OHM Remediation
Services Corp.
A Subsidiary of OHM Corporation

January 15, 1996

Mr. Joe Cosentino
USEPA, Region II
2890 Woodbridge Avenue
Edison, New Jersey 08837

RE: Delivery Order 2001-02-039; Bayonne Barrel and Drum

Dear Mr. Cosentino:

Enclosed is one copy of the analytical results performed for the above referenced project. If you have any questions, please contact me at 609-588-6395.

Sincerely,

Thomas P. O'Hara/RB

Thomas P. O'Hara
Program Manager,
ERCS Region II

TPO:rb

Enclosure

pc: OHM Project 16441

343083

200 Horizon Center Boulevard ■ Trenton, New Jersey 08691-1904 ■ 609-584-8900

OHM Remediation Services Corp.
A Subsidiary of OHM Corporation

ANALYTICAL DIVISION

Laboratory Analysis

Report(s) #619344

Client: OHM Remediation Services Corp.
Eastern Region (Trenton, NJ)

Attn: Tom O'Hara
Steve Wurzburger

Project: 16441E - Bayonne Barrel & Drum, Newark, NJ

Sample(s) Received: December 7, 1995
Order Received: December 7, 1995

Data Due: December 14, 1995
Data Reported: December 15, 1995

This report is "PROPRIETARY AND CONFIDENTIAL" and delivered to, and intended for the exclusive use of the above named client only. OHM Remediation Services Corp., Analytical Division, assumes no responsibility or liability for the reliance hereon or use hereof by anyone other than the above named client.

Reviewed and Approved by: for
Thomas E. Gran, Ph.D., Vice President

Date: December 26, 1995

16406 U.S. Route 224 East ■ P.O. Box 551 ■ Findlay, OH 45839-0551 ■ 419-423-3526

PROJECT NARRATIVE

The following items relate to the samples and analytical data contained in this report.

- All solid sample results are reported on a "wet weight" basis.
- The identity of all pesticide and herbicide compounds were confirmed by secondary column analysis.
- Note any comments at the bottom of the tables in Appendices B and C.
- Matrix spike recoveries were outside QC limits for Batches #Q2C51852, #Q2V4836 and #Q7P51872 due to sample matrix interferences and/or high levels of target analytes present in the unspiked sample. Batch acceptance is based on method spike recoveries which are within QC limits.
- Due to high levels of target analytes present in the unspiked sample, matrix spike recoveries are not available for Batch #Q2P51854P. Batch acceptance is based on method spike recoveries which are within QC limits.
- Surrogate recoveries are not available for some parameters due to dilution as a result of high levels of target analytes present in the sample(s).
- Surrogate recoveries that are outside QC limits due to sample matrix interferences. This matrix effect was confirmed by replicate analysis.
- The TOX analysis, Method #9022, was subcontracted to Thermo Analytical, Ypsilanti, Michigan.

The following relate to the timeliness and completeness of the analytical data reported:

- Data was reported to Mr. Tom O'Hara on Friday, December 15, 1995. All data was not available within the required time frame. Sample matrix interferences needed to be confirmed before data could be released.

