacetic acid	58	(50 - 150)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW59

WO #: C0FHQ103
LAB #: A5H010101-005
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/28/95
TIME SAMPLED: 13:45
DATE RECEIVED: 7/29/95

- GC Semi-Volatiles -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
2,4-D	ND	0.50	SW846 8150A	08/02-08/08/95	521407
2,4,5-TP (Silvex)	ND	0.20	SW846 8150A	08/02-08/08/95	521407
2,4,5-T	ND	0.10	SW846 8150A	08/02-08/08/95	521407
Dinoseb	ND	1.0	SW846 8150A	08/02-08/08/95	521407

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2,4-Dichlorophenylacetic acid	53	(50 - 150)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

INORGANIC SAMPLE DATA

GERAGHTY & MILLER

FMGWMW12S

WO #: C0FHK
LAB #: A5H010101-001
MATRIX: WATER

DATE SAMPLED: 7/27/95
TIME SAMPLED: 17:00
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - - REQUESTED METALS - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Silver	ND	10.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Barium	174	10.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Beryllium	ND	5.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Cadmium	ND	10.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Cobalt	ND	50.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Chromium	23.6	20.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Copper	198	10.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Iron	36,900	100	ug/L	SW846 6010A	8/14- 9/13/95	522601
Manganese	1,130	15.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Sodium	40,800	5,000	ug/L	SW846 6010A	8/14- 9/13/95	522601
Nickel	ND	40.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Antimony	ND	300	ug/L	SW846 6010A	8/14- 9/13/95	522601
Tin	ND	1,000	ug/L	SW846 6010A	8/14- 9/13/95	522601
Vanadium	ND	50.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Zinc	333	50.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Arsenic	31.6	10.0	ug/L	SW846 7060	8/14- 8/18/95	522601
Lead	106	6.0	ug/L	SW846 7421	8/14- 8/16/95	522601
Mercury	ND	0.20	ug/L	SW846 7470	8/14- 8/16/95	522601
Selenium	*ND W	10.0	ug/L	SW846 7740	8/14- 8/18/95	522601
Thallium	ND W	10.0	ug/L	SW846 7841	8/14- 8/17/95	522601

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
* ELEVATED DETECTION LIMIT DUE TO MATRIX INTERFERENCE.
W - POST DIGESTION SPIKE RECOVERY FELL BETWEEN 40 - 85% WHILE SAMPLE RESULT WAS LESS THAN ONE-HALF THE REPORTING LIMIT.

GERAGHTY & MILLER

FMGWMW12S

WO #: C0FHK
LAB #: A5H010101-001
MATRIX: WATER

DATE SAMPLED: 7/27/95
TIME SAMPLED: 17:00
DATE RECEIVED: 7/29/95

- REQUESTED METALS -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
- - DISSOLVED METALS - -						
Silver	ND	10.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Barium	109	10.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Beryllium	ND	5.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Cadmium	ND	10.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Cobalt	ND	50.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Chromium	ND	20.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Copper	ND	10.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Iron	155	100	ug/L	SW846 6010A	8/14- 9/13/95	52260
Manganese	270	15.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Sodium	32,800	5,000	ug/L	SW846 6010A	8/14- 9/13/95	52260
Nickel	ND	40.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Antimony	ND	300	ug/L	SW846 6010A	8/14- 9/13/95	52260
Tin	ND	1,000	ug/L	SW846 6010A	8/14- 9/13/95	52260
Vanadium	ND	50.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Zinc	66.2	50.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Arsenic	14.4	5.0	ug/L	SW846 7060	8/14- 8/18/95	52260
Lead	ND	3.0	ug/L	SW846 7421	8/14- 8/16/95	52260
Mercury	ND	0.20	ug/L	SW846 7470	8/14- 8/16/95	52260
Selenium	ND W	5.0	ug/L	SW846 7740	8/14- 8/18/95	52260
Thallium	ND W	10.0	ug/L	SW846 7841	8/14- 8/17/95	52260

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
W - POST DIGESTION SPIKE RECOVERY FELL BETWEEN 40 - 85% WHILE SAMPLE RESULT WAS LESS THAN ONE-HALF THE REPORTING LIMIT.

GERAGHTY & MILLER

FMGWMW7S

WO #: C0FHM
LAB #: A5H010101-002
MATRIX: WATER

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - REQUESTED METALS - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Silver	ND	10.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Barium	274	10.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Beryllium	ND	5.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Cadmium	ND	10.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Cobalt	ND	50.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Chromium	25.4	20.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Copper	8,700	10.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Iron	42,600	100	ug/L	SW846 6010A	8/14- 9/13/95	522601
Manganese	1,110	15.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Sodium	71,600	5,000	ug/L	SW846 6010A	8/14- 9/13/95	522601
Nickel	106	40.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Antimony	ND	300	ug/L	SW846 6010A	8/14- 9/13/95	522601
Tin	1,260	1,000	ug/L	SW846 6010A	8/14- 9/13/95	522601
Vanadium	ND	50.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Zinc	9,230	50.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Arsenic	113	10.0	ug/L	SW846 7060	8/14- 8/18/95	522601
Lead	9,460	600	ug/L	SW846 7421	8/14- 8/16/95	522601
Mercury	0.0038	0.00020	mg/L	SW846 7470	8/17- 8/18/95	522905
Selenium	ND W	5.0	ug/L	SW846 7740	8/14- 8/18/95	522601
Thallium	ND	10.0	ug/L	SW846 7841	8/14- 8/17/95	522601

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
W - POST DIGESTION SPIKE RECOVERY FELL BETWEEN 40 - 85% WHILE SAMPLE RESULT WAS LESS THAN ONE-HALF THE REPORTING LIMIT.

GERAGHTY & MILLER

FMGWMW7S

WO #: C0FHM
LAB #: A5H010101-002
MATRIX: WATER

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

- REQUESTED METALS -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
- - DISSOLVED METALS - -						
Silver	ND	10.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Barium	125	10.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Beryllium	ND	5.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Cadmium	ND	10.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Cobalt	ND	50.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Chromium	ND	20.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Copper	15.2	10.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Iron	846	100	ug/L	SW846 6010A	8/14- 9/13/95	52260
Manganese	607	15.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Sodium	69,100	5,000	ug/L	SW846 6010A	8/14- 9/13/95	52260
Nickel	ND	40.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Antimony	ND	300	ug/L	SW846 6010A	8/14- 9/13/95	52260
Tin	ND	1,000	ug/L	SW846 6010A	8/14- 9/13/95	52260
Vanadium	ND	50.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Zinc	87.7	50.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Arsenic	12.2	5.0	ug/L	SW846 7060	8/14- 8/18/95	52260
Lead	ND	3.0	ug/L	SW846 7421	8/14- 8/16/95	52260
Mercury	ND	0.00020	mg/L	SW846 7470	8/17- 8/18/95	52290
Selenium	ND W	5.0	ug/L	SW846 7740	8/14- 8/18/95	52260
Thallium	ND W	10.0	ug/L	SW846 7841	8/14- 8/17/95	52260

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
W - POST DIGESTION SPIKE RECOVERY FELL BETWEEN 40 - 85% WHILE SAMPLE RESULT WAS LESS THAN ONE-HALF THE REPORTING LIMIT.

GERAGHTY & MILLER

FMGWMW58

WO #: C0FHN
LAB #: A5H010101-003
MATRIX: WATER

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - - REQUESTED METALS - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Silver	ND	10.0	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Barium	237	10.0	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Beryllium	ND	5.0	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Cadmium	ND	10.0	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Cobalt	ND	50.0	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Chromium	ND	20.0	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Copper	8,930	10.0	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Iron	38,800	100	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Manganese	1,120	15.0	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Sodium	71,900	5,000	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Nickel	91.1	40.0	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Antimony	ND	300	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Tin	ND	1,000	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Vanadium	ND	50.0	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Zinc	9,090	50.0	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Arsenic	86.6	10.0	ug/L	SW846 7060	8/14- 8/18/95	5226019
Lead	9,320	600	ug/L	SW846 7421	8/14- 8/16/95	5226019
Mercury	0.0038	0.00020	mg/L	SW846 7470	8/17- 8/18/95	5229056
Selenium	ND W	5.0	ug/L	SW846 7740	8/14- 8/18/95	5226019
Thallium	ND W	10.0	ug/L	SW846 7841	8/14- 8/17/95	5226019

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
W - POST DIGESTION SPIKE RECOVERY FELL BETWEEN 40 - 85% WHILE SAMPLE RESULT WAS LESS THAN ONE-HALF THE REPORTING LIMIT.

GERAGHTY & MILLER

FMGWMW58

WO #: C0FHN
LAB #: A5H010101-003
MATRIX: WATER

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - REQUESTED METALS - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
- - DISSOLVED METALS - -						
Silver	ND	10.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Barium	135	10.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Beryllium	ND	5.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Cadmium	ND	10.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Cobalt	ND	50.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Chromium	ND	20.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Copper	18.9	10.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Iron	658	100	ug/L	SW846 6010A	8/14- 9/13/95	522601
Manganese	646	15.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Sodium	73,400	5,000	ug/L	SW846 6010A	8/14- 9/13/95	522601
Nickel	ND	40.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Antimony	ND	300	ug/L	SW846 6010A	8/14- 9/13/95	522601
Tin	ND	1,000	ug/L	SW846 6010A	8/14- 9/13/95	522601
Vanadium	ND	50.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Zinc	77.0	50.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Arsenic	11.0	5.0	ug/L	SW846 7060	8/14- 8/18/95	522601
Lead	ND	3.0	ug/L	SW846 7421	8/14- 8/16/95	522601
Mercury	ND	0.00020	mg/L	SW846 7470	8/17- 8/18/95	522905
Selenium	ND W	5.0	ug/L	SW846 7740	8/14- 8/18/95	522601
Thallium	ND W	10.0	ug/L	SW846 7841	8/14- 8/17/95	522601

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
W - POST DIGESTION SPIKE RECOVERY FELL BETWEEN 40 - 85% WHILE SAMPLE RESULT WAS LESS THAN ONE-HALF THE REPORTING LIMIT.

GERAGHTY & MILLER

FMGWMW7D

WO #: C0FHP
LAB #: A5H010101-004
MATRIX: WATER

DATE SAMPLED: 7/28/95
TIME SAMPLED: 11:00
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - REQUESTED METALS - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Silver	ND	10.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Barium	259	10.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Beryllium	ND	5.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Cadmium	ND	10.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Cobalt	ND	50.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Chromium	40.2	20.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Copper	413	10.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Iron	41,000	100	ug/L	SW846 6010A	8/14- 9/13/95	52260
Manganese	1,020	15.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Sodium	130,000	5,000	ug/L	SW846 6010A	8/14- 9/13/95	52260
Nickel	46.2	40.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Antimony	ND	300	ug/L	SW846 6010A	8/14- 9/13/95	52260
Tin	ND	1,000	ug/L	SW846 6010A	8/14- 9/13/95	52260
Vanadium	ND	50.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Zinc	475	50.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Arsenic	60.5	5.0	ug/L	SW846 7060	8/14- 8/18/95	52260
Lead	225	13.5	ug/L	SW846 7421	8/14- 8/16/95	52260
Mercury	ND	0.20	ug/L	SW846 7470	8/14- 8/16/95	52260
Selenium	ND W	5.0	ug/L	SW846 7740	8/14- 8/18/95	52260
Thallium	ND W	10.0	ug/L	SW846 7841	8/14- 8/17/95	52260

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
W - POST DIGESTION SPIKE RECOVERY FELL BETWEEN 40 - 85% WHILE SAMPLE RESULT WAS LESS THAN ONE-HALF THE REPORTING LIMIT.

GERAGHTY & MILLER

FMGWMW7D

WO #: C0FHP
LAB #: A5H010101-004
MATRIX: WATER

DATE SAMPLED: 7/28/95
TIME SAMPLED: 11:00
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - - REQUESTED METALS - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
- - DISSOLVED METALS - -						
Silver	ND	10.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Barium	172	10.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Beryllium	ND	5.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Cadmium	ND	10.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Cobalt	ND	50.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Chromium	ND	20.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Copper	ND	10.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Iron	ND	100	ug/L	SW846 6010A	8/14- 9/13/95	52260
Manganese	178	15.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Sodium	128,000	5,000	ug/L	SW846 6010A	8/14- 9/13/95	52260
Nickel	ND	40.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Antimony	ND	300	ug/L	SW846 6010A	8/14- 9/13/95	52260
Tin	ND	1,000	ug/L	SW846 6010A	8/14- 9/13/95	52260
Vanadium	ND	50.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Zinc	ND	50.0	ug/L	SW846 6010A	8/14- 9/13/95	52260
Arsenic	40.5	25.0	ug/L	SW846 7060	8/14- 8/21/95	52260
Lead	ND	3.0	ug/L	SW846 7421	8/14- 8/16/95	52260
Mercury	ND	0.20	ug/L	SW846 7470	8/14- 8/16/95	52260
Selenium	ND W	5.0	ug/L	SW846 7740	8/14- 8/18/95	52260
Thallium	ND W	10.0	ug/L	SW846 7841	8/14- 8/17/95	52260

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
W - POST DIGESTION SPIKE RECOVERY FELL BETWEEN 40 - 85% WHILE SAMPLE RESULT WAS LESS THAN ONE-HALF THE REPORTING LIMIT.

GERAGHTY & MILLER

FMGWMW59

WO #: C0FHQ
LAB #: A5H010101-005
MATRIX: WATER

DATE SAMPLED: 7/28/95
TIME SAMPLED: 13:45
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - REQUESTED METALS - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Silver	ND	10.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Barium	ND	10.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Beryllium	ND	5.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Cadmium	ND	10.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Cobalt	ND	50.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Chromium	ND	20.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Copper	ND	10.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Iron	ND	100	ug/L	SW846 6010A	8/14- 9/13/95	522601
Manganese	ND	15.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Sodium	ND	5,000	ug/L	SW846 6010A	8/14- 9/13/95	522601
Nickel	ND	40.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Antimony	ND	300	ug/L	SW846 6010A	8/14- 9/13/95	522601
Tin	ND	1,000	ug/L	SW846 6010A	8/14- 9/13/95	522601
Vanadium	ND	50.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Zinc	ND	50.0	ug/L	SW846 6010A	8/14- 9/13/95	522601
Arsenic	ND	5.0	ug/L	SW846 7060	8/14- 8/18/95	522601
Lead	ND	3.0	ug/L	SW846 7421	8/14- 8/16/95	522601
Mercury	ND	0.20	ug/L	SW846 7470	8/14- 8/16/95	522601
Selenium	ND	5.0	ug/L	SW846 7740	8/14- 8/18/95	522601
Thallium	ND	10.0	ug/L	SW846 7841	8/14- 8/17/95	522601

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW59

WO #: C0FHQ
LAB #: A5H010101-005
MATRIX: WATER

DATE SAMPLED: 7/28/95
TIME SAMPLED: 13:45
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - - REQUESTED METALS - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
- - DISSOLVED METALS - -						
Silver	ND	10.0	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Barium	ND	10.0	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Beryllium	ND	5.0	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Cadmium	ND	10.0	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Cobalt	ND	50.0	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Chromium	ND	20.0	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Copper	ND	10.0	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Iron	ND	100	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Manganese	ND	15.0	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Sodium	ND	5,000	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Nickel	ND	40.0	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Antimony	ND	300	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Tin	ND	1,000	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Vanadium	ND	50.0	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Zinc	ND	50.0	ug/L	SW846 6010A	8/14- 9/13/95	5226019
Arsenic	ND	5.0	ug/L	SW846 7060	8/14- 8/18/95	5226019
Lead	ND	3.0	ug/L	SW846 7421	8/14- 8/16/95	5226019
Mercury	ND	0.20	ug/L	SW846 7470	8/14- 8/16/95	5226019
Selenium	ND W	5.0	ug/L	SW846 7740	8/14- 8/18/95	5226019
Thallium	ND	10.0	ug/L	SW846 7841	8/14- 8/17/95	5226019

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
W - POST DIGESTION SPIKE RECOVERY FELL BETWEEN 40 - 85% WHILE SAMPLE RESULT WAS LESS THAN ONE-HALF THE REPORTING LIMIT.

WET CHEMISTRY SAMPLE DATA

GERAGHTY & MILLER

FMGWMW12S

WO #: C0FHK
LAB #: A5H010101-001
MATRIX: WATER

DATE SAMPLED: 7/27/95
TIME SAMPLED: 17:00
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - **INORGANIC ANALYTICAL REPORT** - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Fluoride (Potentiometric, Ion Selective Electrode)	**3,700**	**3,700**	**ug/L**	**MCAWW 340.2**	**8/14/95**	**52270**
Sulfide	ND	1,000	ug/L	MCAWW 376.1	8/02/95	52141
Total Cyanide	ND	5.0	ug/L	SW846 9012	8/08- 8/10/95	52200

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW7S

WO #: C0FHM
LAB #: A5H010101-002
MATRIX: WATER

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - **INORGANIC ANALYTICAL REPORT** - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Fluoride (Potentiometric, Ion Selective Electrode)	**7,600**	**2,500**	**ug/L**	**MCAWW 340.2**	**8/14/95**	**522702**
Sulfide	ND	1,000	ug/L	MCAWW 376.1	8/04/95	521902
Total Cyanide	ND	5.0	ug/L	SW846 9012	8/08- 8/09/95	522002

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW58

WO #: C0FHN
LAB #: A5H010101-003
MATRIX: WATER

DATE SAMPLED: 7/28/95
TIME SAMPLED: 8:30
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - INORGANIC ANALYTICAL REPORT - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Fluoride (Potentiometric, Ion Selective Electrode)	**8,300**	**2,400**	**ug/L**	**MCAWW 340.2**	**8/14/95**	**52270**
Sulfide	ND	1,000	ug/L	MCAWW 376.1	8/04/95	52190
Total Cyanide	ND	5.0	ug/L	SW846 9012	8/08- 8/09/95	52200

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW7D

WO #: C0FHP
LAB #: A5H010101-004
MATRIX: WATER

DATE SAMPLED: 7/28/95
TIME SAMPLED: 11:00
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - **INORGANIC ANALYTICAL REPORT** - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Fluoride (Potentiometric, Ion Selective Electrode)	**3,300**	**1,200**	**ug/L**	**MCAWW 340.2**	**8/14/95**	**52270**
Sulfide	ND	1,000	ug/L	MCAWW 376.1	8/04/95	52190
Total Cyanide	ND	5.0	ug/L	SW846 9012	8/08- 8/09/95	52200

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW59

WO #: C0FHQ
LAB #: A5H010101-005
MATRIX: WATER

DATE SAMPLED: 7/28/95
TIME SAMPLED: 13:45
DATE RECEIVED: 7/29/95

- - - - - - - - - - - - - - - - - - **INORGANIC ANALYTICAL REPORT** - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Fluoride (Potentiometric, Ion Selective Electrode)	ND	1,200	ug/L	MCAWW 340.2	8/15/95	522702
Sulfide	ND	1,000	ug/L	MCAWW 376.1	8/04/95	521902
Total Cyanide	ND	5.0	ug/L	SW846 9012	8/08- 8/09/95	522002

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

CHAIN-OF-CUSTODY

GERAGHTY & MILLER, INC. Environmental Services
a heidemij company

Laboratory Task Order No. _____

CHAIN-OF-CUSTODY RECORD

Project Number IN0144.109

Project Location Federated Metals - Hammond

Laboratory Quanterra

Sampler(s)/Affiliation Jamie Yater / G+M
Tim Northam / G+M

SAMPLE BOTTLE / CONTAINER DESCRIPTION

SAMPLE IDENTITY	Code	Date/Time Sampled	Lab ID	VOCs 8240 40 ml vial HCl	BNAs 8270 1L glass	T. Metals* (Fe, Mn, Na) HNO3 1L plas	Dissolved Metals* HNO3 1L plas	Sulfide 1L plas NaOH + Zinc Ac	CN 250 ml NaOH	Fluoride 250 ml	0.1µm Filter #1 60.349 Post Filter Weight	0.1µm Filter #2 60.369 Post Filter Weight	TOTAL
FMGWMW125		7/27/95 5P		3	2	1	1	1	1	1	1		11
FMGWMW75		7/28/95 830A		3	2	1	1	1	1	1	1	1	11
FMGWMW58		7/28/95 830A		3	2	1	1	1	1	1			10
FMGWMW7D		7/28/95 11A		3	2	1	1	1	1	1			10
FMGWMW59		7/28/95 145P		2 ~~3~~	2	1	1	1	1	1			~~10~~ 9
TRIP BLANK		7/28/95		1									1

Total No. of Bottles/Containers: 52 ~~53~~

Sample Code: L = Liquid; S = Solid; A = Air

Relinquished by: Jamie Yater	Organization: G+M	Date 7/28/95 Time 830P	Seal Intact? Yes No N/A
Received by:	Organization:	Date / / Time	
Relinquished by:	Organization:	Date / / Time	Seal Intact?
Received by: Jessica A. Rydon	Organization: Quanterra	Date 7/29/95 Time 11:00A	Yes No N/A

Special Instructions/Remarks:
*For Total and Dissolved Metals also analyze for Mn, Na, Fe

Delivery Method: ☐ In Person ☑ Common Carrier ☐ Lab Courier ☐ Other

GER/ TY & MII INC. Environm. Services
a heidemij company

Laboratory Task Order No. _____

CHAIN-OF-CUSTODY RECORD

Page 2 of 2

Project Number 1N0144.109

Project Location Fed. Metals - Hammond

Laboratory _____

Sampler(s)/Affiliation _____

SAMPLE IDENTITY	Code	Date/Time Sampled	Lab ID	Pest/PCB 8080 1 L glass	O-P-Pest 8140 1L glass	Herbs 8150	0.1um Filter #3 60.424 Post Filter Weight						TOTAL
FMGWMW75		7/20/95 830A		2	2	2							6
FMGWMW58		7/28/95 830A		2	2	2							6
FMGWMW7D		7/28/95 11A		2	2	2	1						7
FMGWMW59		7/28/95		2	2	2							6
												77 total	

Total No. of Bottles/Containers 25

Sample Code: L = Liquid; S = Solid; A = Air

Relinquished by: Jamie Yater	Organization: HAM	Date 7/28/95	Time 830P	Seal Intact? Yes No N/A
Received by:	Organization:	Date / /	Time	
Relinquished by:	Organization:	Date / /	Time	Seal Intact? Yes No N/A
Received by: Jessica M. Taylor	Organization: Quanterra	Date 7/29/95	Time 11:00A	

Special Instructions/Remarks: _____

170

7/8-95
(500)

Quanterra
Environmental Services

Quanterra Incorporated
4101 Shuffel Drive, NW
North Canton, Ohio 44720

216 497-9396 Telephone
216 497-0772 Fax

RECEIVED
OCT 4 1995
GERAGHTY & MILLER, INC.
INDIANAPOLIS, INDIANA

ANALYTICAL REPORT

PROJECT NO. IN0144.109

FEDERATED METALS, HAMMOND

TIM NORTHAM

GERAGHTY & MILLER

QUANTERRA INCORPORATED

Thomas M. Himes
Project Manager

October 3, 1995

TABLE OF CONTENTS

Case Narrative

Sample Summary

Method Reference

GC/MS Volatile QC Summary Data

GC/MS Volatile Sample Data

GC/MS Volatile Standard Data

GC/MS Volatile Raw QC Data

GC/MS Semivolatile QC Summary Data

GC/MS Semivolatile Sample Data

GC/MS Semivolatile Standard Data

GC/MS Semivolatile Raw QC Data

Inorganic QC Summary Data

Inorganic Sample Data

Inorganic Calibration Data

Inorganic Instrument Print-Out

Inorganic Prep Logs

Wet Chemistry QC Data

Wet Chemistry Sample Data

Wet Chemistry Log Sheets

TABLE OF CONTENTS (CONT'D)

Organic Instrument Log Sheets

Internal Chain-of-Custody

Chain-of-Custody

CASE NARRATIVE

CASE NARRATIVE

The following report contains the analytical results for two water samples and one quality control sample submitted to Quanterra-North Canton by Geraghty & Miller from the Federated Metals, Hammond, IN Site. The samples were received July 22, 1995, according to documented sample acceptance procedures.

Quanterra-North Canton utilizes only USEPA approved methods and instrumentation in all analytical work. The samples presented in this report were analyzed for the parameters listed on the method reference page in accordance with the methods indicated.

The results included in this report have been reviewed for compliance with the laboratory QA/QC plan. All data have been found to be compliant with the exception of those items noted.

The analyses for Dissolved Metals were cancelled at the request of the client.

SAMPLE SUMMARY

SAMPLE SUMMARY

The analytical results of the samples listed below are presented on the following pages.

WO #	LABORATORY ID	SAMPLE IDENTIFICATION	DATE/TIME SAMPLEI	
C0C01	A5G220128-001	FMGWMW10S	7/21/95	9:30
C0C02	A5G220128-002	FMGWMW10D	7/21/95	13:00
C0C03	A5G220128-003	TRIP	7/21/95	

METHOD REFERENCE

ANALYTICAL METHODS SUMMARY

A5G220128

Parameters	Methods
Volatile Organics by GC/MS	SW846 8240A
Semivolatile Organic Compounds by GC/MS	SW846 8270A
Fluoride (Potentiometric, Ion Selective Electrode)	MCAWW 340.2
Sulfide	MCAWW 376.1
Inductively Coupled Plasma (ICP) Metals	SW846 6010A
Arsenic (AA, Furnace Technique)	SW846 7060
Lead (AA, Furnace Technique)	SW846 7421
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470
Selenium (AA, Furnace Technique)	SW846 7740
Thallium (AA, Furnace Technique)	SW846 7841
Total Cyanide	SW846 9012

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and Final Update I (7/92).

GC/MS SEMIVOLATILE SAMPLE DATA

GERAGHTY & MILLER

FMGWMW10S

WO #: C0C01102 | **DATE SAMPLED:** 7/21/95
LAB #: A5G220128-001 | **TIME SAMPLED:** 9:30
MATRIX: WATER | **DATE RECEIVED:** 7/22/95
DILUTION FACTOR: 1.00

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Acenaphthene	ND	10	SW846 8270A	07/26-08/02/95	52070
Acenaphthylene	ND	10	SW846 8270A	07/26-08/02/95	52070
Acetophenone	ND	10	SW846 8270A	07/26-08/02/95	52070
2-Acetylaminofluorene	ND	20	SW846 8270A	07/26-08/02/95	52070
4-Aminobiphenyl	ND	50	SW846 8270A	07/26-08/02/95	52070
Aniline	ND	10	SW846 8270A	07/26-08/02/95	52070
Anthracene	ND	10	SW846 8270A	07/26-08/02/95	52070
Aramite	--		**SW846 8270A**	**07/26-08/02/95**	**52070**
Benzo(a)anthracene	ND	10	SW846 8270A	07/26-08/02/95	52070
Benzo(a)pyrene	ND	10	SW846 8270A	07/26-08/02/95	52070
Benzo(b)fluoranthene	ND	10	SW846 8270A	07/26-08/02/95	52070
Benzo(ghi)perylene	ND	10	SW846 8270A	07/26-08/02/95	52070
Benzo(k)fluoranthene	ND	10	SW846 8270A	07/26-08/02/95	52070
Benzyl alcohol	ND	10	SW846 8270A	07/26-08/02/95	52070
4-Bromophenyl phenyl ether	ND	10	SW846 8270A	07/26-08/02/95	52070
Butyl benzyl phthalate	ND	10	SW846 8270A	07/26-08/02/95	52070
2-sec-Butyl-4,6-dinitro-phenol	ND	20	SW846 8270A	07/26-08/02/95	52070
4-Chloroaniline	ND	10	SW846 8270A	07/26-08/02/95	52070
bis(2-Chloroethoxy)methane	ND	10	SW846 8270A	07/26-08/02/95	52070
bis(2-Chloroethyl) ether	ND	10	SW846 8270A	07/26-08/02/95	52070
bis(2-Chloro-1-methylethyl) et	ND	10	SW846 8270A	07/26-08/02/95	52070

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	77	(36 - 148)
2-Fluorobiphenyl	76	(38 - 106)
Terphenyl-d14	46	(10 - 169)
Phenol-d5	56	(15 - 126)
2-Fluorophenol	38	(17 - 106)
2,4,6-Tribromophenol	92	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
\- (NOT ANALYZED)

GERAGHTY & MILLER

FMGWMW10S

WO #: C0C01102
LAB #: A5G220128-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/21/95
TIME SAMPLED: 9:30
DATE RECEIVED: 7/22/95

- - - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
4-Chloro-3-methylphenol	ND	10	SW846 8270A	07/26-08/02/95	520705
2-Chloronaphthalene	ND	10	SW846 8270A	07/26-08/02/95	520705
2-Chlorophenol	ND	10	SW846 8270A	07/26-08/02/95	520705
4-Chlorophenyl phenyl ether	ND	10	SW846 8270A	07/26-08/02/95	520705
Chrysene	ND	10	SW846 8270A	07/26-08/02/95	520705
Dibenz(a,h)anthracene	ND	10	SW846 8270A	07/26-08/02/95	520705
Dibenzofuran	ND	10	SW846 8270A	07/26-08/02/95	520705
Di-n-butyl phthalate	ND	10	SW846 8270A	07/26-08/02/95	520705
1,2-Dichlorobenzene	ND	10	SW846 8270A	07/26-08/02/95	520705
1,3-Dichlorobenzene	ND	10	SW846 8270A	07/26-08/02/95	520705
1,4-Dichlorobenzene	ND	10	SW846 8270A	07/26-08/02/95	520705
3,3'-Dichlorobenzidine	ND	10	SW846 8270A	07/26-08/02/95	520705
2,4-Dichlorophenol	ND	10	SW846 8270A	07/26-08/02/95	520705
2,6-Dichlorophenol	ND	10	SW846 8270A	07/26-08/02/95	520705
Diethyl phthalate	ND	10	SW846 8270A	07/26-08/02/95	520705
p-Dimethylaminoazobenzene	ND	10	SW846 8270A	07/26-08/02/95	520705
7,12-Dimethylbenz(a)-anthracene	ND	20	SW846 8270A	07/26-08/02/95	520705
3,3'-Dimethylbenzidine	ND	20	SW846 8270A	07/26-08/02/95	520705
a,a-Dimethylphenethylamine	ND	50	SW846 8270A	07/26-08/02/95	520705
2,4-Dimethylphenol	ND	10	SW846 8270A	07/26-08/02/95	520705
Dimethyl phthalate	ND	10	SW846 8270A	07/26-08/02/95	520705

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	77	(36 - 148)
2-Fluorobiphenyl	76	(38 - 106)
Terphenyl-d14	46	(10 - 169)
Phenol-d5	56	(15 - 126)
2-Fluorophenol	38	(17 - 106)
2,4,6-Tribromophenol	92	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW10S

WO #: C0C01102
LAB #: A5G220128-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/21/95
TIME SAMPLED: 9:30
DATE RECEIVED: 7/22/95

- - - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,3-Dinitrobenzene	ND	10	SW846 8270A	07/26-08/02/95	520705
4,6-Dinitro-2-methylphenol	ND	50	SW846 8270A	07/26-08/02/95	520705
2,4-Dinitrophenol	ND	50	SW846 8270A	07/26-08/02/95	520705
2,4-Dinitrotoluene	ND	10	SW846 8270A	07/26-08/02/95	520705
2,6-Dinitrotoluene	ND	10	SW846 8270A	07/26-08/02/95	520705
Di-n-octyl phthalate	ND	10	SW846 8270A	07/26-08/02/95	520705
Diphenylamine	ND	10	SW846 8270A	07/26-08/02/95	520705
bis(2-Ethylhexyl) phthalate	ND	10	SW846 8270A	07/26-08/02/95	520705
Ethyl methanesulfonate	ND	10	SW846 8270A	07/26-08/02/95	520705
Fluoranthene	ND	10	SW846 8270A	07/26-08/02/95	520705
Fluorene	ND	10	SW846 8270A	07/26-08/02/95	520705
Hexachlorobenzene	ND	10	SW846 8270A	07/26-08/02/95	520705
Hexachlorobutadiene	ND	10	SW846 8270A	07/26-08/02/95	520705
Hexachlorocyclopentadiene	ND	10	SW846 8270A	07/26-08/02/95	520705
Hexachloroethane	ND	10	SW846 8270A	07/26-08/02/95	520705
Hexachlorophene	--	-	**SW846 8270A**	**07/26-08/02/95**	**520705**
Hexachloropropene	ND	100	SW846 8270A	07/26-08/02/95	520705
Indeno(1,2,3-cd)pyrene	ND	10	SW846 8270A	07/26-08/02/95	520705
Isophorone	ND	10	SW846 8270A	07/26-08/02/95	520705
Isosafrole	ND	10	SW846 8270A	07/26-08/02/95	520705
Methapyrilene	ND	100	SW846 8270A	07/26-08/02/95	520705

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	77	(36 - 148)
2-Fluorobiphenyl	76	(38 - 106)
Terphenyl-d14	46	(10 - 169)
Phenol-d5	56	(15 - 126)
2-Fluorophenol	38	(17 - 106)
2,4,6-Tribromophenol	92	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
– (NOT ANALYZED)

GERAGHTY & MILLER

FMGWMW10S

WO #: C0C01102
LAB #: A5G220128-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/21/95
TIME SAMPLED: 9:30
DATE RECEIVED: 7/22/95

- - - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
3-Methylcholanthrene	ND	100	SW846 8270A	07/26-08/02/95	520705
Methyl methanesulfonate	ND	10	SW846 8270A	07/26-08/02/95	520705
2-Methylnaphthalene	ND	10	SW846 8270A	07/26-08/02/95	520705
2-Methylphenol	ND	10	SW846 8270A	07/26-08/02/95	520705
3-Methylphenol	ND	10	SW846 8270A	07/26-08/02/95	520705
4-Methylphenol	ND	10	SW846 8270A	07/26-08/02/95	520705
Naphthalene	ND	10	SW846 8270A	07/26-08/02/95	520705
1,4-Naphthoquinone	ND	200	SW846 8270A	07/26-08/02/95	520705
1-Naphthylamine	ND	10	SW846 8270A	07/26-08/02/95	520705
2-Naphthylamine	ND	10	SW846 8270A	07/26-08/02/95	520705
2-Nitroaniline	ND	50	SW846 8270A	07/26-08/02/95	520705
3-Nitroaniline	ND	50	SW846 8270A	07/26-08/02/95	520705
4-Nitroaniline	ND	50	SW846 8270A	07/26-08/02/95	520705
Nitrobenzene	ND	10	SW846 8270A	07/26-08/02/95	520705
2-Nitrophenol	ND	10	SW846 8270A	07/26-08/02/95	520705
4-Nitrophenol	ND	50	SW846 8270A	07/26-08/02/95	520705
4-Nitroquinoline-1-oxide	ND	100	SW846 8270A	07/26-08/02/95	520705
N-Nitrosodi-n-butylamine	ND	10	SW846 8270A	07/26-08/02/95	520705
N-Nitrosodiethylamine	ND	10	SW846 8270A	07/26-08/02/95	520705
N-Nitrosodimethylamine	ND	10	SW846 8270A	07/26-08/02/95	520705
N-Nitrosodiphenylamine	ND	10	SW846 8270A	07/26-08/02/95	520705

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	77	(36 - 148)
2-Fluorobiphenyl	76	(38 - 106)
Terphenyl-d14	46	(10 - 169)
Phenol-d5	56	(15 - 126)
2-Fluorophenol	38	(17 - 106)
2,4,6-Tribromophenol	92	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW10S

WO #: C0C01102
LAB #: A5G220128-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/21/95
TIME SAMPLED: 9:30
DATE RECEIVED: 7/22/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
N-Nitrosodi-n-propylamine	ND	10	SW846 8270A	07/26-08/02/95	520705
N-Nitrosomethylethylamine	ND	10	SW846 8270A	07/26-08/02/95	520705
N-Nitrosomorpholine	ND	10	SW846 8270A	07/26-08/02/95	520705
N-Nitrosopiperidine	ND	10	SW846 8270A	07/26-08/02/95	520705
N-Nitrosopyrrolidine	ND	10	SW846 8270A	07/26-08/02/95	520705
5-Nitro-o-toluidine	ND	20	SW846 8270A	07/26-08/02/95	520705
Pentachlorobenzene	ND	10	SW846 8270A	07/26-08/02/95	520705
Pentachloroethane	ND	50	SW846 8270A	07/26-08/02/95	520705
Pentachloronitrobenzene	ND	50	SW846 8270A	07/26-08/02/95	520705
Pentachlorophenol	ND	50	SW846 8270A	07/26-08/02/95	520705
Phenacetin	ND	50	SW846 8270A	07/26-08/02/95	520705
Phenanthrene	ND	10	SW846 8270A	07/26-08/02/95	520705
Phenol	ND	10	SW846 8270A	07/26-08/02/95	520705
p-Phenylene diamine	ND	50	SW846 8270A	07/26-08/02/95	520705
2-Picoline	ND	20	SW846 8270A	07/26-08/02/95	520705
Pronamide	ND	20	SW846 8270A	07/26-08/02/95	520705
Pyrene	ND	10	SW846 8270A	07/26-08/02/95	520705
Pyridine	ND	10	SW846 8270A	07/26-08/02/95	520705
Safrole	ND	10	SW846 8270A	07/26-08/02/95	520705
1,2,4,5-Tetrachlorobenzene	ND	10	SW846 8270A	07/26-08/02/95	520705
2,3,4,6-Tetrachlorophenol	ND	50	SW846 8270A	07/26-08/02/95	520705

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	77	(36 - 148)
2-Fluorobiphenyl	76	(38 - 106)
Terphenyl-d14	46	(10 - 169)
Phenol-d5	56	(15 - 126)
2-Fluorophenol	38	(17 - 106)
2,4,6-Tribromophenol	92	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW10S