SAMPLE INFORMATION SUMMARY

Sample Id	Lab Id	Sample Date	Matrix	Method	QC Batch #	Prep Date	Analysis Date	Hold Met	Run #	Analyst
TANK6	JP1142	12/06/95	Solid	1.7.1.1			12/08/95	N/A		Knapke J.
			Solid	1020			12/11/95	YES		Henschen S.
			Solid	1311		12/08/95	N/A	YES		Lucy R.
			Solid	1311-ZHE		12/08/95	N/A	YES		Lucy R.
			Solid	160.3			12/08/95	N/A		Henschen S.
			Solid	5050/300.0	Q2O405	12/08/95	12/08/95	YES	^I9699	Dew M.
			Solid	6010	Q2M7426	12/11/95	12/12/95	YES	IM9651	Baumgartner J.
			Leachate	6010	Q7M7430	12/13/95	12/14/95	YES	IM9707	Baumgartner J.
			Solid	7.3.3.2	Q2I4862	12/11/95	12/11/95	YES	I57627	Henschen S.
			Solid	7.3.4.2	Q2I4861	12/11/95	12/11/95	YES	I57633	Henschen S.
			Leachate	7470	Q7G7423	12/11/95	12/11/95	YES	I57623	Henschen S.
			Solid	7471	Q2G7419	12/08/95	12/08/95	YES	I57582	Henschen S.
			Solid	8080	Q2P51854P	12/08/95	12/12/95	YES	ZF1679	Schock R.
			Leachate	8080	Q7P51872	12/09/95	12/13/95	YES	ZF1735	Kunselman A.
			Solid	8150	Q2H51853	12/08/95	12/10/95	YES	^H3176	DeLong W.
			Leachate	8150	Q7H51871	12/09/95	12/12/95	YES	^H3185	DeLong W.
			Leachate	8240	Q7V4829	12/09/95	12/09/95	YES	A5572	Knieriem G.
			Solid	8240	Q2V4836	12/14/95	12/14/95	YES	A5631	Kelly J.
			Leachate	8270	Q7C51869	12/09/95	12/11/95	YES	B9063	Bigelow K.
			Solid	8270	Q2C51852	12/08/95	12/12/95	YES	B9088	Bigelow K.
			Solid	9010	N2I4872	12/12/95	12/12/95	YES	I57679	Henschen S.
			Solid	9095			12/08/95	YES		Knapke J.
			Solid	D240-76			12/08/95	YES		Henschen S.
			Solid	D482-95			12/09/95	YES		Knapke J.

APPENDIX A

DATA SUMMARY REPORT

DATA SUMMARY REPORT

DATE: 12/15/95

PAGE: 1

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: TANK6
ASC Sample Number: JP1142
Sample Date: 951206
Facility Code: 016441E

Parameters	Units	
Volatile Tentatively Identified Compounds , GC/MS, (CL1E)		
Benzene, 1,2,4,5-tetramethyl-	mg/kg	97.2 J
Benzene, 1-ethyl-2,3-dimethyl-	mg/kg	91.9 J
Benzene, 1-ethyl-2-methyl-	mg/kg	62.0 J
Benzene, 1-methyl-2-(1-methyle	mg/kg	93.8 J
Benzene, 1-methyl-3-propyl-	mg/kg	81.9 J
Benzene, 1-methyl-4-(2-propeny	mg/kg	104 J
Benzene, 4-ethyl-1,2-dimethyl-	mg/kg	70.6 J
Limonene	mg/kg	105 J
Unk hydrocarbon	mg/kg	192 J
Unk substituted aromatic	mg/kg	78.5 J

Sample Point ID: TANK6
ASC Sample Number: JP1142
Sample Date: 951206
Facility Code: 016441E

Parameters	Units	
Semivolatile Tentatively Identified Compounds, GC/MS, (CL1F)		
1,2,4-Trimethylbenzene	mg/kg	169 J
1-Hexanol, 2-ethyl-	mg/kg	202 J
Benzene, 1,2,4,5-tetramethyl-	mg/kg	96.8 J
Benzene, 1-methyl-2-(1-methyle	mg/kg	162 J
Cyclohexanol, 2-methyl-5-(1-me	mg/kg	363 J
Decane	mg/kg	195 J
Heptadecane	mg/kg	210 J
Hexadecane	mg/kg	238 J
Hexadecanoic acid	mg/kg	224 J
Octadecane	mg/kg	112 J
Oleic Acid	mg/kg	516 J
Pentadecane	mg/kg	226 J
Phosphoric acid tributyl ester	mg/kg	202 J
Tetradecane	mg/kg	221 J
Tridecane	mg/kg	75.5 J