WO #: C0C01102
LAB #: A5G220128-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/21/95
TIME SAMPLED: 9:30
DATE RECEIVED: 7/22/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
o-Toluidine	ND	20	SW846 8270A	07/26-08/02/95	520705
1,2,4-Trichlorobenzene	ND	10	SW846 8270A	07/26-08/02/95	520705
2,4,5-Trichlorophenol	ND	10	SW846 8270A	07/26-08/02/95	520705
2,4,6-Trichlorophenol	ND	10	SW846 8270A	07/26-08/02/95	520705
1,3,5-Trinitrobenzene	ND	50	SW846 8270A	07/26-08/02/95	520705
Diallate	ND	20	SW846 8270A	07/26-08/02/95	520705
Chlorobenzilate	ND	10	SW846 8270A	07/26-08/02/95	520705

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	77	(36 - 148)
2-Fluorobiphenyl	76	(38 - 106)
Terphenyl-d14	46	(10 - 169)
Phenol-d5	56	(15 - 126)
2-Fluorophenol	38	(17 - 106)
2,4,6-Tribromophenol	92	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW10S

WO #: C0C01102		**DATE SAMPLED:**	7/21/95
LAB #: A5G220128-001		**DATE RECEIVED:**	7/22/95
MATRIX: WATER		**DATE EXTRACTED:**	7/26/95
DILUTION FACTOR:	1.00	**DATE ANALYZED:**	8/02/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
Base/Neutrals and Acids (8270)			
Unknown	**2**	**ug/L**	**5207053**
Ethanol, 2-(2-ethoxyethox	**4**	**ug/L**	**5207053**

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
Base/Neutrals and Acids (8270)			
None		**ug/L**	**5207053**

GERAGHTY & MILLER

FMGWMW10D

WO #: C0C02102 | **DATE SAMPLED:** 7/21/95
LAB #: A5G220128-002 | **TIME SAMPLED:** 13:00
MATRIX: WATER | **DATE RECEIVED:** 7/22/95
DILUTION FACTOR: 1.00

GC/MS Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Acenaphthene	ND	10	SW846 8270A	07/26-08/02/95	520705
Acenaphthylene	ND	10	SW846 8270A	07/26-08/02/95	520705
Acetophenone	ND	10	SW846 8270A	07/26-08/02/95	520705
2-Acetylaminofluorene	ND	20	SW846 8270A	07/26-08/02/95	520705
4-Aminobiphenyl	ND	50	SW846 8270A	07/26-08/02/95	520705
Aniline	ND	10	SW846 8270A	07/26-08/02/95	520705
Anthracene	ND	10	SW846 8270A	07/26-08/02/95	520705
Aramite	--		**SW846 8270A**	**07/26-08/02/95**	**520705**
Benzo(a)anthracene	ND	10	SW846 8270A	07/26-08/02/95	520705
Benzo(a)pyrene	ND	10	SW846 8270A	07/26-08/02/95	520705
Benzo(b)fluoranthene	ND	10	SW846 8270A	07/26-08/02/95	520705
Benzo(ghi)perylene	ND	10	SW846 8270A	07/26-08/02/95	520705
Benzo(k)fluoranthene	ND	10	SW846 8270A	07/26-08/02/95	520705
Benzyl alcohol	ND	10	SW846 8270A	07/26-08/02/95	520705
4-Bromophenyl phenyl ether	ND	10	SW846 8270A	07/26-08/02/95	520705
Butyl benzyl phthalate	ND	10	SW846 8270A	07/26-08/02/95	520705
2-sec-Butyl-4,6-dinitro-phenol	ND	20	SW846 8270A	07/26-08/02/95	520705
4-Chloroaniline	ND	10	SW846 8270A	07/26-08/02/95	520705
bis(2-Chloroethoxy)methane	ND	10	SW846 8270A	07/26-08/02/95	520705
bis(2-Chloroethyl) ether	ND	10	SW846 8270A	07/26-08/02/95	520705
bis(2-Chloro-1-methylethyl) et	ND	10	SW846 8270A	07/26-08/02/95	520705

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	74	(36 - 148)
2-Fluorobiphenyl	71	(38 - 106)
Terphenyl-d14	36	(10 - 169)
Phenol-d5	54	(15 - 126)
2-Fluorophenol	44	(17 - 106)
2,4,6-Tribromophenol	90	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
-- (NOT ANALYZED)

GERAGHTY & MILLER

FMGWMW10D

WO #: C0C02102
LAB #: A5G220128-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/21/95
TIME SAMPLED: 13:00
DATE RECEIVED: 7/22/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
4-Chloro-3-methylphenol	ND	10	SW846 8270A	07/26-08/02/95	520705
2-Chloronaphthalene	ND	10	SW846 8270A	07/26-08/02/95	520705
2-Chlorophenol	ND	10	SW846 8270A	07/26-08/02/95	520705
4-Chlorophenyl phenyl ether	ND	10	SW846 8270A	07/26-08/02/95	520705
Chrysene	ND	10	SW846 8270A	07/26-08/02/95	520705
Dibenz(a,h)anthracene	ND	10	SW846 8270A	07/26-08/02/95	520705
Dibenzofuran	ND	10	SW846 8270A	07/26-08/02/95	520705
Di-n-butyl phthalate	ND	10	SW846 8270A	07/26-08/02/95	520705
1,2-Dichlorobenzene	ND	10	SW846 8270A	07/26-08/02/95	520705
1,3-Dichlorobenzene	ND	10	SW846 8270A	07/26-08/02/95	520705
1,4-Dichlorobenzene	ND	10	SW846 8270A	07/26-08/02/95	520705
3,3'-Dichlorobenzidine	ND	10	SW846 8270A	07/26-08/02/95	520705
2,4-Dichlorophenol	ND	10	SW846 8270A	07/26-08/02/95	520705
2,6-Dichlorophenol	ND	10	SW846 8270A	07/26-08/02/95	520705
Diethyl phthalate	ND	10	SW846 8270A	07/26-08/02/95	520705
p-Dimethylaminoazobenzene	ND	10	SW846 8270A	07/26-08/02/95	520705
7,12-Dimethylbenz(a)-anthracene	ND	20	SW846 8270A	07/26-08/02/95	520705
3,3'-Dimethylbenzidine	ND	20	SW846 8270A	07/26-08/02/95	520705
a,a-Dimethylphenethylamine	ND	50	SW846 8270A	07/26-08/02/95	520705
2,4-Dimethylphenol	ND	10	SW846 8270A	07/26-08/02/95	520705
Dimethyl phthalate	ND	10	SW846 8270A	07/26-08/02/95	520705

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	74	(36 - 148)
2-Fluorobiphenyl	71	(38 - 106)
Terphenyl-d14	36	(10 - 169)
Phenol-d5	54	(15 - 126)
2-Fluorophenol	44	(17 - 106)
2,4,6-Tribromophenol	90	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW10D

WO #: C0C02102
LAB #: A5G220128-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/21/95
TIME SAMPLED: 13:00
DATE RECEIVED: 7/22/95

- - - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,3-Dinitrobenzene	ND	10	SW846 8270A	07/26-08/02/95	520705
4,6-Dinitro-2-methylphenol	ND	50	SW846 8270A	07/26-08/02/95	520705
2,4-Dinitrophenol	ND	50	SW846 8270A	07/26-08/02/95	520705
2,4-Dinitrotoluene	ND	10	SW846 8270A	07/26-08/02/95	520705
2,6-Dinitrotoluene	ND	10	SW846 8270A	07/26-08/02/95	520705
Di-n-octyl phthalate	ND	10	SW846 8270A	07/26-08/02/95	520705
Diphenylamine	ND	10	SW846 8270A	07/26-08/02/95	520705
bis(2-Ethylhexyl) phthalate	ND	10	SW846 8270A	07/26-08/02/95	520705
Ethyl methanesulfonate	ND	10	SW846 8270A	07/26-08/02/95	520705
Fluoranthene	ND	10	SW846 8270A	07/26-08/02/95	520705
Fluorene	ND	10	SW846 8270A	07/26-08/02/95	520705
Hexachlorobenzene	ND	10	SW846 8270A	07/26-08/02/95	520705
Hexachlorobutadiene	ND	10	SW846 8270A	07/26-08/02/95	520705
Hexachlorocyclopentadiene	ND	10	SW846 8270A	07/26-08/02/95	520705
Hexachloroethane	ND	10	SW846 8270A	07/26-08/02/95	520705
Hexachlorophene	--	-	**SW846 8270A**	**07/26-08/02/95**	**520705**
Hexachloropropene	ND	100	SW846 8270A	07/26-08/02/95	520705
Indeno(1,2,3-cd)pyrene	ND	10	SW846 8270A	07/26-08/02/95	520705
Isophorone	ND	10	SW846 8270A	07/26-08/02/95	520705
Isosafrole	ND	10	SW846 8270A	07/26-08/02/95	520705
Methapyrilene	ND	100	SW846 8270A	07/26-08/02/95	520705

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	74	(36 - 148)
2-Fluorobiphenyl	71	(38 - 106)
Terphenyl-d14	36	(10 - 169)
Phenol-d5	54	(15 - 126)
2-Fluorophenol	44	(17 - 106)
2,4,6-Tribromophenol	90	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
-- (NOT ANALYZED)

GERAGHTY & MILLER

FMGWMW10D

WO #: C0C02102
LAB #: A5G220128-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/21/95
TIME SAMPLED: 13:00
DATE RECEIVED: 7/22/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
3-Methylcholanthrene	ND	100	SW846 8270A	07/26-08/02/95	520705
Methyl methanesulfonate	ND	10	SW846 8270A	07/26-08/02/95	520705
2-Methylnaphthalene	ND	10	SW846 8270A	07/26-08/02/95	520705
2-Methylphenol	ND	10	SW846 8270A	07/26-08/02/95	520705
3-Methylphenol	ND	10	SW846 8270A	07/26-08/02/95	520705
4-Methylphenol	ND	10	SW846 8270A	07/26-08/02/95	520705
Naphthalene	ND	10	SW846 8270A	07/26-08/02/95	520705
1,4-Naphthoquinone	ND	200	SW846 8270A	07/26-08/02/95	520705
1-Naphthylamine	ND	10	SW846 8270A	07/26-08/02/95	520705
2-Naphthylamine	ND	10	SW846 8270A	07/26-08/02/95	520705
2-Nitroaniline	ND	50	SW846 8270A	07/26-08/02/95	520705
3-Nitroaniline	ND	50	SW846 8270A	07/26-08/02/95	520705
4-Nitroaniline	ND	50	SW846 8270A	07/26-08/02/95	520705
Nitrobenzene	ND	10	SW846 8270A	07/26-08/02/95	520705
2-Nitrophenol	ND	10	SW846 8270A	07/26-08/02/95	520705
4-Nitrophenol	ND	50	SW846 8270A	07/26-08/02/95	520705
4-Nitroquinoline-1-oxide	ND	100	SW846 8270A	07/26-08/02/95	520705
N-Nitrosodi-n-butylamine	ND	10	SW846 8270A	07/26-08/02/95	520705
N-Nitrosodiethylamine	ND	10	SW846 8270A	07/26-08/02/95	520705
N-Nitrosodimethylamine	ND	10	SW846 8270A	07/26-08/02/95	520705
N-Nitrosodiphenylamine	ND	10	SW846 8270A	07/26-08/02/95	520705

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	74	(36 - 148)
2-Fluorobiphenyl	71	(38 - 106)
Terphenyl-d14	36	(10 - 169)
Phenol-d5	54	(15 - 126)
2-Fluorophenol	44	(17 - 106)
2,4,6-Tribromophenol	90	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW10D

WO #: C0C02102
LAB #: A5G220128-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/21/95
TIME SAMPLED: 13:00
DATE RECEIVED: 7/22/95

GC/MS Semi-Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
N-Nitrosodi-n-propylamine	ND	10	SW846 8270A	07/26-08/02/95	520705
N-Nitrosomethylethylamine	ND	10	SW846 8270A	07/26-08/02/95	520705
N-Nitrosomorpholine	ND	10	SW846 8270A	07/26-08/02/95	520705
N-Nitrosopiperidine	ND	10	SW846 8270A	07/26-08/02/95	520705
N-Nitrosopyrrolidine	ND	10	SW846 8270A	07/26-08/02/95	520705
5-Nitro-o-toluidine	ND	20	SW846 8270A	07/26-08/02/95	520705
Pentachlorobenzene	ND	10	SW846 8270A	07/26-08/02/95	520705
Pentachloroethane	ND	50	SW846 8270A	07/26-08/02/95	520705
Pentachloronitrobenzene	ND	50	SW846 8270A	07/26-08/02/95	520705
Pentachlorophenol	ND	50	SW846 8270A	07/26-08/02/95	520705
Phenacetin	ND	50	SW846 8270A	07/26-08/02/95	520705
Phenanthrene	ND	10	SW846 8270A	07/26-08/02/95	520705
Phenol	ND	10	SW846 8270A	07/26-08/02/95	520705
p-Phenylene diamine	ND	50	SW846 8270A	07/26-08/02/95	520705
2-Picoline	ND	20	SW846 8270A	07/26-08/02/95	520705
Pronamide	ND	20	SW846 8270A	07/26-08/02/95	520705
Pyrene	ND	10	SW846 8270A	07/26-08/02/95	520705
Pyridine	ND	10	SW846 8270A	07/26-08/02/95	520705
Safrole	ND	10	SW846 8270A	07/26-08/02/95	520705
1,2,4,5-Tetrachlorobenzene	ND	10	SW846 8270A	07/26-08/02/95	520705
2,3,4,6-Tetrachlorophenol	ND	50	SW846 8270A	07/26-08/02/95	520705

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	74	(36 - 148)
2-Fluorobiphenyl	71	(38 - 106)
Terphenyl-d14	36	(10 - 169)
Phenol-d5	54	(15 - 126)
2-Fluorophenol	44	(17 - 106)
2,4,6-Tribromophenol	90	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW10D

WO #: C0C02102
LAB #: A5G220128-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/21/95
TIME SAMPLED: 13:00
DATE RECEIVED: 7/22/95

- - - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
o-Toluidine	ND	20	SW846 8270A	07/26-08/02/95	520705
1,2,4-Trichlorobenzene	ND	10	SW846 8270A	07/26-08/02/95	520705
2,4,5-Trichlorophenol	ND	10	SW846 8270A	07/26-08/02/95	520705
2,4,6-Trichlorophenol	ND	10	SW846 8270A	07/26-08/02/95	520705
1,3,5-Trinitrobenzene	ND	50	SW846 8270A	07/26-08/02/95	520705
Diallate	ND	20	SW846 8270A	07/26-08/02/95	520705
Chlorobenzilate	ND	10	SW846 8270A	07/26-08/02/95	520705

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	74	(36 - 148)
2-Fluorobiphenyl	71	(38 - 106)
Terphenyl-d14	36	(10 - 169)
Phenol-d5	54	(15 - 126)
2-Fluorophenol	44	(17 - 106)
2,4,6-Tribromophenol	90	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW10D

WO #: C0C02102
LAB #: A5G220128-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/21/95
DATE RECEIVED: 7/22/95
DATE EXTRACTED: 7/26/95
DATE ANALYZED: 8/02/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
Base/Neutrals and Acids (8270)			
Unknown	**2**	**ug/L**	**5207053**
Ethanol, 2-(2-ethoxyethox	**5**	**ug/L**	**5207053**
Unknown	**4**	**ug/L**	**5207053**
Linalyl propanoate	**10**	**ug/L**	**5207053**

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
Base/Neutrals and Acids (8270)			
None		**ug/L**	**5207053**

GC/MS VOLATILE SAMPLE DATA

GERAGHTY & MILLER

FMGWMW10S

WO #: C0C01101
LAB #: A5G220128-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/21/95
DATE RECEIVED: 7/22/95

- GC/MS Volatiles -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Acetone	ND	50	SW846 8240A	07/27/95	521001
Acetonitrile	ND	50	SW846 8240A	07/27/95	521001
Acrolein	ND	100	SW846 8240A	07/27/95	521001
Acrylonitrile	ND	50	SW846 8240A	07/27/95	521001
Allyl chloride	ND	5.0	SW846 8240A	07/27/95	521001
Benzene	ND	5.0	SW846 8240A	07/27/95	521001
Bromodichloromethane	ND	5.0	SW846 8240A	07/27/95	521001
Bromoform	ND	10	SW846 8240A	07/27/95	521001
Bromomethane	ND	10	SW846 8240A	07/27/95	521001
2-Butanone (MEK)	ND	50	SW846 8240A	07/27/95	521001
Carbon disulfide	ND	5.0	SW846 8240A	07/27/95	521001
Carbon tetrachloride	ND	10	SW846 8240A	07/27/95	521001
Chlorobenzene	ND	5.0	SW846 8240A	07/27/95	521001
Chloroethane	ND	10	SW846 8240A	07/27/95	521001
Chloroform	ND	5.0	SW846 8240A	07/27/95	521001
Chloromethane	ND	10	SW846 8240A	07/27/95	521001
Chloroprene	ND	5.0	SW846 8240A	07/27/95	521001
Dibromochloromethane	ND	5.0	SW846 8240A	07/27/95	521001
1,2-Dibromo-3-chloro-propane	ND	10	SW846 8240A	07/27/95	521001
1,2-Dibromoethane (EDB)	ND	5.0	SW846 8240A	07/27/95	521001
Dibromomethane	ND	5.0	SW846 8240A	07/27/95	521001
trans-1,4-Dichloro-2-butene	ND	5.0	SW846 8240A	07/27/95	521001
Dichlorodifluoromethane	ND	10	SW846 8240A	07/27/95	521001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	102	(76 - 114)
Toluene-d8	107	(88 - 110)
Bromofluorobenzene	92	(86 - 115)

NOTE:
AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW10S

WO #: C0C01101 | **DATE SAMPLED:** 7/21/95
LAB #: A5G220128-001 | **DATE RECEIVED:** 7/22/95
MATRIX: WATER
DILUTION FACTOR: 1.00

- GC/MS Volatiles -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,1-Dichloroethane	ND	5.0	SW846 8240A	07/27/95	521001
1,2-Dichloroethane	ND	5.0	SW846 8240A	07/27/95	521001
1,1-Dichloroethene	ND	5.0	SW846 8240A	07/27/95	521001
1,2-Dichloropropane	ND	5.0	SW846 8240A	07/27/95	521001
cis-1,3-Dichloropropene	ND	5.0	SW846 8240A	07/27/95	521001
trans-1,3-Dichloropropene	ND	5.0	SW846 8240A	07/27/95	521001
1,4-Dioxane	ND	1,000	SW846 8240A	07/27/95	521001
Ethylbenzene	ND	5.0	SW846 8240A	07/27/95	521001
Ethyl methacrylate	ND	5.0	SW846 8240A	07/27/95	521001
2-Hexanone	ND	50	SW846 8240A	07/27/95	521001
Iodomethane	ND	5.0	SW846 8240A	07/27/95	521001
Isobutyl alcohol	ND	500	SW846 8240A	07/27/95	521001
Methacrylonitrile	ND	20	SW846 8240A	07/27/95	521001
Methylene chloride	ND	5.0	SW846 8240A	07/27/95	521001
Methyl methacrylate	ND	5.0	SW846 8240A	07/27/95	521001
4-Methyl-2-pentanone (MIBK)	ND	50	SW846 8240A	07/27/95	521001
Propionitrile	ND	20	SW846 8240A	07/27/95	521001
Styrene	ND	5.0	SW846 8240A	07/27/95	521001
1,1,1,2-Tetrachloroethane	ND	5.0	SW846 8240A	07/27/95	521001
1,1,2,2-Tetrachloroethane	ND	5.0	SW846 8240A	07/27/95	521001
Tetrachloroethene	ND	5.0	SW846 8240A	07/27/95	521001
Toluene	ND	5.0	SW846 8240A	07/27/95	521001
1,1,1-Trichloroethane	ND	5.0	SW846 8240A	07/27/95	521001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	102	(76 - 114)
Toluene-d8	107	(88 - 110)
Bromofluorobenzene	92	(86 - 115)

NOTE:
AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW10S

WO #: C0C01101
LAB #: A5G220128-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/21/95
DATE RECEIVED: 7/22/95

GC/MS Volatiles

3 OF 3

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,1,2-Trichloroethane	ND	5.0	SW846 8240A	07/27/95	5210019
Trichloroethene	ND	5.0	SW846 8240A	07/27/95	5210019
Trichlorofluoromethane	ND	5.0	SW846 8240A	07/27/95	5210019
1,2,3-Trichloropropane	ND	5.0	SW846 8240A	07/27/95	5210019
Vinyl acetate	ND	50	SW846 8240A	07/27/95	5210019
Vinyl chloride	ND	10	SW846 8240A	07/27/95	5210019
Xylenes (total)	ND	5.0	SW846 8240A	07/27/95	5210019
1,2-Dichloroethene (total)	ND	5.0	SW846 8240A	07/27/95	5210019

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	102	(76 - 114)
Toluene-d8	107	(88 - 110)
Bromofluorobenzene	92	(86 - 115)

NOTE:
AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW10S

WO #: C0C01101
LAB #: A5G220128-001
MATRIX: WATER

DATE SAMPLED: 7/21/95
DATE RECEIVED: 7/22/95
DATE EXTRACTED: 7/27/95
DATE ANALYZED: 7/27/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5210019

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5210019

GERAGHTY & MILLER

FMGWMW10D

WO #: C0C02101
LAB #: A5G220128-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/21/95
DATE RECEIVED: 7/22/95

- GC/MS Volatiles -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Acetone	ND	50	SW846 8240A	07/27/95	521001
Acetonitrile	ND	50	SW846 8240A	07/27/95	521001
Acrolein	ND	100	SW846 8240A	07/27/95	521001
Acrylonitrile	ND	50	SW846 8240A	07/27/95	521001
Allyl chloride	ND	5.0	SW846 8240A	07/27/95	521001
Benzene	ND	5.0	SW846 8240A	07/27/95	521001
Bromodichloromethane	ND	5.0	SW846 8240A	07/27/95	521001
Bromoform	ND	10	SW846 8240A	07/27/95	521001
Bromomethane	ND	10	SW846 8240A	07/27/95	521001
2-Butanone (MEK)	ND	50	SW846 8240A	07/27/95	521001
Carbon disulfide	ND	5.0	SW846 8240A	07/27/95	521001
Carbon tetrachloride	ND	10	SW846 8240A	07/27/95	521001
Chlorobenzene	ND	5.0	SW846 8240A	07/27/95	521001
Chloroethane	ND	10	SW846 8240A	07/27/95	521001
Chloroform	ND	5.0	SW846 8240A	07/27/95	521001
Chloromethane	ND	10	SW846 8240A	07/27/95	521001
Chloroprene	ND	5.0	SW846 8240A	07/27/95	521001
Dibromochloromethane	ND	5.0	SW846 8240A	07/27/95	521001
1,2-Dibromo-3-chloro-propane	ND	10	SW846 8240A	07/27/95	521001
1,2-Dibromoethane (EDB)	ND	5.0	SW846 8240A	07/27/95	521001
Dibromomethane	ND	5.0	SW846 8240A	07/27/95	521001
trans-1,4-Dichloro-2-butene	ND	5.0	SW846 8240A	07/27/95	521001
Dichlorodifluoromethane	ND	10	SW846 8240A	07/27/95	521001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	102	(76 - 114)
Toluene-d8	107	(88 - 110)
Bromofluorobenzene	89	(86 - 115)

NOTE:
AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW10D

WO #: C0C02101
LAB #: A5G220128-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/21/95
DATE RECEIVED: 7/22/95

- GC/MS Volatiles -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,1-Dichloroethane	ND	5.0	SW846 8240A	07/27/95	521001
1,2-Dichloroethane	ND	5.0	SW846 8240A	07/27/95	521001
1,1-Dichloroethene	ND	5.0	SW846 8240A	07/27/95	521001
1,2-Dichloropropane	ND	5.0	SW846 8240A	07/27/95	521001
cis-1,3-Dichloropropene	ND	5.0	SW846 8240A	07/27/95	521001
trans-1,3-Dichloropropene	ND	5.0	SW846 8240A	07/27/95	521001
1,4-Dioxane	ND	1,000	SW846 8240A	07/27/95	521001
Ethylbenzene	ND	5.0	SW846 8240A	07/27/95	521001
Ethyl methacrylate	ND	5.0	SW846 8240A	07/27/95	521001
2-Hexanone	ND	50	SW846 8240A	07/27/95	521001
Iodomethane	ND	5.0	SW846 8240A	07/27/95	521001
Isobutyl alcohol	ND	500	SW846 8240A	07/27/95	521001
Methacrylonitrile	ND	20	SW846 8240A	07/27/95	521001
Methylene chloride	ND	5.0	SW846 8240A	07/27/95	521001
Methyl methacrylate	ND	5.0	SW846 8240A	07/27/95	521001
4-Methyl-2-pentanone (MIBK)	ND	50	SW846 8240A	07/27/95	521001
Propionitrile	ND	20	SW846 8240A	07/27/95	521001
Styrene	ND	5.0	SW846 8240A	07/27/95	521001
1,1,1,2-Tetrachloroethane	ND	5.0	SW846 8240A	07/27/95	521001
1,1,2,2-Tetrachloroethane	ND	5.0	SW846 8240A	07/27/95	521001
Tetrachloroethene	ND	5.0	SW846 8240A	07/27/95	521001
Toluene	ND	5.0	SW846 8240A	07/27/95	521001
1,1,1-Trichloroethane	ND	5.0	SW846 8240A	07/27/95	521001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	102	(76 - 114)
Toluene-d8	107	(88 - 110)
Bromofluorobenzene	89	(86 - 115)

NOTE:
AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW10D

WO #: C0C02101
LAB #: A5G220128-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/21/95
DATE RECEIVED: 7/22/95

- GC/MS Volatiles -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,1,2-Trichloroethane	ND	5.0	SW846 8240A	07/27/95	521001
Trichloroethene	ND	5.0	SW846 8240A	07/27/95	521001
Trichlorofluoromethane	ND	5.0	SW846 8240A	07/27/95	521001
1,2,3-Trichloropropane	ND	5.0	SW846 8240A	07/27/95	521001
Vinyl acetate	ND	50	SW846 8240A	07/27/95	521001
Vinyl chloride	ND	10	SW846 8240A	07/27/95	521001
Xylenes (total)	ND	5.0	SW846 8240A	07/27/95	521001
1,2-Dichloroethene (total)	ND	5.0	SW846 8240A	07/27/95	521001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	102	(76 - 114)
Toluene-d8	107	(88 - 110)
Bromofluorobenzene	89	(86 - 115)

NOTE:
AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW10D

WO #: C0C02101
LAB #: A5G220128-002
MATRIX: WATER

DATE SAMPLED: 7/21/95
DATE RECEIVED: 7/22/95
DATE EXTRACTED: 7/27/95
DATE ANALYZED: 7/27/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5210019

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5210019

GERAGHTY & MILLER

TRIP

WO #: C0C03101
LAB #: A5G220128-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/21/95
DATE RECEIVED: 7/22/95

- GC/MS Volatiles -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Acetone	ND	50	SW846 8240A	07/27/95	521001
Acetonitrile	ND	50	SW846 8240A	07/27/95	521001
Acrolein	ND	100	SW846 8240A	07/27/95	521001
Acrylonitrile	ND	50	SW846 8240A	07/27/95	521001
Allyl chloride	ND	5.0	SW846 8240A	07/27/95	521001
Benzene	ND	5.0	SW846 8240A	07/27/95	521001
Bromodichloromethane	ND	5.0	SW846 8240A	07/27/95	521001
Bromoform	ND	10	SW846 8240A	07/27/95	521001
Bromomethane	ND	10	SW846 8240A	07/27/95	521001
2-Butanone (MEK)	ND	50	SW846 8240A	07/27/95	521001
Carbon disulfide	ND	5.0	SW846 8240A	07/27/95	521001
Carbon tetrachloride	ND	10	SW846 8240A	07/27/95	521001
Chlorobenzene	ND	5.0	SW846 8240A	07/27/95	521001
Chloroethane	ND	10	SW846 8240A	07/27/95	521001
Chloroform	ND	5.0	SW846 8240A	07/27/95	521001
Chloromethane	ND	10	SW846 8240A	07/27/95	521001
Chloroprene	ND	5.0	SW846 8240A	07/27/95	521001
Dibromochloromethane	ND	5.0	SW846 8240A	07/27/95	521001
1,2-Dibromo-3-chloro-propane	ND	10	SW846 8240A	07/27/95	521001
1,2-Dibromoethane (EDB)	ND	5.0	SW846 8240A	07/27/95	521001
Dibromomethane	ND	5.0	SW846 8240A	07/27/95	521001
trans-1,4-Dichloro-2-butene	ND	5.0	SW846 8240A	07/27/95	521001
Dichlorodifluoromethane	ND	10	SW846 8240A	07/27/95	521001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	103	(76 - 114)
Toluene-d8	107	(88 - 110)
Bromofluorobenzene	92	(86 - 115)

NOTE:
AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

TRIP

WO #: C0C03101
LAB #: A5G220128-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/21/95
DATE RECEIVED: 7/22/95

- GC/MS Volatiles -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,1-Dichloroethane	ND	5.0	SW846 8240A	07/27/95	521001
1,2-Dichloroethane	ND	5.0	SW846 8240A	07/27/95	521001
1,1-Dichloroethene	ND	5.0	SW846 8240A	07/27/95	521001
1,2-Dichloropropane	ND	5.0	SW846 8240A	07/27/95	521001
cis-1,3-Dichloropropene	ND	5.0	SW846 8240A	07/27/95	521001
trans-1,3-Dichloropropene	ND	5.0	SW846 8240A	07/27/95	521001
1,4-Dioxane	ND	1,000	SW846 8240A	07/27/95	521001
Ethylbenzene	ND	5.0	SW846 8240A	07/27/95	521001
Ethyl methacrylate	ND	5.0	SW846 8240A	07/27/95	521001
2-Hexanone	ND	50	SW846 8240A	07/27/95	521001
Iodomethane	ND	5.0	SW846 8240A	07/27/95	521001
Isobutyl alcohol	ND	500	SW846 8240A	07/27/95	521001
Methacrylonitrile	ND	20	SW846 8240A	07/27/95	521001
Methylene chloride	ND	5.0	SW846 8240A	07/27/95	521001
Methyl methacrylate	ND	5.0	SW846 8240A	07/27/95	521001
4-Methyl-2-pentanone (MIBK)	ND	50	SW846 8240A	07/27/95	521001
Propionitrile	ND	20	SW846 8240A	07/27/95	521001
Styrene	ND	5.0	SW846 8240A	07/27/95	521001
1,1,1,2-Tetrachloroethane	ND	5.0	SW846 8240A	07/27/95	521001
1,1,2,2-Tetrachloroethane	ND	5.0	SW846 8240A	07/27/95	521001
Tetrachloroethene	ND	5.0	SW846 8240A	07/27/95	521001
Toluene	ND	5.0	SW846 8240A	07/27/95	521001
1,1,1-Trichloroethane	ND	5.0	SW846 8240A	07/27/95	521001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	103	(76 - 114)
Toluene-d8	107	(88 - 110)
Bromofluorobenzene	92	(86 - 115)

NOTE:
AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

TRIP

WO #: C0C03101
LAB #: A5G220128-003
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/21/95
DATE RECEIVED: 7/22/95

- GC/MS Volatiles -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,1,2-Trichloroethane	ND	5.0	SW846 8240A	07/27/95	521001
Trichloroethene	ND	5.0	SW846 8240A	07/27/95	521001
Trichlorofluoromethane	ND	5.0	SW846 8240A	07/27/95	521001
1,2,3-Trichloropropane	ND	5.0	SW846 8240A	07/27/95	521001
Vinyl acetate	ND	50	SW846 8240A	07/27/95	521001
Vinyl chloride	ND	10	SW846 8240A	07/27/95	521001
Xylenes (total)	ND	5.0	SW846 8240A	07/27/95	521001
1,2-Dichloroethene (total)	ND	5.0	SW846 8240A	07/27/95	521001

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	103	(76 - 114)
Toluene-d8	107	(88 - 110)
Bromofluorobenzene	92	(86 - 115)

NOTE:
AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

TRIP

WO #: C0C03101
LAB #: A5G220128-003
MATRIX: WATER

DATE SAMPLED: 7/21/95
DATE RECEIVED: 7/22/95
DATE EXTRACTED: 7/27/95
DATE ANALYZED: 7/27/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5210019

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5210019

INORGANIC SAMPLE DATA

GERAGHTY & MILLER

FMGWMW10S

WO #: C0C01
LAB #: A5G220128-001
MATRIX: WATER

DATE SAMPLED: 7/21/95
TIME SAMPLED: 9:30
DATE RECEIVED: 7/22/95

- - - - - - - - - - - - - - - - - - REQUESTED METALS - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Silver	ND	10.0	ug/L	SW846 6010A	8/09- 9/13/95	522104
Barium	509	10.0	ug/L	SW846 6010A	8/09- 9/13/95	522104
Beryllium	ND	5.0	ug/L	SW846 6010A	8/09- 9/13/95	522104
Cadmium	10.5	10.0	ug/L	SW846 6010A	8/09- 9/13/95	522104
Cobalt	ND	50.0	ug/L	SW846 6010A	8/09- 9/13/95	522104
Chromium	85.7	20.0	ug/L	SW846 6010A	8/09- 9/13/95	522104
Copper	4,910	10.0	ug/L	SW846 6010A	8/09- 9/13/95	522104
Nickel	210	40.0	ug/L	SW846 6010A	8/09- 9/13/95	522104
Antimony	ND	300	ug/L	SW846 6010A	8/09- 9/13/95	522104
Tin	ND	1,000	ug/L	SW846 6010A	8/09- 9/13/95	522104
Vanadium	113	50.0	ug/L	SW846 6010A	8/09- 9/13/95	522104
Zinc	6,740	50.0	ug/L	SW846 6010A	8/09- 9/13/95	522104
Arsenic	131	10.0	ug/L	SW846 7060	8/09- 8/11/95	522104
Lead	2,230	300	ug/L	SW846 7421	8/09- 8/14/95	522104
Mercury	0.90	0.20	ug/L	SW846 7470	8/09- 8/10/95	522104
Selenium	ND W	5.0	ug/L	SW846 7740	8/09- 8/11/95	522104
Thallium	ND W	10.0	ug/L	SW846 7841	8/09- 8/11/95	522104

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
W - POST DIGESTION SPIKE RECOVERY FELL BETWEEN 40 - 85% WHILE SAMPLE RESULT WAS LESS THAN ONE-HALF THE REPORTING LIMIT.

GERAGHTY & MILLER

FMGWMW10D

WO #: C0C02
LAB #: A5G220128-002
MATRIX: WATER

DATE SAMPLED: 7/21/95
TIME SAMPLED: 13:00
DATE RECEIVED: 7/22/95

- - - - - - - - - - - - - - - - - - REQUESTED METALS - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Silver	ND	10.0	ug/L	SW846 6010A	8/09- 9/13/95	522104
Barium	269	10.0	ug/L	SW846 6010A	8/09- 9/13/95	522104
Beryllium	ND	5.0	ug/L	SW846 6010A	8/09- 9/13/95	522104
Cadmium	ND	10.0	ug/L	SW846 6010A	8/09- 9/13/95	522104
Cobalt	ND	50.0	ug/L	SW846 6010A	8/09- 9/13/95	522104
Chromium	60.7	20.0	ug/L	SW846 6010A	8/09- 9/13/95	522104
Copper	97.3	10.0	ug/L	SW846 6010A	8/09- 9/13/95	522104
Nickel	87.4	40.0	ug/L	SW846 6010A	8/09- 9/13/95	522104
Antimony	ND	300	ug/L	SW846 6010A	8/09- 9/13/95	522104
Tin	ND	1,000	ug/L	SW846 6010A	8/09- 9/13/95	522104
Vanadium	79.5	50.0	ug/L	SW846 6010A	8/09- 9/13/95	522104
Zinc	354	50.0	ug/L	SW846 6010A	8/09- 9/13/95	522104
Arsenic	344	50.0	ug/L	SW846 7060	8/09- 8/11/95	522104
Lead	39.6	6.0	ug/L	SW846 7421	8/09- 8/10/95	522104
Mercury	ND	0.20	ug/L	SW846 7470	8/09- 8/10/95	522104
Selenium	ND W	5.0	ug/L	SW846 7740	8/09- 8/11/95	522104
Thallium	ND W	10.0	ug/L	SW846 7841	8/09- 8/11/95	522104

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
W - POST DIGESTION SPIKE RECOVERY FELL BETWEEN 40 - 85% WHILE SAMPLE RESULT WAS LESS THAN ONE-HALF THE REPORTING LIMIT.