DATA SUMMARY REPORT

DATE: 12/15/95

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: TANK6
ASC Sample Number: JP1142
Sample Date: 951206
Facility Code: 016441E

Parameters	Units	
Semivolatile Tentatively Identified Compounds, GC/MS, (CL1F)		
Undecane	mg/kg	308 J
Unk hydrocarbon	mg/kg	171 J
unknown	mg/kg	121 J
unknown	mg/kg	152 J
unknown	mg/kg	127 J

Sample Point ID: TANK6
ASC Sample Number: JP1142
Sample Date: 951206
Facility Code: 016441E

Parameters	Units	
Conventional Data (CV10)		
Ash	%	27.0
BTU/lb	BTU/lb	9590
Cyanide, Total	mg/kg	<.719
Flash Point, Seta Flash	Deg C	>93
Free Liquid	%	PASS
Reactive Cyanide	mg/kg	<10.0
Reactive Sulfide	mg/kg	6800
Solids, Total	%	68.2
Sulfur, Total as S	mg/kg	11100
Total Organic Halides (TOX)	mg/kg	2050
pH (Electrode)	std	7.69

DATA SUMMARY REPORT

DATE: 12/15/95

PAGE: 3

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: TANK6
ASC Sample Number: JP1142
Sample Date: 951206
Facility Code: 016441E

Parameters	Units	
Total Herbicide Analysis, GC, (GS02)		
2,4-D	mg/kg	.559
2,4,5-T	mg/kg	1.04
2,4,5-TP (Silvex)	mg/kg	<.086

Sample Point ID: TANK6
ASC Sample Number: JP1142
Sample Date: 951206
Facility Code: 016441E

Parameters	Units	
Total Pesticide and PCB Analysis, GC, (GS05)		
Aldrin	mg/kg	<.329
Alpha-BHC	mg/kg	<.329
Beta-BHC	mg/kg	<.329
Chlordane	mg/kg	<3.29
4,4'-DDD	mg/kg	<.329
4,4'-DDE	mg/kg	11.4
4,4'-DDT	mg/kg	14.0
Delta-BHC	mg/kg	<.329
Dieldrin	mg/kg	<.329
Endosulfan sulfate	mg/kg	<.329
Endosulfan I	mg/kg	4.18
Endosulfan II	mg/kg	2.01
Endrin	mg/kg	<.329
Endrin aldehyde	mg/kg	<.329
Endrin ketone	mg/kg	<.329
Gamma-BHC (Lindane)	mg/kg	<.329
Heptachlor	mg/kg	<.329
Heptachlor epoxide	mg/kg	4.34
Methoxychlor	mg/kg	<.329
Toxaphene	mg/kg	<6.58
Aroclor 1016	mg/kg	<3.29
Aroclor 1221	mg/kg	<3.29

DATA SUMMARY REPORT

DATE: 12/15/95

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: TANK6
ASC Sample Number: JP1142
Sample Date: 951206
Facility Code: 016441E

Parameters	Units	
Total Pesticide and PCB Analysis, GC, (GS05)		
Aroclor 1232	mg/kg	<3.29
Aroclor 1242	mg/kg	<3.29
Aroclor 1248	mg/kg	<3.29
Aroclor 1254	mg/kg	<3.29
Aroclor 1260	mg/kg	<3.29

Sample Point ID: TANK6
ASC Sample Number: JP1142
Sample Date: 951206
Facility Code: 016441E

Parameters	Units	
RCRA TCLP Leachate Herbicide Analysis, GC, (GS52)		
2,4-D	mg/L	<.250
2,4,5-TP (Silvex)	mg/L	<.250

Sample Point ID: TANK6
ASC Sample Number: JP1142
Sample Date: 951206
Facility Code: 016441E