WET CHEMISTRY SAMPLE DATA

GERAGHTY & MILLER

FMGWMW10S

WO #: C0C01
LAB #: A5G220128-001
MATRIX: WATER

DATE SAMPLED: 7/21/95
DATE RECEIVED: 7/22/95

- - - - - - - - - - - - - - - - - INORGANIC ANALYTICAL REPORT - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Fluoride (Colorimetric, Ion Selective Electrode)	8.8	2.4	ug/L	MCAWW 340.2	8/09/95	522202
Sulfide	ND	0.50	mg/L	MCAWW 376.1	7/26/95	520709
Total cyanide	ND	5.0	ug/L	SW846 9012	8/03/95	521500

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

FMGWMW10D

WO #: C0C02
LAB #: A5G220128-002
MATRIX: WATER

DATE SAMPLED: 7/21/95
DATE RECEIVED: 7/22/95

- - - - - - - - - - - - - - - - - - INORGANIC ANALYTICAL REPORT - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Fluoride (Colorimetric, Ion Selective Electrode)	5.1	1.2	ug/L	MCAWW 340.2	8/09/95	522202
Sulfide	ND	0.50	mg/L	MCAWW 376.1	7/26/95	520709
Total cyanide	ND	5.0	ug/L	SW846 9012	8/03/95	521500

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

CHAIN-OF-CUSTODY

GERAGHTY & MILLER, INC.
Environmental Services
...mij company

Laboratory Task

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Project Number IN0144.109

Project Location Federated Metals, Hammond

Laboratory Quanterra - N. Canton

Sampler(s)/Affiliation Jamie Yater / G&M

SAMPLE BOTTLE / CONTAINER DESCRIPTION

SAMPLE IDENTITY	Code	Date/Time Sampled	Lab ID	VOC 8260 HCl 40ml vials	BNA 8270 L glass	T. Metals HNO3 L. plas	Dissolved Metals HNO3 L plas.	CN NaOH 250ml	Sulfide NaOH + Zinc 1 L plas	Fluoride 250ml			TOTAL
FMGWMW10S		7/21/95 930A		3	2	1	1	1	1	1			10
FMGWMW10D		7/21/95 1P		3	2	1	1	1	1	1			10
TRIP				1									1

Sample Code: L = Liquid; S = Solid; A = Air

Total No. of Bottles/Containers 21

Relinquished by: Jamie Yater	Organization: Geraghty & Miller	Date 7/21/95	Time 630P	Seal Intact? Yes No N/A
Received by:	Organization:	Date / /	Time	
Relinquished by:	Organization:	Date / /	Time	Seal Intact? Yes No N/A
Received by: Jessica M. Nydon	Organization: Quanterra	Date 7/22/95	Time 3:45pm	

Special Instructions/Remarks: See Table 7-1 QAPP for prep + analyses SOPs

462

Delivery Method: ☐ In Person ☐ Common Carrier ☐ Lab Courier ☐ Other

7/8-95
GW

Quanterra
Environmental Services

Quanterra Incorporated
4101 Shuffel Drive, NW
North Canton, Ohio 44720

216 497-9396 Telephone
216 497-0772 Fax

RECEIVED
SEP 30 1995
GERAGHTY & MILLER, INC.
INDIANAPOLIS, INDIANA

ANALYTICAL REPORT

PROJECT NO. IN0144.109

Federated Metals/Hammond, IN

Tim Northam

GERAGHTY & MILLER

QUANTERRA INCORPORATED

Thomas M. Himes
Project Manager

September 28, 1995

CASE NARRATIVE

TABLE OF CONTENTS

Case Narrative

Sample Summary

Method Reference

GC/MS Volatile QC Summary Data

GC/MS Volatile Sample Data

GC/MS Volatile Standard Data

GC/MS Volatile Raw QC Data

GC/MS Semivolatile QC Summary Data

GC/MS Semivolatile Sample Data

GC/MS Semivolatile Raw QC Data

GC/MS Semivolatile Standard Data

Inorganic QC Summary Data

Inorganic Sample Data

Inorganic Calibration Data

Inorganic Instrument Print-outs

Inorganic Prep Logs

Wet Chemistry QC Data

Wet Chemistry Sample Data

Wet Chemistry Log Sheets

Organic Instrument Log Sheets

Organic Extraction Log Sheets

TABLE OF CONTENTS (CONT'D.)

Internal Chain-of-Custody

Chain-of-Custody

CASE NARRATIVE

The following report contains the analytical results for one water sample and one quality control sample submitted to Quanterra-North Canton by Geraghty & Miller from the Federated Metals/Hammond, IN Site, project number IN0144.109. The samples were received July 25, 1995, according to documented sample acceptance procedures.

Quanterra, Inc. utilizes only USEPA approved methods and instrumentation in all analytical work. The samples presented in this report were analyzed for the parameters listed on the method reference page in accordance with the methods indicated.

The results included in this report have been reviewed for compliance with the laboratory QA/QC plan. All data have been found to be compliant with laboratory protocol.

The matrix spike and matrix spike duplicates (MS/MSD) contained in this quality control report were generated as part of the laboratory QA/QC program requirements. These requirements include the analysis of a MS/MSD on a one in twenty basis. Therefore, the associated batch number indicated on the MS/MSD reports may not reflect the same batch numbers as those of the samples contained in the analytical report.

The check samples associated with sample A5G250105-001 submitted for Base/Neutral & Acid Extractable analysis failed to meet laboratory acceptance criteria. Upon reextraction and reanalysis the associated checks met criteria, however, sample holding times had been exceeded.

QUALITY/TECHNOLOGY UPDATE

Update II to SW-846 was promulgated on January 13th, 1995 and became effective immediately. Amongst the many changes to existing methods Update II was the specification for acid first extraction when the determinative method is 8270. This specification is included in Table 1 of methods 3510B (Separatory Funnel Liquid/Liquid Extraction) and 3520B (Continuous Liquid/Liquid Extraction).

The reason for the change is that loss of phthalate esters, organochlorine pesticides and phenols may occur under the previously specified base first extraction conditions (Methods 3510A and 3520B).

The use of the latest revision of SW-846 methods is required for situations where regulations require the use of SW-846 methods.[1]

When new updates to SW-846 are promulgated, Quanterra will modify existing SOPs or develop new SOPs to incorporate the method revisions. The new SOPs will be used for all SW-846 analysis unless there is clear direction from the client to use older versions of SW-846. However, this use of older versions of SW-846 is contrary to the EPA's intent for the use of SW-846.

New SOPs for liquid/liquid extraction incorporating the acid first protocol have been developed and are currently in the process of implementation at Quanterra facilities.

---

[1] Response to Public Comments Background document, Promulgation of the Second Update to SW-846, Third Edition. (Docket No. F-94-WT2F-FFFFF), November 1994

SAMPLE SUMMARY

SAMPLE SUMMARY

The analytical results of the samples listed below are presented on the following pages.

WO #	LABORATORY ID	SAMPLE IDENTIFICATION	DATE/TIME SAMPL
C0CHQ	A5G250105-001	MGWMW11S	7/24/95 11:30
C0CHT	A5G250105-002	TRIP BLANK	7/24/95

METHOD REFERENCE

ANALYTICAL METHODS SUMMARY

A5G250105

Parameters	Methods
Volatile Organics by GC/MS	SW846 8240A
Semivolatile Organic Compounds by GC/MS	SW846 8270A
Fluoride (Colorimetric, Ion Selective Electrode)	MCAWW 340.2
Sulfide	MCAWW 376.1
Inductively Coupled Plasma (ICP) Metals	SW846 6010A
Arsenic (AA, Furnace Technique)	SW846 7060
Lead (AA, Furnace Technique)	SW846 7421
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470
Selenium (AA, Furnace Technique)	SW846 7740
Thallium (AA, Furnace Technique)	SW846 7841
Total Cyanide	SW846 9012

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and Final Update I (7/92).

GC/MS VOLATILE SAMPLE DATA

GERAGHTY & MILLER

EMGWMW11S

WO #: C0CHQ101
LAB #: A5G250105-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/24/95
DATE RECEIVED: 7/25/95

- GC/MS Volatiles -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Acetone	ND	50	SW846 8240A	07/28/95	5213104
Acetonitrile	ND	50	SW846 8240A	07/28/95	5213104
Acrolein	ND	100	SW846 8240A	07/28/95	5213104
Acrylonitrile	ND	50	SW846 8240A	07/28/95	5213104
Allyl chloride	ND	5.0	SW846 8240A	07/28/95	5213104
Benzene	ND	5.0	SW846 8240A	07/28/95	5213104
Bromodichloromethane	ND	5.0	SW846 8240A	07/28/95	5213104
Bromoform	ND	10	SW846 8240A	07/28/95	5213104
Bromomethane	ND	10	SW846 8240A	07/28/95	5213104
2-Butanone (MEK)	ND	50	SW846 8240A	07/28/95	5213104
Carbon disulfide	ND	5.0	SW846 8240A	07/28/95	5213104
Carbon tetrachloride	ND	10	SW846 8240A	07/28/95	5213104
Chlorobenzene	ND	5.0	SW846 8240A	07/28/95	5213104
Chloroethane	ND	10	SW846 8240A	07/28/95	5213104
Chloroform	ND	5.0	SW846 8240A	07/28/95	5213104
Chloromethane	ND	10	SW846 8240A	07/28/95	5213104
Chloroprene	ND	5.0	SW846 8240A	07/28/95	5213104
Dibromochloromethane	ND	5.0	SW846 8240A	07/28/95	5213104
1,2-Dibromo-3-chloro-propane	ND	10	SW846 8240A	07/28/95	5213104
1,2-Dibromoethane (EDB)	ND	5.0	SW846 8240A	07/28/95	5213104
Dibromomethane	ND	5.0	SW846 8240A	07/28/95	5213104
trans-1,4-Dichloro-2-butene	ND	5.0	SW846 8240A	07/28/95	5213104
Dichlorodifluoromethane	ND	10	SW846 8240A	07/28/95	5213104

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	103	(76 - 114)
Toluene-d8	102	(88 - 110)
Bromofluorobenzene	100	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

EMGWMW11S

WO #: C0CHQ101
LAB #: A5G250105-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/24/95
DATE RECEIVED: 7/25/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,1-Dichloroethane	ND	5.0	SW846 8240A	07/28/95	5213104
1,2-Dichloroethane	ND	5.0	SW846 8240A	07/28/95	5213104
1,1-Dichloroethene	ND	5.0	SW846 8240A	07/28/95	5213104
1,2-Dichloropropane	ND	5.0	SW846 8240A	07/28/95	5213104
cis-1,3-Dichloropropene	ND	5.0	SW846 8240A	07/28/95	5213104
trans-1,3-Dichloropropene	ND	5.0	SW846 8240A	07/28/95	5213104
1,4-Dioxane	ND	1,000	SW846 8240A	07/28/95	5213104
Ethylbenzene	ND	5.0	SW846 8240A	07/28/95	5213104
Ethyl methacrylate	ND	5.0	SW846 8240A	07/28/95	5213104
2-Hexanone	ND	50	SW846 8240A	07/28/95	5213104
Iodomethane	ND	5.0	SW846 8240A	07/28/95	5213104
Isobutyl alcohol	ND	500	SW846 8240A	07/28/95	5213104
Methacrylonitrile	ND	20	SW846 8240A	07/28/95	5213104
Methylene chloride	ND	5.0	SW846 8240A	07/28/95	5213104
Methyl methacrylate	ND	5.0	SW846 8240A	07/28/95	5213104
4-Methyl-2-pentanone (MIBK)	ND	50	SW846 8240A	07/28/95	5213104
Propionitrile	ND	20	SW846 8240A	07/28/95	5213104
Styrene	ND	5.0	SW846 8240A	07/28/95	5213104
1,1,1,2-Tetrachloroethane	ND	5.0	SW846 8240A	07/28/95	5213104
1,1,2,2-Tetrachloroethane	ND	5.0	SW846 8240A	07/28/95	5213104
Tetrachloroethene	ND	5.0	SW846 8240A	07/28/95	5213104
Toluene	ND	5.0	SW846 8240A	07/28/95	5213104
1,1,1-Trichloroethane	ND	5.0	SW846 8240A	07/28/95	5213104

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	103	(76 - 114)
Toluene-d8	102	(88 - 110)
Bromofluorobenzene	100	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

EMGWMW11S

WO #: C0CHQ101
LAB #: A5G250105-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/24/95
DATE RECEIVED: 7/25/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,1,2-Trichloroethane	ND	5.0	SW846 8240A	07/28/95	5213104
Trichloroethene	ND	5.0	SW846 8240A	07/28/95	5213104
Trichlorofluoromethane	ND	5.0	SW846 8240A	07/28/95	5213104
1,2,3-Trichloropropane	ND	5.0	SW846 8240A	07/28/95	5213104
Vinyl acetate	ND	50	SW846 8240A	07/28/95	5213104
Vinyl chloride	ND	10	SW846 8240A	07/28/95	5213104
Xylenes (total)	ND	5.0	SW846 8240A	07/28/95	5213104
1,2-Dichloroethene (total)	ND	5.0	SW846 8240A	07/28/95	5213104

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	103	(76 - 114)
Toluene-d8	102	(88 - 110)
Bromofluorobenzene	100	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

EMGWMW11S

WO #: C0CHQ101
LAB #: A5G250105-001
MATRIX: WATER

DATE SAMPLED: 7/24/95
DATE RECEIVED: 7/25/95
DATE EXTRACTED: 7/28/95
DATE ANALYZED: 7/28/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5213104

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5213104

GERAGHTY & MILLER

TRIP BLANK

WO #: C0CHT101
LAB #: A5G250105-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/24/95
DATE RECEIVED: 7/25/95

- GC/MS Volatiles -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Acetone	ND	50	SW846 8240A	07/28/95	5213104
Acetonitrile	ND	50	SW846 8240A	07/28/95	5213104
Acrolein	ND	100	SW846 8240A	07/28/95	5213104
Acrylonitrile	ND	50	SW846 8240A	07/28/95	5213104
Allyl chloride	ND	5.0	SW846 8240A	07/28/95	5213104
Benzene	ND	5.0	SW846 8240A	07/28/95	5213104
Bromodichloromethane	ND	5.0	SW846 8240A	07/28/95	5213104
Bromoform	ND	10	SW846 8240A	07/28/95	5213104
Bromomethane	ND	10	SW846 8240A	07/28/95	5213104
2-Butanone (MEK)	ND	50	SW846 8240A	07/28/95	5213104
Carbon disulfide	ND	5.0	SW846 8240A	07/28/95	5213104
Carbon tetrachloride	ND	10	SW846 8240A	07/28/95	5213104
Chlorobenzene	ND	5.0	SW846 8240A	07/28/95	5213104
Chloroethane	ND	10	SW846 8240A	07/28/95	5213104
Chloroform	ND	5.0	SW846 8240A	07/28/95	5213104
Chloromethane	ND	10	SW846 8240A	07/28/95	5213104
Chloroprene	ND	5.0	SW846 8240A	07/28/95	5213104
Dibromochloromethane	ND	5.0	SW846 8240A	07/28/95	5213104
1,2-Dibromo-3-chloro-propane	ND	10	SW846 8240A	07/28/95	5213104
1,2-Dibromoethane (EDB)	ND	5.0	SW846 8240A	07/28/95	5213104
Dibromomethane	ND	5.0	SW846 8240A	07/28/95	5213104
trans-1,4-Dichloro-2-butene	ND	5.0	SW846 8240A	07/28/95	5213104
Dichlorodifluoromethane	ND	10	SW846 8240A	07/28/95	5213104

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	102	(76 - 114)
Toluene-d8	103	(88 - 110)
Bromofluorobenzene	97	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

TRIP BLANK

WO #: COCHT101
LAB #: A5G250105-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/24/95
DATE RECEIVED: 7/25/95

GC/MS Volatiles

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,1-Dichloroethane	ND	5.0	SW846 8240A	07/28/95	5213104
1,2-Dichloroethane	ND	5.0	SW846 8240A	07/28/95	5213104
1,1-Dichloroethene	ND	5.0	SW846 8240A	07/28/95	5213104
1,2-Dichloropropane	ND	5.0	SW846 8240A	07/28/95	5213104
cis-1,3-Dichloropropene	ND	5.0	SW846 8240A	07/28/95	5213104
trans-1,3-Dichloropropene	ND	5.0	SW846 8240A	07/28/95	5213104
1,4-Dioxane	ND	1,000	SW846 8240A	07/28/95	5213104
Ethylbenzene	ND	5.0	SW846 8240A	07/28/95	5213104
Ethyl methacrylate	ND	5.0	SW846 8240A	07/28/95	5213104
2-Hexanone	ND	50	SW846 8240A	07/28/95	5213104
Iodomethane	ND	5.0	SW846 8240A	07/28/95	5213104
Isobutyl alcohol	ND	500	SW846 8240A	07/28/95	5213104
Methacrylonitrile	ND	20	SW846 8240A	07/28/95	5213104
Methylene chloride	ND	5.0	SW846 8240A	07/28/95	5213104
Methyl methacrylate	ND	5.0	SW846 8240A	07/28/95	5213104
4-Methyl-2-pentanone (MIBK)	ND	50	SW846 8240A	07/28/95	5213104
Propionitrile	ND	20	SW846 8240A	07/28/95	5213104
Styrene	ND	5.0	SW846 8240A	07/28/95	5213104
1,1,1,2-Tetrachloroethane	ND	5.0	SW846 8240A	07/28/95	5213104
1,1,2,2-Tetrachloroethane	ND	5.0	SW846 8240A	07/28/95	5213104
Tetrachloroethene	ND	5.0	SW846 8240A	07/28/95	5213104
Toluene	ND	5.0	SW846 8240A	07/28/95	5213104
1,1,1-Trichloroethane	ND	5.0	SW846 8240A	07/28/95	5213104

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	102	(76 - 114)
Toluene-d8	103	(88 - 110)
Bromofluorobenzene	97	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

TRIP BLANK

WO #: C0CHT101
LAB #: A5G250105-002
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/24/95
DATE RECEIVED: 7/25/95

- GC/MS Volatiles -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,1,2-Trichloroethane	ND	5.0	SW846 8240A	07/28/95	5213104
Trichloroethene	ND	5.0	SW846 8240A	07/28/95	5213104
Trichlorofluoromethane	ND	5.0	SW846 8240A	07/28/95	5213104
1,2,3-Trichloropropane	ND	5.0	SW846 8240A	07/28/95	5213104
Vinyl acetate	ND	50	SW846 8240A	07/28/95	5213104
Vinyl chloride	ND	10	SW846 8240A	07/28/95	5213104
Xylenes (total)	ND	5.0	SW846 8240A	07/28/95	5213104
1,2-Dichloroethene (total)	ND	5.0	SW846 8240A	07/28/95	5213104

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
1,2-Dichloroethane-d4	102	(76 - 114)
Toluene-d8	103	(88 - 110)
Bromofluorobenzene	97	(86 - 115)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

TRIP BLANK

WO #: C0CHT101
LAB #: A5G250105-002
MATRIX: WATER

DATE SAMPLED: 7/24/95
DATE RECEIVED: 7/25/95
DATE EXTRACTED: 7/28/95
DATE ANALYZED: 7/28/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5213104

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
None		ug/L	5213104

GC/MS SEMIVOLATILE SAMPLE DATA

GERAGHTY & MILLER

EMGWMW11S

WO #: C0CHQ102
LAB #: A5G250105-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/24/95
TIME SAMPLED: 11:30
DATE RECEIVED: 7/25/95

- - - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
Acenaphthene	**2.5 J**	**10**	**SW846 8270A**	**07/29-08/12/95**	**5210002**
Acenaphthylene	ND	10	SW846 8270A	07/29-08/12/95	5210002
Acetophenone	ND	10	SW846 8270A	07/29-08/12/95	5210002
2-Acetylaminofluorene	ND	100	SW846 8270A	07/29-08/12/95	5210002
4-Aminobiphenyl	ND	50	SW846 8270A	07/29-08/12/95	5210002
Aniline	ND	10	SW846 8270A	07/29-08/12/95	5210002
Anthracene	**2.0 J**	**10**	**SW846 8270A**	**07/29-08/12/95**	**5210002**
Aramite	**--**		**SW846 8270A**	**07/29-08/12/95**	**5210002**
Benzo(a)anthracene	**2.0 J**	**10**	**SW846 8270A**	**07/29-08/12/95**	**5210002**
Benzo(a)pyrene	ND	10	SW846 8270A	07/29-08/12/95	5210002
Benzo(b)fluoranthene	ND	10	SW846 8270A	07/29-08/12/95	5210002
Benzo(ghi)perylene	ND	10	SW846 8270A	07/29-08/12/95	5210002
Benzo(k)fluoranthene	ND	10	SW846 8270A	07/29-08/12/95	5210002
Benzyl alcohol	ND	10	SW846 8270A	07/29-08/12/95	5210002
4-Bromophenyl phenyl ether	ND	10	SW846 8270A	07/29-08/12/95	5210002
Butyl benzyl phthalate	ND	10	SW846 8270A	07/29-08/12/95	5210002
2-sec-Butyl-4,6-dinitro-phenol	ND	20	SW846 8270A	07/29-08/12/95	5210002
4-Chloroaniline	ND	10	SW846 8270A	07/29-08/12/95	5210002
bis(2-Chloroethoxy)methane	ND	10	SW846 8270A	07/29-08/12/95	5210002
bis(2-Chloroethyl) ether	ND	10	SW846 8270A	07/29-08/12/95	5210002
bis(2-Chloro-1-methylethyl) et	ND	10	SW846 8270A	07/29-08/12/95	5210002

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	89	(36 - 148)
2-Fluorobiphenyl	80	(38 - 106)
Terphenyl-d14	54	(10 - 169)
Phenol-d5	71	(15 - 126)
2-Fluorophenol	49	(17 - 106)
2,4,6-Tribromophenol	91	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
J ESTIMATED VALUE. (DETECTED), BUT BELOW QUANTITATION LIMIT.
– (NOT ANALYZED)

GERAGHTY & MILLER

EMGWMW11S

WO #: C0CHQ102
LAB #: A5G250105-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/24/95
TIME SAMPLED: 11:30
DATE RECEIVED: 7/25/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
4-Chloro-3-methylphenol	ND	10	SW846 8270A	07/29-08/12/95	521000
2-Chloronaphthalene	ND	10	SW846 8270A	07/29-08/12/95	521000
2-Chlorophenol	ND	10	SW846 8270A	07/29-08/12/95	521000
4-Chlorophenyl phenyl ether	ND	10	SW846 8270A	07/29-08/12/95	521000
Chrysene	**3.1 J**	**10**	**SW846 8270A**	**07/29-08/12/95**	**521000**
Dibenz(a,h)anthracene	ND	10	SW846 8270A	07/29-08/12/95	521000
Dibenzofuran	ND	10	SW846 8270A	07/29-08/12/95	521000
Di-n-butyl phthalate	ND	10	SW846 8270A	07/29-08/12/95	521000
1,2-Dichlorobenzene	ND	10	SW846 8270A	07/29-08/12/95	521000
1,3-Dichlorobenzene	ND	10	SW846 8270A	07/29-08/12/95	521000
1,4-Dichlorobenzene	ND	10	SW846 8270A	07/29-08/12/95	521000
3,3'-Dichlorobenzidine	ND	50	SW846 8270A	07/29-08/12/95	521000
2,4-Dichlorophenol	ND	10	SW846 8270A	07/29-08/12/95	521000
2,6-Dichlorophenol	ND	10	SW846 8270A	07/29-08/12/95	521000
Diethyl phthalate	ND	10	SW846 8270A	07/29-08/12/95	521000
p-Dimethylaminoazobenzene	ND	20	SW846 8270A	07/29-08/12/95	521000
7,12-Dimethylbenz(a)-anthracene	ND	20	SW846 8270A	07/29-08/12/95	521000
3,3'-Dimethylbenzidine	ND	10	SW846 8270A	07/29-08/12/95	521000
a,a-Dimethylphenethylamine	ND	50	SW846 8270A	07/29-08/12/95	521000
2,4-Dimethylphenol	ND	10	SW846 8270A	07/29-08/12/95	521000
Dimethyl phthalate	ND	10	SW846 8270A	07/29-08/12/95	521000

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	89	(36 - 148)
2-Fluorobiphenyl	80	(38 - 106)
Terphenyl-d14	54	(10 - 169)
Phenol-d5	71	(15 - 126)
2-Fluorophenol	49	(17 - 106)
2,4,6-Tribromophenol	91	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
J ESTIMATED VALUE. (DETECTED), BUT BELOW QUANTITATION LIMIT.

GERAGHTY & MILLER

EMGWMW11S

WO #: C0CHQ102
LAB #: A5G250105-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/24/95
TIME SAMPLED: 11:30
DATE RECEIVED: 7/25/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
1,3-Dinitrobenzene	ND	10	SW846 8270A	07/29-08/12/95	5210002
4,6-Dinitro-2-methylphenol	ND	50	SW846 8270A	07/29-08/12/95	5210002
2,4-Dinitrophenol	ND	50	SW846 8270A	07/29-08/12/95	5210002
2,4-Dinitrotoluene	ND	10	SW846 8270A	07/29-08/12/95	5210002
2,6-Dinitrotoluene	ND	10	SW846 8270A	07/29-08/12/95	5210002
Di-n-octyl phthalate	ND	10	SW846 8270A	07/29-08/12/95	5210002
Diphenylamine	ND	10	SW846 8270A	07/29-08/12/95	5210002
bis(2-Ethylhexyl) phthalate	ND	10	SW846 8270A	07/29-08/12/95	5210002
Ethyl methanesulfonate	ND	10	SW846 8270A	07/29-08/12/95	5210002
Fluoranthene	**1.3 J**	**10**	**SW846 8270A**	**07/29-08/12/95**	**5210002**
Fluorene	ND	10	SW846 8270A	07/29-08/12/95	5210002
Hexachlorobenzene	ND	10	SW846 8270A	07/29-08/12/95	5210002
Hexachlorobutadiene	ND	10	SW846 8270A	07/29-08/12/95	5210002
Hexachlorocyclopentadiene	ND	50	SW846 8270A	07/29-08/12/95	5210002
Hexachloroethane	ND	10	SW846 8270A	07/29-08/12/95	5210002
Hexachlorophene	**--**		**SW846 8270A**	**07/29-08/12/95**	**5210002**
Hexachloropropene	ND	100	SW846 8270A	07/29-08/12/95	5210002
Indeno(1,2,3-cd)pyrene	ND	10	SW846 8270A	07/29-08/12/95	5210002
Isophorone	ND	10	SW846 8270A	07/29-08/12/95	5210002
Isosafrole	ND	20	SW846 8270A	07/29-08/12/95	5210002
Methapyrilene	ND	50	SW846 8270A	07/29-08/12/95	5210002

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	89	(36 - 148)
2-Fluorobiphenyl	80	(38 - 106)
Terphenyl-d14	54	(10 - 169)
Phenol-d5	71	(15 - 126)
2-Fluorophenol	49	(17 - 106)
2,4,6-Tribromophenol	91	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
J ESTIMATED VALUE. (DETECTED), BUT BELOW QUANTITATION LIMIT.
– (NOT ANALYZED)

GERAGHTY & MILLER

EMGWMW11S

WO #: C0CHQ102
LAB #: A5G250105-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/24/95
TIME SAMPLED: 11:30
DATE RECEIVED: 7/25/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
3-Methylcholanthrene	ND	20	SW846 8270A	07/29-08/12/95	5210002
Methyl methanesulfonate	ND	10	SW846 8270A	07/29-08/12/95	5210002
2-Methylnaphthalene	ND	10	SW846 8270A	07/29-08/12/95	5210002
2-Methylphenol	ND	10	SW846 8270A	07/29-08/12/95	5210002
3-Methylphenol	ND	10	SW846 8270A	07/29-08/12/95	5210002
4-Methylphenol	ND	10	SW846 8270A	07/29-08/12/95	5210002
Naphthalene	**2.3 J**	**10**	**SW846 8270A**	**07/29-08/12/95**	**5210002**
1,4-Naphthoquinone	ND	50	SW846 8270A	07/29-08/12/95	5210002
1-Naphthylamine	ND	10	SW846 8270A	07/29-08/12/95	5210002
2-Naphthylamine	ND	10	SW846 8270A	07/29-08/12/95	5210002
2-Nitroaniline	ND	50	SW846 8270A	07/29-08/12/95	5210002
3-Nitroaniline	ND	50	SW846 8270A	07/29-08/12/95	5210002
4-Nitroaniline	ND	50	SW846 8270A	07/29-08/12/95	5210002
Nitrobenzene	ND	10	SW846 8270A	07/29-08/12/95	5210002
2-Nitrophenol	ND	10	SW846 8270A	07/29-08/12/95	5210002
4-Nitrophenol	ND	50	SW846 8270A	07/29-08/12/95	5210002
4-Nitroquinoline-1-oxide	ND	100	SW846 8270A	07/29-08/12/95	5210002
N-Nitrosodi-n-butylamine	ND	10	SW846 8270A	07/29-08/12/95	5210002
N-Nitrosodiethylamine	ND	10	SW846 8270A	07/29-08/12/95	5210002
N-Nitrosodimethylamine	ND	10	SW846 8270A	07/29-08/12/95	5210002
N-Nitrosodiphenylamine	ND	10	SW846 8270A	07/29-08/12/95	5210002

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	89	(36 - 148)
2-Fluorobiphenyl	80	(38 - 106)
Terphenyl-d14	54	(10 - 169)
Phenol-d5	71	(15 - 126)
2-Fluorophenol	49	(17 - 106)
2,4,6-Tribromophenol	91	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
J ESTIMATED VALUE. (DETECTED), BUT BELOW QUANTITATION LIMIT.

GERAGHTY & MILLER

EMGWMW11S

WO #: C0CHQ102
LAB #: A5G250105-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/24/95
TIME SAMPLED: 11:30
DATE RECEIVED: 7/25/95

- - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
N-Nitrosodi-n-propylamine	ND	10	SW846 8270A	07/29-08/12/95	521000
N-Nitrosomethylethylamine	ND	10	SW846 8270A	07/29-08/12/95	521000
N-Nitrosomorpholine	ND	10	SW846 8270A	07/29-08/12/95	521000
N-Nitrosopiperidine	ND	10	SW846 8270A	07/29-08/12/95	521000
N-Nitrosopyrrolidine	ND	10	SW846 8270A	07/29-08/12/95	521000
5-Nitro-o-toluidine	ND	20	SW846 8270A	07/29-08/12/95	521000
Pentachlorobenzene	ND	10	SW846 8270A	07/29-08/12/95	521000
Pentachloroethane	ND	10	SW846 8270A	07/29-08/12/95	521000
Pentachloronitrobenzene	ND	50	SW846 8270A	07/29-08/12/95	521000
Pentachlorophenol	ND	50	SW846 8270A	07/29-08/12/95	521000
Phenacetin	ND	20	SW846 8270A	07/29-08/12/95	521000
Phenanthrene	**2.6 J**	**10**	**SW846 8270A**	**07/29-08/12/95**	**521000**
Phenol	ND	10	SW846 8270A	07/29-08/12/95	521000
p-Phenylene diamine	ND	100	SW846 8270A	07/29-08/12/95	521000
2-Picoline	ND	20	SW846 8270A	07/29-08/12/95	521000
Pronamide	ND	20	SW846 8270A	07/29-08/12/95	521000
Pyrene	**7.5 J**	**10**	**SW846 8270A**	**07/29-08/12/95**	**521000**
Pyridine	ND	20	SW846 8270A	07/29-08/12/95	521000
Safrole	ND	20	SW846 8270A	07/29-08/12/95	521000
1,2,4,5-Tetrachlorobenzene	ND	10	SW846 8270A	07/29-08/12/95	521000
2,3,4,6-Tetrachlorophenol	ND	50	SW846 8270A	07/29-08/12/95	521000

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	89	(36 - 148)
2-Fluorobiphenyl	80	(38 - 106)
Terphenyl-d14	54	(10 - 169)
Phenol-d5	71	(15 - 126)
2-Fluorophenol	49	(17 - 106)
2,4,6-Tribromophenol	91	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
J ESTIMATED VALUE. (DETECTED), BUT BELOW QUANTITATION LIMIT.

GERAGHTY & MILLER

EMGWMW11S

WO #: C0CHQ102
LAB #: A5G250105-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/24/95
TIME SAMPLED: 11:30
DATE RECEIVED: 7/25/95

- - - - - - - - - - - - - - - - - - - GC/MS Semi-Volatiles - - - - - - - - - - - - - - - - -

PARAMETER	RESULT (ug/L)	REPORTING LIMIT	METHOD	EXTRACTION-ANALYSIS DATE	QC BATCH
o-Toluidine	ND	20	SW846 8270A	07/29-08/12/95	5210002
1,2,4-Trichlorobenzene	ND	10	SW846 8270A	07/29-08/12/95	5210002
2,4,5-Trichlorophenol	ND	10	SW846 8270A	07/29-08/12/95	5210002
2,4,6-Trichlorophenol	ND	10	SW846 8270A	07/29-08/12/95	5210002
1,3,5-Trinitrobenzene	ND	50	SW846 8270A	07/29-08/12/95	5210002

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Nitrobenzene-d5	89	(36 - 148)
2-Fluorobiphenyl	80	(38 - 106)
Terphenyl-d14	54	(10 - 169)
Phenol-d5	71	(15 - 126)
2-Fluorophenol	49	(17 - 106)
2,4,6-Tribromophenol	91	(13 - 145)

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

GERAGHTY & MILLER

EMGWMW11S

WO #: C0CHQ102
LAB #: A5G250105-001
MATRIX: WATER
DILUTION FACTOR: 1.00

DATE SAMPLED: 7/24/95
DATE RECEIVED: 7/25/95
DATE EXTRACTED: 7/29/95
DATE ANALYZED: 8/12/95

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS
with their estimated concentrations

PARAMETER	RESULT	UNIT	QC BATCH
Base/Neutrals and Acids (8270)			
Unknown Aromatic	15	ug/L	5210002
Unknown Aromatic	8	ug/L	5210002
Unknown	7	ug/L	5210002
Unknown PAH	9	ug/L	5210002
Unknown PAH	12	ug/L	5210002
Unknown PAH	8	ug/L	5210002
Unknown PAH	10	ug/L	5210002
Unknown PAH	11	ug/L	5210002
Unknown PAH	14	ug/L	5210002
Unknown PAH	7	ug/L	5210002
Unknown PAH	14	ug/L	5210002
Unknown PAH	9	ug/L	5210002
Unknown Hydrocarbon	10	ug/L	5210002
Unknown	8	ug/L	5210002
Unknown Hydrocarbon	10	ug/L	5210002
Unknown PAH	12	ug/L	5210002
Unknown PAH	8	ug/L	5210002
Unknown PAH	8	ug/L	5210002
Unknown	8	ug/L	5210002
Unknown PAH	10	ug/L	5210002

OTHER COMPOUNDS

PARAMETER	RESULT	UNIT	QC BATCH
Base/Neutrals and Acids (8270)			
None		ug/L	5210002

INORGANIC SAMPLE DATA

GERAGHTY & MILLER

EMGWMW11S

WO #: COCHQ
LAB #: A5G250105-001
MATRIX: WATER

DATE SAMPLED: 7/24/95
TIME SAMPLED: 11:30
DATE RECEIVED: 7/25/95

- - - - - - - - - - - - - - - - - - - REQUESTED METALS - - - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Silver	ND	10.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Barium	ND	200	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Beryllium	ND	5.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Cadmium	53.1	5.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Cobalt	ND	50.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Chromium	25.6	10.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Copper	543	25.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Nickel	215	40.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Antimony	ND	60.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Tin	537	100	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Vanadium	ND	50.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Zinc	4,220	50.0	ug/L	SW846 6010A	8/03- 9/13/95	5215051
Arsenic	25.5	10.0	ug/L	SW846 7060	8/03- 8/07/95	5215051
Lead	1,360	150	ug/L	SW846 7421	8/03- 8/07/95	5215051
Mercury	0.59	0.20	ug/L	SW846 7470	8/03- 8/05/95	5215051
Selenium	ND W	5.0	ug/L	SW846 7740	8/09- 8/11/95	5220109
Thallium	ND	10.0	ug/L	SW846 7841	8/03- 8/07/95	5215051

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT
W - POST DIGESTION SPIKE RECOVERY FELL BETWEEN 40 - 85% WHILE SAMPLE RESULT WAS LESS THAN ONE-HALF THE REPORTING LIMIT.

WET CHEMISTRY SAMPLE DATA

GERAGHTY & MILLER

EMGWMW11S

WO #: C0CHQ
LAB #: A5G250105-001
MATRIX: WATER

DATE SAMPLED: 7/24/95
TIME SAMPLED: 11:30
DATE RECEIVED: 7/25/95

- - - - - - - - - - - - - - - - - - INORGANIC ANALYTICAL REPORT - - - - - - - - - - - - - - - - -

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	PREPARATION - ANALYSIS DATE	QC BATCH
Fluoride (Colorimetric, Ion Selective Electrode)	8.8	2.4	mg/L	MCAWW 340.2	8/14/95	5227025
Sulfide	0.74	0.50	mg/L	MCAWW 376.1	7/26/95	5207092
Total cyanide	ND	5.0	ug/L	SW846 9012	8/03/95	5215029

NOTE: AS RECEIVED
ND NOT DETECTED AT THE STATED REPORTING LIMIT

CHAIN-OF-CUSTODY

GERAGHTY & MILLER, INC.
Environmental Services
a heidemij company

Laboratory Task Order No._____

CHAIN-OF-CUSTODY RECORD

Page_____ of_____

Project Number IN0144.109

Project Location Federated Metals - Hammond

Laboratory Quanterra

Sampler(s)/Affiliation Jamie Yater/G+M

SAMPLE BOTTLE / CONTAINER DESCRIPTION

SAMPLE IDENTITY	Code	Date/Time Sampled	Lab ID	VOCs 8260 HCl 40ml vials	BNAs 8270 L glass	T. Metals L plastic HNO3	CN NaOH 250ml	Fluoride 250ml	Sulfide 1L plas NaOH+2ml				TOTAL
FMGWMW11S	L	7/24/95 1130A		3	2	1	1	1	1				9
Trip				1									1

Sample Code: L = Liquid; S = Solid; A = Air

Total No. of Bottles/Containers 10

Relinquished by: Jamie Yater Organization: Geraghty & Miller Date 7/24/95 Time 830A
Received by: Organization: Date / / Time

Seal Intact? Yes No N/A

Relinquished by: Organization: Date / / Time
Received by: Jessica M. Kyzlon Organization: Quanterra Date 7/25/95 Time 10:20A

Seal Intact? Yes No N/A

Special Instructions/Remarks:
Included some filters (0.1) for Tom Himes at the request of Tim Northam
See Table 7-1 of Fed QAPP for prep & analysis SOPs

566

Delivery Method: ☐ In Person ☐ Common Carrier _____ SPECIFY ☐ Lab Courier ☐ Other _____

10 - 25
GW

Quanterra
Environmental Services

Quanterra Incorporated
880 Riverside Parkway
West Sacramento, California 95605

916 373-5600 Telephone
916 372-1059 Fax

August 3, 1995
QUANTERRA INCORPORATED PROJECT NUMBER: 083078
PO/CONTRACT: IN0144.109

Tim Northarn
Geraghty & Miller, Inc.
251 E. Ohio Street
Suite 1010
Indianapolis, IN 46204

RECEIVED
AUG 7 1995
GERAGHTY & MILLER, INC.
INDIANAPOLIS, INDIANA

Dear Mr. Northarn:

This report contains the analytical results for the three aqueous samples which were received under chain of custody by Quanterra Incorporated on 22 July 1995. These samples are associated with your" Federated Metals Project".