Parameters	Units	
RCRA TCLP Leachate Pesticide Analysis, GC, (GS54)		
Chlordane	mg/L	<.020
Endrin	mg/L	<.002
Heptachlor	mg/L	<.002
Heptachlor epoxide	mg/L	<.002
Methoxychlor	mg/L	<.002
Toxaphene	mg/L	<.040
Gamma-BHC (Lindane)	mg/L	<.002

DATA SUMMARY REPORT

DATE: 12/15/95

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: TANK6
ASC Sample Number: JP1142
Sample Date: 951206
Facility Code: 016441E

RCRA TCLP Leachate Pesticide Analysis, GC, (GS54)

Parameters	Units	
alpha-Chlordane	mg/L	<.002
gamma-Chlordane	mg/L	.002

Sample Point ID: TANK6
ASC Sample Number: JP1142
Sample Date: 951206
Facility Code: 016441E

Target Analyte List Total Metals Analysis, (ME20)

Parameters	Units	
Aluminum	mg/kg	1270
Antimony	mg/kg	36.4
Arsenic	mg/kg	<10.0
Barium	mg/kg	1080
Beryllium	mg/kg	<4.00
Cadmium	mg/kg	39.9
Calcium	mg/kg	1950
Chromium	mg/kg	275
Cobalt	mg/kg	54.5
Copper	mg/kg	283
Iron	mg/kg	45300
Lead	mg/kg	1930
Magnesium	mg/kg	412
Manganese	mg/kg	185
Mercury	mg/kg	7.75
Nickel	mg/kg	19.7
Potassium	mg/kg	<200
Selenium	mg/kg	<10.0
Silver	mg/kg	<4.00
Sodium	mg/kg	1220
Thallium	mg/kg	12.2
Vanadium	mg/kg	6.67
Zinc	mg/kg	1110

DATA SUMMARY REPORT

DATE: 12/15/95

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: TANK6
ASC Sample Number: JP1142
Sample Date: 951206
Facility Code: 016441E

Parameters	Units	
Target Analyte List Total Metals Analysis, (ME20)		
Molybdenum	mg/kg	47.0

Sample Point ID: TANK6
ASC Sample Number: JP1142
Sample Date: 951206
Facility Code: 016441E

Parameters	Units	
RCRA TCLP Leachate Metals Analysis, (ME52)		
Arsenic	mg/L	<.100
Barium	mg/L	1.53
Cadmium	mg/L	.005
Chromium	mg/L	<.020
Lead	mg/L	.152
Mercury	mg/L	.0002
Selenium	mg/L	<.100
Silver	mg/L	<.020

Sample Point ID: TANK6
ASC Sample Number: JP1142
Sample Date: 951206
Facility Code: 016441E

Parameters	Units	
Total Base/Neutral/Acid Analysis, MS, (MS02)		
Acenaphthene	mg/kg	<32.8
Acenaphthylene	mg/kg	<32.8
Anthracene	mg/kg	<32.8
Benzidine	mg/kg	<32.8
Benzo(a)anthracene	mg/kg	<32.8

DATA SUMMARY REPORT

DATE: 12/15/95

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: TANK6
ASC Sample Number: JP1142
Sample Date: 951206
Facility Code: 016441E