The case narrative is an integral part of this report.

If you have any questions, please call me at (916) 374-4433.

Sincerely,

Robert Hrabak
Project Manager
Low Resolution Dioxin Services

RH/ct

Quanterra
Environmental Services

TABLE OF CONTENTS

QUANTERRA INCORPORATED PROJECT NUMBER 083078

Case Narrative

Quality Assurance Program

Sample Description Information

Chain of Custody Documentation

Appendix IX - Method 8280
Includes Samples: 1 through 3
- Method Blank Data Sheet
- Sample Data Sheet
- Laboratory Control Sample (DCS)

Raw Data:
- Sample Data
- Duplicate Control Sample
- Initial Calibration
- Continuing Calibration
- Instrument Analysis Log Copies
- Sample Extraction/Preparation Log Copies

Quanterra
Environmental Services

CASE NARRATIVE

QUANTERRA INCORPORATED PROJECT NUMBER 083078

There were no anomalies associated with this report.

Quanterra
Environmental Services

QUANTERRA INCORPORATED QUALITY ASSURANCE PROGRAM

Quanterra Incorporated has implemented an extensive Quality Assurance (QA) program to ensure the production of scientifically sound, legally defensible data of known documental quality. A key element of this program is Quanterra's Laboratory Control Sample (LCS) system. Controlling lab operations with LCS (as opposed to matrix spike/matrix spike duplicate samples), allows the lab to differentiate between bias as a result of procedural errors versus bias due to matrix effects. The analyst can then identify and implement the appropriate corrective actions at the bench level, without waiting for extensive senior level review or costly and time-consuming sample re-analyses. The LCS program also provides our client with information to assess batch, and overall laboratory performance.

Laboratory Control Samples - (LCS)

Laboratory Control Samples (LCS) are well-characterized, laboratory generated samples used to monitor the laboratory's day-to-day performance of routine analytical methods. The results of the LCS are compared to well-defined laboratory acceptance criteria to determine whether the laboratory system is "in control". Three types of LCS are routinely analyzed: Duplicate Control Samples (DCS), Single Control Samples (SCS), and method blanks. Each of these LCS are described below.

Duplicate Control Samples. A DCS is a well-characterized matrix (blank water, sand, sodium sulfate or celite) which is spiked with certain target parameters and analyzed at approximately 10% of the sample load in order to establish method-specific control limits.

Single Control Samples. An SCS consists of a control matrix that is spiked with surrogate compounds appropriate to the method being used. In cases where no surrogate is available, (e.g. metals or conventional analyses) a single control sample identical to the DCS serves as the control sample. An SCS is prepared for each sample lot. Accuracy is calculated identically to the DCS.

Method Blank Results. A method blank is a laboratory-generated sample which assesses the degree to which laboratory operations and procedures cause false-positive analytical results for your samples.

Quanterra
Environmental Services

SAMPLE DESCRIPTION INFORMATION
for
Geraghty & Miller, Inc.

Lab ID	Client ID	Matrix	Sampled Date	Sampled Time	Received Date
083078-0001-MB	Method Blank	AQUEOUS			22 JUL 95
083078-0001-SA	FMGWMW8D	AQUEOUS	20 JUL 95	10:00	22 JUL 95
083078-0002-SA	FMGWMW6D	AQUEOUS	18 JUL 95	15:00	22 JUL 95
083078-0003-SA	FMGWMW6S	AQUEOUS	18 JUL 95	10:30	22 JUL 95

G & M MILLER, INC.
Environmental Services
a heidemij company

Laboratory Task Order No._____

CHAIN-OF-CUSTODY RECORD

Page_____ of_____

Project Number IN0144.109

Project Location Federated Metals

Laboratory Quanterra

Sampler(s)/Affiliation Jamie Yater / G+M

SAMPLE BOTTLE / CONTAINER DESCRIPTION

SAMPLE IDENTITY	Code	Date/Time Sampled	Lab ID	Dioxin 1L glass									TOTAL
FMGWMW8D	L	7/20/95 10A		2			good	condition AC 7/22/95					2
FMGWMW6D	L	7/18/95 3P		2			2	lids cracked & chipped AC 7/22/95					2 (taped)
FMGWMW6S	L	7/18/95 1030A		2	1 bottle		OK	1 bottle broken AC 7/22/95					2
		So											

Sample Code: L = Liquid; S = Solid; A = Air

Total No. of Bottles/Containers 6

Relinquished by: Jamie Yater	Organization: G+M	Date 7/21/95	Time 630P	Seal Intact? Yes No N/A
Received by:	Organization:	Date / /	Time	
Relinquished by: Sheila Cook	Organization:	Date / /	Time	Seal Intact? Yes No N/A
Received by:	Organization: Quanterra	Date 7/22/95	Time 11:00	

Special Instructions/Remarks: See Table 7-1 for Prep + Analysis SOPs - Federated QAPP
?s CALL TIM Northam G+M Indpls, Tom Homes Quanterra

Delivery Method: ☐ In Person ☐ Common Carrier _____ ☐ Lab Courier ☐ Other _____

G&M Form 09-9-91

Southprint 95-0533

Quanterra Environmental Services

APPENDIX IX DIOXINS/FURANS

LOW RESOLUTION

Client Name: Geraghty & Miller, Inc.
Client ID: Method Blank
Lab ID: 083078-0001-MB
Matrix: AQUEOUS Sampled: NA Received: NA
Authorized: 22 JUL 95 Prepared: 27 JUL 95 Analyzed: 31 JUL 95

Sample Amount 1.0 L
Column Type DB-5

Parameter	Result	Units	Detection Limit	Data Qualifiers
Furans				
TCDFs (total)	ND	ng/L	0.68	
PeCDFs (total)	ND	ng/L	0.49	
HxCDFs (total)	ND	ng/L	0.84	
Dioxins				
TCDDs (total)	ND	ng/L	0.46	
2,3,7,8-TCDD	ND	ng/L	0.46	
PeCDDs (total)	ND	ng/L	1.1	
HxCDDs (total)	ND	ng/L	0.95	
	% Recovery			
13C-2,3,7,8-TCDF	67			
13C-2,3,7,8-TCDD	69			
13C-1,2,3,7,8-PeCDD	84			
13C-1,2,3,6,7,8-HxCDD	73			

ND = Not detected
NA = Not applicable

Reported By: Emily Uebelhoer Approved By: Robert Hrabak

The cover letter is an integral part of this report.
Rev 230787

Quanterra Environmental Services

APPENDIX IX DIOXINS/FURANS

LOW RESOLUTION

Client Name: Geraghty & Miller, Inc.
Client ID: FMGWMW8D
Lab ID: 083078-0001-SA
Matrix: AQUEOUS Sampled: 20 JUL 95 Received: 22 JUL 95
Authorized: 22 JUL 95 Prepared: 27 JUL 95 Analyzed: 31 JUL 95

Sample Amount 0.991 L
Column Type DB-5

Parameter	Result	Units	Detection Limit	Data Qualifiers
Furans				
TCDFs (total)	ND	ng/L	0.57	
PeCDFs (total)	ND	ng/L	0.36	
HxCDFs (total)	ND	ng/L	0.42	
Dioxins				
TCDDs (total)	ND	ng/L	0.29	
2,3,7,8-TCDD	ND	ng/L	0.29	
PeCDDs (total)	ND	ng/L	0.81	
HxCDDs (total)	ND	ng/L	0.73	
	% Recovery			
13C-2,3,7,8-TCDF	72			
13C-2,3,7,8-TCDD	77			
13C-1,2,3,7,8-PeCDD	80			
13C-1,2,3,6,7,8-HxCDD	82			

ND = Not detected
NA = Not applicable

Reported By: Emily Uebelhoer Approved By: Robert Hrabak

The cover letter is an integral part of this report.
Rev 230787

Quanterra Environmental Services

APPENDIX IX DIOXINS/FURANS

LOW RESOLUTION

Client Name: Geraghty & Miller, Inc.
Client ID: FMGWMW6D
Lab ID: 083078-0002-SA
Matrix: AQUEOUS Sampled: 18 JUL 95 Received: 22 JUL 95
Authorized: 22 JUL 95 Prepared: 27 JUL 95 Analyzed: 31 JUL 95

Sample Amount 0.939 L
Column Type DB-5

Parameter	Result	Units	Detection Limit	Data Qualifiers
Furans				
TCDFs (total)	ND	ng/L	0.57	
PeCDFs (total)	ND	ng/L	0.44	
HxCDFs (total)	ND	ng/L	0.46	
Dioxins				
TCDDs (total)	ND	ng/L	0.42	
2,3,7,8-TCDD	ND	ng/L	0.42	
PeCDDs (total)	ND	ng/L	0.88	
HxCDDs (total)	ND	ng/L	0.73	
	% Recovery			
13C-2,3,7,8-TCDF	71			
13C-2,3,7,8-TCDD	74			
13C-1,2,3,7,8-PeCDD	87			
13C-1,2,3,6,7,8-HxCDD	78			

ND = Not detected
NA = Not applicable

Reported By: Emily Uebelhoer Approved By: Robert Hrabak

The cover letter is an integral part of this report.
Rev 230787

Quanterra Environmental Services

APPENDIX IX DIOXINS/FURANS

LOW RESOLUTION

Client Name: Geraghty & Miller, Inc.
Client ID: FMGWMW6S
Lab ID: 083078-0003-SA
Matrix: AQUEOUS Sampled: 18 JUL 95 Received: 22 JUL 95
Authorized: 22 JUL 95 Prepared: 27 JUL 95 Analyzed: 31 JUL 95

Sample Amount 0.960 L
Column Type DB-5

Parameter	Result	Units	Detection Limit	Data Qualifiers
Furans				
TCDFs (total)	ND	ng/L	0.64	
PeCDFs (total)	ND	ng/L	0.26	
HxCDFs (total)	ND	ng/L	0.48	
Dioxins				
TCDDs (total)	ND	ng/L	0.38	
2,3,7,8-TCDD	ND	ng/L	0.38	
PeCDDs (total)	ND	ng/L	0.94	
HxCDDs (total)	ND	ng/L	0.73	
	% Recovery			
13C-2,3,7,8-TCDF	68			
13C-2,3,7,8-TCDD	77			
13C-1,2,3,7,8-PeCDD	78			
13C-1,2,3,6,7,8-HxCDD	77			

ND = Not detected
NA = Not applicable

Reported By: Emily Uebelhoer Approved By: Robert Hrabak

The cover letter is an integral part of this report.
Rev 230787

Quanterra
Environmental Services

QC LOT ASSIGNMENT REPORT
Special Services - Low Resolution Mass Spectrometry

Laboratory Sample Number	QC Matrix	QC Category	QC Lot Number (DCS)	QC Run Number (SCS/BLANK)
083078-0001-MB	AQUEOUS	DXNFUR-A	27 JUL 95-Z	-
083078-0001-SA	AQUEOUS	DXNFUR-A	27 JUL 95-Z	-
083078-0002-SA	AQUEOUS	DXNFUR-A	27 JUL 95-Z	-
083078-0003-SA	AQUEOUS	DXNFUR-A	27 JUL 95-Z	-

Quanterra
Environmental Services

DUPLICATE CONTROL SAMPLE REPORT
Special Services - Low Resolution Mass Spectrometry

Analyte	Concentration Spiked	Measured DCS1	Measured DCS2	Measured AVG	Accuracy Average(%) DCS	Accuracy Limits	Precisio (RPD) DCS	Limi
Category: DXNFUR-A								
Matrix: AQUEOUS								
QC Lot: 27 JUL 95-Z								
Concentration Units: ng/sample								
2,3,7,8-TCDF	10	11.3	11.3	11.3	113	62-129	0.0	18.(
2,3,4,7,8-PeCDF	10	9.43	8.93	9.18	92	51-132	5.4	24.(
1,2,3,4,7,8-HxCDF	10	10.3	9.47	9.88	99	50-146	8.4	41.(
1,2,3,4,6,7,8-HpCDF	10	10.5	9.90	10.2	102	50-150	5.9	50.(
OCDF	50	54.5	50.7	52.6	105	50-150	7.2	28.(
2,3,7,8-TCDD	10	9.67	9.66	9.66	97	57-128	0.1	20.(
1,2,3,7,8-PeCDD	10	9.79	9.29	9.54	95	80-125	5.2	25.(
1,2,3,4,7,8-HxCDD	10	9.43	9.03	9.23	92	64-127	4.3	23.(
1,2,3,4,6,7,8-HpCDD	10	9.19	8.49	8.84	88	60-131	7.9	23.(
OCDD	50	42.7	41.3	42.0	84	50-147	3.3	20.(

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quanterra Incorporated
880 Riverside Parkway
West Sacramento, California 95605

916 373-5600 Telephone
916 372-1059 Fax

Quanterra
Environmental Services

August 16, 1995
QUANTERRA INCORPORATED PROJECT NUMBER: 083254
PO/CONTRACT: IN0144.109

RECEIVED
AUG 17 1995
GERAGHTY & MILLER, INC.
INDIANAPOLIS, INDIANA

Tim Northarn
Geraghty & Miller, Inc.
251 E. Ohio Street
Suite 1010
Indianapolis, IN 46204

Dear Mr. Northarn:

This report contains the analytical results for the seven aqueous samples which were received under chain of custody by Quanterra Incorporated on 02 and 03 August 1995.

The case narrative is an integral part of this report.

If you have any questions, please call me at (916) 374-4433.

Sincerely,

Robert Hrabak
Project Manager
Low Resolution Dioxin Services

RH/ct

Quanterra
Environmental Services

TABLE OF CONTENTS

QUANTERRA INCORPORATED PROJECT NUMBER 083254

Case Narrative

Quality Assurance Program

Sample Description Information

Chain of Custody Documentation

Appendix IX Dioxins/Furans - Method 8280
Includes Samples: 1 through 7
- Method Blank Data Sheet
- Sample Data Sheets
- Matrix Specific QC Summary
- Laboratory Control Sample (DCS)

Raw Data:
- Method Blank
- Sample Data
- Matrix Spike/Matrix Spike Duplicate
- Duplicate Control Sample
- Initial Calibration
- Continuing Calibration
- Instrument Logs
- Sample Extraction/Preparation Log Copies

Quanterra
Environmental Services

CASE NARRATIVE

QUANTERRA INCORPORATED PROJECT NUMBER 083254

General Comments:

Please note that sample "FMGWMW8D", listed on the chain of custody, was not received.

There were no other anomalies associated with this report.

Quanterra
Environmental Services

QUANTERRA INCORPORATED QUALITY ASSURANCE PROGRAM

Quanterra Incorporated has implemented an extensive Quality Assurance (QA) program to ensure the production of scientifically sound, legally defensible data of known documental quality. A key element of this program is Quanterra's Laboratory Control Sample (LCS) system. Controlling lab operations with LCS (as opposed to matrix spike/matrix spike duplicate samples), allows the lab to differentiate between bias as a result of procedural errors versus bias due to matrix effects. The analyst can then identify and implement the appropriate corrective actions at the bench level, without waiting for extensive senior level review or costly and time-consuming sample re-analyses. The LCS program also provides our client with information to assess batch, and overall laboratory performance.

Laboratory Control Samples - (LCS)

Laboratory Control Samples (LCS) are well-characterized, laboratory generated samples used to monitor the laboratory's day-to-day performance of routine analytical methods. The results of the LCS are compared to well-defined laboratory acceptance criteria to determine whether the laboratory system is "in control". Three types of LCS are routinely analyzed: Duplicate Control Samples (DCS), Single Control Samples (SCS), and method blanks. Each of these LCS are described below.

Duplicate Control Samples. A DCS is a well-characterized matrix (blank water, sand, sodium sulfate or celite) which is spiked with certain target parameters and analyzed at approximately 10% of the sample load in order to establish method-specific control limits.

Single Control Samples. An SCS consists of a control matrix that is spiked with surrogate compounds appropriate to the method being used. In cases where no surrogate is available, (e.g. metals or conventional analyses) a single control sample identical to the DCS serves as the control sample. An SCS is prepared for each sample lot. Accuracy is calculated identically to the DCS.

Method Blank Results. A method blank is a laboratory-generated sample which assesses the degree to which laboratory operations and procedures cause false-positive analytical results for your samples.

Quanterra
Environmental Services

SAMPLE DESCRIPTION INFORMATION
for
Geraghty & Miller, Inc.

Lab ID	Client ID	Matrix	Sampled Date	Sampled Time	Received Date
083254-0001-SA	FMGWMW7S	AQUEOUS	28 JUL 95	08:30	02 AUG 95
083254-0001-MB	Method Blank	AQUEOUS			02 AUG 95
083254-0002-SA	FMGWMW58	AQUEOUS	28 JUL 95	08:30	02 AUG 95
083254-0003-SA	FMGWMW7D	AQUEOUS	28 JUL 95	11:00	02 AUG 95
083254-0004-SA	FMGWMW59	AQUEOUS	28 JUL 95	13:45	02 AUG 95
083254-0005-SA	FMGWMW8S	AQUEOUS	01 AUG 95	11:50	02 AUG 95
083254-0005-MS	FMGWMW8S (MS)	AQUEOUS	01 AUG 95	11:50	02 AUG 95
083254-0005-SD	FMGWMW8S (SD)	AQUEOUS	01 AUG 95	11:50	02 AUG 95
083254-0006-SA	FMGWMW9S	AQUEOUS	02 AUG 95	10:00	03 AUG 95
083254-0007-SA	FMGWMW9D	AQUEOUS	02 AUG 95	14:00	03 AUG 95

GERAGHTY & MILLER, INC.
Environmental Services
a heidemij company

Laboratory Task Order No._____

CHAIN-OF-CUSTODY RECORD

Page_____ of_____

Project Number INC144.109

Project Location Federated Metals - Hammond

Laboratory Quanterra - W. Sacramento

Sampler(s)/Affiliation J. Yater GHM
T Northam

SAMPLE BOTTLE / CONTAINER DESCRIPTION

SAMPLE IDENTITY	Code	Date/Time Sampled	Lab ID	Dioxins/Furans									TOTAL
FMGWMW7S	L	7/28/95 830A		2									2
FMGWMW5S	L	7/28/95 830A		2									2
FMGWMW7D	L	7/28/95 11A		2									2
FMGWMW5D	L	7/28/95 145P		2									2
FMGWMW8D	L	8/1/95 915A		2									2
* FMGWMW8S	L	8/1/95 1150A		6									6

Did not receive sample FMGWMW8D.
All other samples arrived in good condition MCS 080495

Sample Code: L = Liquid; S = Solid; A = Air

Total No. of Bottles/Containers 16

Relinquished by: Jamie Yater	Organization: GHM	Date 8/1/95 Time 630P	Seal Intact? Yes No N/A
Received by: M. Dyar	Organization: GTC	Date 08/02/95 Time 2145	
Relinquished by:	Organization:	Date / / Time	Seal Intact? Yes No N/A
Received by:	Organization:	Date / / Time	

Special Instructions/Remarks:
* Run MS/MSD on FMGWMW8S

Delivery Method: ☐ In Person ☐ Common Carrier _____ SPECIFY ☐ Lab Courier ☐ Other _____ SPECIFY

G&M Form 09-9-91

Southpoint 95-0533

GERAGHTY & MILLER, INC.
Environmental Services
a heidemij company

Laboratory Task Order No._____

CHAIN-OF-CUSTODY RECORD

Page_____ of_____

Project Number IN0144.109

Project Location Fed. Metals

Laboratory Quanterra

Sampler(s)/Affiliation Jamie Yater G&M
Blake Fahl

SAMPLE BOTTLE / CONTAINER DESCRIPTION

SAMPLE IDENTITY	Code	Date/Time Sampled	Lab ID	Dioxins/Furans									TOTAL
FMGWMW9S	L	8.2.95 10A		2									2
FMGWMW9D	L	8.2.95 2P		2									2

Samples received in good condition.
RJB 080395

Sample Code: L = Liquid; S = Solid; A = Air

Total No. of Bottles/Containers: 4

Relinquished by: Jamie Yater	Organization: G&M	Date 8/5/95	Time 830P	Seal Intact? Yes No N/A
Received by: RJ Bonaly	Organization: QES	Date 08/03/95	Time 1200	
Relinquished by:	Organization:	Date / /	Time	Seal Intact? Yes No N/A
Received by:	Organization:	Date / /	Time	

Special Instructions/Remarks:

Delivery Method: ☐ In Person ☐ Common Carrier _____ SPECIFY ☐ Lab Courier ☐ Other _____ SPECIFY

G&M Form 09-9-91

Southprint 95-0533

Quanterra Environmental Services

APPENDIX IX DIOXINS/FURANS

LOW RESOLUTION

Client Name: Geraghty & Miller, Inc.
Client ID: Method Blank
Lab ID: 083254-0001-MB
Matrix: AQUEOUS Sampled: NA Received: NA
Authorized: 02 AUG 95 Prepared: 14 AUG 95 Analyzed: 16 AUG 95

Sample Amount 1.0 L
Column Type DB-5

Parameter	Result	Units	Detection Limit	Data Qualifiers
Furans				
TCDFs (total)	ND	ng/L	0.45	
PeCDFs (total)	ND	ng/L	0.13	
HxCDFs (total)	ND	ng/L	0.21	
Dioxins				
TCDDs (total)	ND	ng/L	0.13	
2,3,7,8-TCDD	ND	ng/L	0.13	
PeCDDs (total)	ND	ng/L	0.36	
HxCDDs (total)	ND	ng/L	0.42	
	% Recovery			
13C-2,3,7,8-TCDF	66			
13C-2,3,7,8-TCDD	66			
13C-1,2,3,7,8-PeCDD	79			
13C-1,2,3,6,7,8-HxCDD	78			

ND = Not detected
NA = Not applicable

Reported By: Emily Uebelhoer Approved By: Robert Hrabak

The cover letter is an integral part of this report.
Rev 230787

Quanterra
Environmental Services

APPENDIX IX DIOXINS/FURANS

LOW RESOLUTION

Client Name: Geraghty & Miller, Inc.
Client ID: FMGWMW7S
Lab ID: 083254-0001-SA
Matrix: AQUEOUS Sampled: 28 JUL 95 Received: 02 AUG 95
Authorized: 02 AUG 95 Prepared: 14 AUG 95 Analyzed: 16 AUG 95

Sample Amount 0.957 L
Column Type DB-5

Parameter	Result	Units	Detection Limit	Data Qualifiers
Furans				
TCDFs (total)	ND	ng/L	0.53	
PeCDFs (total)	ND	ng/L	0.20	
HxCDFs (total)	ND	ng/L	0.22	
Dioxins				
TCDDs (total)	ND	ng/L	0.14	
2,3,7,8-TCDD	ND	ng/L	0.14	
PeCDDs (total)	ND	ng/L	0.41	
HxCDDs (total)	ND	ng/L	0.49	
	% Recovery			
13C-2,3,7,8-TCDF	77			
13C-2,3,7,8-TCDD	80			
13C-1,2,3,7,8-PeCDD	91			
13C-1,2,3,6,7,8-HxCDD	90			

ND = Not detected
NA = Not applicable

Reported By: Emily Uebelhoer Approved By: Robert Hrabak

The cover letter is an integral part of this report.
Rev 230787

Quanterra
Environmental Services

APPENDIX IX DIOXINS/FURANS

LOW RESOLUTION

Client Name: Geraghty & Miller, Inc.
Client ID: FMGWMW58
Lab ID: 083254-0002-SA
Matrix: AQUEOUS Sampled: 28 JUL 95 Received: 02 AUG 95
Authorized: 02 AUG 95 Prepared: 14 AUG 95 Analyzed: 16 AUG 95

Sample Amount 0.973 L
Column Type DB-5

Parameter	Result	Units	Detection Limit	Data Qualifiers
Furans				
TCDFs (total)	ND	ng/L	0.47	
PeCDFs (total)	ND	ng/L	0.17	
HxCDFs (total)	ND	ng/L	0.27	
Dioxins				
TCDDs (total)	ND	ng/L	0.17	
2,3,7,8-TCDD	ND	ng/L	0.17	
PeCDDs (total)	ND	ng/L	0.32	
HxCDDs (total)	ND	ng/L	0.31	
	% Recovery			
13C-2,3,7,8-TCDF	83			
13C-2,3,7,8-TCDD	82			
13C-1,2,3,7,8-PeCDD	95			
13C-1,2,3,6,7,8-HxCDD	93			

ND = Not detected
NA = Not applicable

Reported By: Emily Uebelhoer Approved By: Robert Hrabak

The cover letter is an integral part of this report.
Rev 230787

Quanterra Environmental Services

APPENDIX IX DIOXINS/FURANS

LOW RESOLUTION

Client Name: Geraghty & Miller, Inc.
Client ID: FMGWMW7D
Lab ID: 083254-0003-SA
Matrix: AQUEOUS Sampled: 28 JUL 95 Received: 02 AUG 95
Authorized: 02 AUG 95 Prepared: 14 AUG 95 Analyzed: 16 AUG 95

Sample Amount 0.962 L
Column Type DB-5

Parameter	Result	Units	Detection Limit	Data Qualifiers
Furans				
TCDFs (total)	ND	ng/L	0.47	
PeCDFs (total)	ND	ng/L	0.22	
HxCDFs (total)	ND	ng/L	0.20	
Dioxins				
TCDDs (total)	ND	ng/L	0.18	
2,3,7,8-TCDD	ND	ng/L	0.18	
PeCDDs (total)	ND	ng/L	0.31	
HxCDDs (total)	ND	ng/L	0.31	
	% Recovery			
13C-2,3,7,8-TCDF	80			
13C-2,3,7,8-TCDD	83			
13C-1,2,3,7,8-PeCDD	96			
13C-1,2,3,6,7,8-HxCDD	95			

ND = Not detected
NA = Not applicable

Reported By: Emily Uebelhoer Approved By: Robert Hrabak

The cover letter is an integral part of this report.
Rev 230787

Quanterra
Environmental Services

APPENDIX IX DIOXINS/FURANS

LOW RESOLUTION

Client Name: Geraghty & Miller, Inc.
Client ID: FMGWMW59
Lab ID: 083254-0004-SA
Matrix: AQUEOUS Sampled: 28 JUL 95 Received: 02 AUG 95
Authorized: 02 AUG 95 Prepared: 14 AUG 95 Analyzed: 16 AUG 95

Sample Amount 0.920 L
Column Type DB-5

Parameter	Result	Units	Detection Limit	Data Qualifiers
Furans				
TCDFs (total)	ND	ng/L	0.42	
PeCDFs (total)	ND	ng/L	0.25	
HxCDFs (total)	ND	ng/L	0.45	
Dioxins				
TCDDs (total)	ND	ng/L	0.20	
2,3,7,8-TCDD	ND	ng/L	0.20	
PeCDDs (total)	ND	ng/L	0.28	
HxCDDs (total)	ND	ng/L	0.38	
	% Recovery			
13C-2,3,7,8-TCDF	87			
13C-2,3,7,8-TCDD	88			
13C-1,2,3,7,8-PeCDD	102			
13C-1,2,3,6,7,8-HxCDD	100			

ND = Not detected
NA = Not applicable

Reported By: Emily Uebelhoer Approved By: Robert Hrabak

The cover letter is an integral part of this report.
Rev 230787

Quanterra
Environmental Services

APPENDIX IX DIOXINS/FURANS

LOW RESOLUTION

Client Name: Geraghty & Miller, Inc.
Client ID: FMGWMW8S
Lab ID: 083254-0005-SA
Matrix: AQUEOUS Sampled: 01 AUG 95 Received: 02 AUG 95
Authorized: 02 AUG 95 Prepared: 14 AUG 95 Analyzed: 16 AUG 95

Sample Amount 0.950 L
Column Type DB-5

Parameter	Result	Units	Detection Limit	Data Qualifiers
Furans				
TCDFs (total)	ND	ng/L	0.36	
PeCDFs (total)	ND	ng/L	0.22	
HxCDFs (total)	ND	ng/L	0.42	
Dioxins				
TCDDs (total)	ND	ng/L	0.16	
2,3,7,8-TCDD	ND	ng/L	0.16	
PeCDDs (total)	ND	ng/L	0.38	
HxCDDs (total)	ND	ng/L	0.34	
	% Recovery			
13C-2,3,7,8-TCDF	87			
13C-2,3,7,8-TCDD	91			
13C-1,2,3,7,8-PeCDD	107			
13C-1,2,3,6,7,8-HxCDD	107			

ND = Not detected
NA = Not applicable

Reported By: Emily Uebelhoer Approved By: Robert Hrabak

The cover letter is an integral part of this report.
Rev 230787

Quanterra
Environmental Services

APPENDIX IX DIOXINS/FURANS

LOW RESOLUTION

Client Name: Geraghty & Miller, Inc.
Client ID: FMGWMW9S
Lab ID: 083254-0006-SA
Matrix: AQUEOUS Sampled: 02 AUG 95 Received: 03 AUG 95
Authorized: 02 AUG 95 Prepared: 14 AUG 95 Analyzed: 16 AUG 95

Sample Amount 0.974 L
Column Type DB-5

Parameter	Result	Units	Detection Limit	Data Qualifiers
Furans				
TCDFs (total)	ND	ng/L	0.15	w
PeCDFs (total)	ND	ng/L	0.39	
HxCDFs (total)	ND	ng/L	0.56	w
Dioxins				
TCDDs (total)	ND	ng/L	0.14	
2,3,7,8-TCDD	ND	ng/L	0.14	
PeCDDs (total)	ND	ng/L	0.32	
HxCDDs (total)	ND	ng/L	0.43	
	% Recovery			
13C-2,3,7,8-TCDF	66			
13C-2,3,7,8-TCDD	75			
13C-1,2,3,7,8-PeCDD	86			
13C-1,2,3,6,7,8-HxCDD	85			

Note w : EMPC - Estimated Maximum Possible Concentration.

ND = Not detected
NA = Not applicable

Reported By: Emily Uebelhoer Approved By: Robert Hrabak

The cover letter is an integral part of this report.
Rev 230787

Quanterra
Environmental Services

APPENDIX IX DIOXINS/FURANS

LOW RESOLUTION

Client Name: Geraghty & Miller, Inc.
Client ID: FMGWMW9D
Lab ID: 083254-0007-SA
Matrix: AQUEOUS Sampled: 02 AUG 95 Received: 03 AUG 95
Authorized: 02 AUG 95 Prepared: 14 AUG 95 Analyzed: 16 AUG 95

Sample Amount 0.975 L
Column Type DB-5

Parameter	Result	Units	Detection Limit	Data Qualifiers
Furans				
TCDFs (total)	ND	ng/L	0.64	
PeCDFs (total)	ND	ng/L	0.18	
HxCDFs (total)	ND	ng/L	0.23	
Dioxins				
TCDDs (total)	ND	ng/L	0.21	
2,3,7,8-TCDD	ND	ng/L	0.21	
PeCDDs (total)	ND	ng/L	0.66	
HxCDDs (total)	ND	ng/L	0.52	
	% Recovery			
13C-2,3,7,8-TCDF	72			
13C-2,3,7,8-TCDD	75			
13C-1,2,3,7,8-PeCDD	87			
13C-1,2,3,6,7,8-HxCDD	90			

ND = Not detected
NA = Not applicable

Reported By: Emily Uebelhoer Approved By: Robert Hrabak

The cover letter is an integral part of this report.
Rev 230787

Quanterra
Environmental Services

APPENDIX IX DIOXINS/FURANS

QUALITY CONTROL SUMMARY

Client Name: Geraghty & Miller, Inc.
Client ID: FMGWMW8S (MS)
Lab ID: 083254-0005-MS
Matrix: AQUEOUS Sampled: 01 AUG 95 Received: 02 AUG 95
Authorized: 02 AUG 95 Prepared: 14 AUG 95 Analyzed: 16 AUG 95

Sample Amount: 0.976 L

Parameters	ng Found in Sample	ng Spiked	ng Found in MS Sample	% Recovery
Furans				
2,3,7,8-TCDF	ND	10	12.0	120
2,3,4,7,8-PeCDF	ND	10	9.69	97
1,2,3,4,7,8-HxCDF	ND	10	10.7	107
Dioxins				
2,3,7,8-TCDD	ND	10	10.2	102
1,2,3,7,8-PeCDD	ND	10	9.78	98
1,2,3,4,7,8-HxCDD	ND	10	10.4	104

	% Recovery
13C-2,3,7,8-TCDF	79
13C-2,3,7,8-TCDD	86
13C-1,2,3,7,8-PeCDD	97
13C-1,2,3,6,7,8-HxCDD	95

NC=Not Calculated
ND=Not Detected
NA=Not Applicable

Reported by: Emily Uebelhoer Approved by: Robert Hrabak

The cover letter is an integral part of this report.
Version 070187

Quanterra
Environmental Services

APPENDIX IX DIOXINS/FURANS

QUALITY CONTROL SUMMARY

Client Name: Geraghty & Miller, Inc.
Client ID: FMGWMW8S (SD)
Lab ID: 083254-0005-SD
Matrix: AQUEOUS Sampled: 01 AUG 95 Received: 02 AUG 95
Authorized: 02 AUG 95 Prepared: 14 AUG 95 Analyzed: 16 AUG 95

Sample Amount: 0.984 L

Parameters	ng Found in Sample	ng Spiked	ng Found in MSD Sample	% Recovery
Furans				
2,3,7,8-TCDF	ND	10	12.0	120
2,3,4,7,8-PeCDF	ND	10	9.55	96
1,2,3,4,7,8-HxCDF	ND	10	10.1	101
Dioxins				
2,3,7,8-TCDD	ND	10	9.92	99
1,2,3,7,8-PeCDD	ND	10	9.92	99
1,2,3,4,7,8-HxCDD	ND	10	10.5	105

	% Recovery
13C-2,3,7,8-TCDF	84
13C-2,3,7,8-TCDD	90
13C-1,2,3,7,8-PeCDD	104
13C-1,2,3,6,7,8-HxCDD	105

NC=Not Calculated
ND=Not Detected
NA=Not Applicable

Reported by: Emily Uebelhoer Approved by: Robert Hrabak

The cover letter is an integral part of this report.
Version 070187

Quanterra
Environmental Services

QC LOT ASSIGNMENT REPORT
Special Services - Low Resolution Mass Spectrometry

Laboratory Sample Number	QC Matrix	QC Category	QC Lot Number (DCS)	QC Run Number (SCS/BLANK)
083254-0001-SA	AQUEOUS	DXNFUR-A	04 AUG 95-A	-
083254-0001-MB	AQUEOUS	DXNFUR-A	04 AUG 95-A	-
083254-0002-SA	AQUEOUS	DXNFUR-A	04 AUG 95-A	-
083254-0003-SA	AQUEOUS	DXNFUR-A	04 AUG 95-A	-
083254-0004-SA	AQUEOUS	DXNFUR-A	04 AUG 95-A	-
083254-0005-SA	AQUEOUS	DXNFUR-A	04 AUG 95-A	-
083254-0005-MS	AQUEOUS	DXNFUR-A	04 AUG 95-A	-
083254-0005-SD	AQUEOUS	DXNFUR-A	04 AUG 95-A	-
083254-0006-SA	AQUEOUS	DXNFUR-A	04 AUG 95-A	-
083254-0007-SA	AQUEOUS	DXNFUR-A	04 AUG 95-A	-

Quanterra
Environmental Services

DUPLICATE CONTROL SAMPLE REPORT
Special Services - Low Resolution Mass Spectrometry

Analyte	Concentration Spiked	Measured DCS1	Measured DCS2	AVG	Accuracy Average(%) DCS	Accuracy Limits	Precision (RPD) DCS	Precision Limit
Category: DXNFUR-A								
Matrix: AQUEOUS								
QC Lot: 04 AUG 95-A								
Concentration Units: ng/sample								
2,3,7,8-TCDF	10	12.0	12.0	12.0	120	62-129	0.0	18.0
2,3,4,7,8-PeCDF	10	9.77	9.57	9.67	97	51-132	2.1	24.0
1,2,3,4,7,8-HxCDF	10	10.3	10.1	10.2	102	50-146	2.0	41.0
1,2,3,4,6,7,8-HpCDF	10	10.3	9.93	10.1	101	50-150	3.7	50.0
OCDF	50	56.9	54.0	55.4	111	50-150	5.2	28.0
2,3,7,8-TCDD	10	10.3	10.4	10.4	104	57-128	1.0	20.0
1,2,3,7,8-PeCDD	10	10.6	9.81	10.2	102	80-125	7.7	25.0
1,2,3,4,7,8-HxCDD	10	10.5	10.5	10.5	105	64-127	0.0	23.0
1,2,3,4,6,7,8-HpCDD	10	10.4	10.2	10.3	103	60-131	1.9	23.0
OCDD	50	50.8	48.2	49.5	99	50-147	5.3	20.0

Calculations are performed before rounding to avoid round-off errors in calculated results.