Parameters	Units	
Total Base/Neutral/Acid Analysis, MS, (MS02)		
Benzo(b)fluoranthene	mg/kg	<32.8
Benzo(k)fluoranthene	mg/kg	<32.8
Benzo(ghi)perylene	mg/kg	<32.8
Benzo(a)pyrene	mg/kg	<32.8
bis(2-Chloroethyl) ether	mg/kg	<32.8
bis(2-Chloroethoxy)methane	mg/kg	<32.8
bis(2-Chloroisopropyl)ether	mg/kg	<32.8
bis(2-Ethylhexyl)phthalate	mg/kg	183
4-Bromophenyl phenyl ether	mg/kg	<32.8
Butyl benzyl phthalate	mg/kg	68.5
Carbazole	mg/kg	<32.8
4-Chloroaniline	mg/kg	<32.8
p-Chloro-m-cresol	mg/kg	<32.8
2-Chloronaphthalene	mg/kg	<32.8
2-Chlorophenol	mg/kg	<32.8
4-Chlorophenyl phenyl ether	mg/kg	<32.8
Chrysene	mg/kg	<32.8
Dibenzo(a,h)anthracene	mg/kg	<32.8
Dibenzofuran	mg/kg	<32.8
Di-n-butyl phthalate	mg/kg	<32.8
1,2-Dichlorobenzene	mg/kg	73.1
1,3-Dichlorobenzene	mg/kg	<32.8
1,4-Dichlorobenzene	mg/kg	<32.8
3,3'-Dichlorobenzidine	mg/kg	<32.8
2,4-Dichlorophenol	mg/kg	<32.8
Diethyl phthalate	mg/kg	<32.8
Dimethyl phthalate	mg/kg	<32.8
2,4-Dimethylphenol	mg/kg	<32.8
4,6-Dinitro-o-cresol	mg/kg	<82.0
2,4-Dinitrophenol	mg/kg	<164
2,4-Dinitrotoluene	mg/kg	<32.8
2,6-Dinitrotoluene	mg/kg	<32.8
Di-n-octyl phthalate	mg/kg	<32.8
Fluoranthene	mg/kg	<32.8
Fluorene	mg/kg	<32.8

DATA SUMMARY REPORT

DATE: 12/15/95

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: TANK6
ASC Sample Number: JP1142
Sample Date: 951206
Facility Code: 016441E

Parameters	Units	
Total Base/Neutral/Acid Analysis, MS, (MS02)		
Hexachlorobenzene	mg/kg	<32.8
Hexachlorobutadiene	mg/kg	<32.8
Hexachlorocyclopentadiene	mg/kg	<32.8
Hexachloroethane	mg/kg	<32.8
Indeno(1,2,3-cd)pyrene	mg/kg	<32.8
Isophorone	mg/kg	<32.8
2-Methylnaphthalene	mg/kg	45.2
2-Methylphenol	mg/kg	<32.8
4-Methylphenol	mg/kg	<32.8
N-Nitrosodimethylamine	mg/kg	<32.8
N-Nitrosodi-n-propylamine	mg/kg	<32.8
N-Nitrosodiphenylamine	mg/kg	<32.8
Naphthalene	mg/kg	100
2-Nitroaniline	mg/kg	<32.8
3-Nitroaniline	mg/kg	<32.8
4-Nitroaniline	mg/kg	<32.8
Nitrobenzene	mg/kg	<32.8
2-Nitrophenol	mg/kg	<32.8
4-Nitrophenol	mg/kg	<164
Pentachlorophenol	mg/kg	<32.8
Phenanthrene	mg/kg	<32.8
Phenol	mg/kg	<32.8
Pyrene	mg/kg	<32.8
Pyridine	mg/kg	<32.8
1,2,4-Trichlorobenzene	mg/kg	104
2,4,5-Trichlorophenol	mg/kg	<32.8
2,4,6-Trichlorophenol	mg/kg	<32.8

DATA SUMMARY REPORT

DATE: 12/15/95

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: TANK6
ASC Sample Number: JP1142
Sample Date: 951206
Facility Code: 016441E

RCRA TCLP Leachate Base/Neutral/Acid Analysis, MS, (MS52)

Parameters	Units	
2,4-Dinitrotoluene	mg/L	<.500
Hexachlorobenzene	mg/L	<.500
Hexachloroethane	mg/L	<.500
Hexachlorobutadiene	mg/L	<.500
2-Methylphenol	mg/L	<.500
4-Methylphenol	mg/L	1.57
Nitrobenzene	mg/L	<.500
Pentachlorophenol	mg/L	<.500
Pyridine	mg/L	<.500
2,4,5-Trichlorophenol	mg/L	<.500
2,4,6-Trichlorophenol	mg/L	<.500

Sample Point ID: TANK6
ASC Sample Number: JP1142
Sample Date: 951206
Facility Code: 016441E

Total Volatile Analysis, MS, (MV00)

Parameters	Units	
Acetone	mg/kg	<119
Acrolein	mg/kg	<298
Acrylonitrile	mg/kg	<59.6
Benzene	mg/kg	<59.6
Bromoform	mg/kg	<59.6
Carbon disulfide	mg/kg	<59.6
Carbon tetrachloride	mg/kg	<59.6
Chlorobenzene	mg/kg	<59.6
Chlorodibromomethane	mg/kg	<59.6
Chloroethane	mg/kg	<59.6
Chloroform	mg/kg	<59.6
2-Chloroethylvinyl ether	mg/kg	<59.6
Dichlorobromomethane	mg/kg	<59.6
1,1-Dichloroethane	mg/kg	<59.6

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: TANK6
ASC Sample Number: JP1142
Sample Date: 951206
Facility Code: 016441E

Parameters	Units	
Total Volatile Analysis, MS, (MV00)		
1,2-Dichloroethane	mg/kg	<59.6
1,1-Dichloroethylene	mg/kg	<59.6
1,2-Dichloropropane	mg/kg	<59.6
cis-1,3-Dichloropropylene	mg/kg	<59.6
trans-1,3-Dichloropropylene	mg/kg	<59.6
Ethylbenzene	mg/kg	197
Ethylene dibromide	mg/kg	<59.6
Ethyl acetate	mg/kg	<238
Ethyl ether	mg/kg	<59.6
2-Hexanone	mg/kg	<59.6
Methyl bromide	mg/kg	<59.6
Methyl chloride	mg/kg	<59.6
Methylene chloride	mg/kg	<59.6
Methyl ethyl ketone	mg/kg	<59.6
Methyl-iso-butyl ketone	mg/kg	<119
Styrene	mg/kg	293
1,1,2,2-Tetrachloroethane	mg/kg	<59.6
Tetrachloroethylene	mg/kg	<59.6
Toluene	mg/kg	938
1,1,1-Trichloroethane	mg/kg	<59.6
1,1,2-Trichloroethane	mg/kg	<59.6
Trichloroethylene	mg/kg	<59.6
1,2-Trans-dichloroethylene	mg/kg	<59.6
Trichlorofluoromethane	mg/kg	<59.6
1,1,2-Trichlorotrifluoroethane	mg/kg	<119
Vinyl chloride	mg/kg	<59.6
Xylenes	mg/kg	1010

DATA SUMMARY REPORT

DATE: 12/15/95

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: TANK6
ASC Sample Number: JP1142
Sample Date: 951206
Facility Code: 016441E

RCRA TCLP Leachate (ZHE) Volatile Analysis, MS, (MV50)

Parameters	Units	
Benzene	mg/L	.130
Carbon tetrachloride	mg/L	<.125
Chlorobenzene	mg/L	.370
Chloroform	mg/L	<.125
1,4-Dichlorobenzene	mg/L	<.125
1,2-Dichloroethane	mg/L	<.125
1,1-Dichloroethylene	mg/L	<.125
Methyl ethyl ketone	mg/L	<.125
Tetrachloroethylene	mg/L	<.125
Trichloroethylene	mg/L	.155
Vinyl chloride	mg/L	<.125

APPENDIX B

QUANTITATIVE RESULTS

CONVENTIONAL DATA (CV10)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	016441E	TANK6	JP1142

Compounds		Sample Results	Detection Limits	Blank Results	Batch Number
Ash	%	27.0	.100	-	
BTU/lb	BTU/lb	9590	200	-	
Cyanide, Total	mg/kg	ND	.719	ND	N2I4872
Free Liquid	%	PASS	1.00	-	
Reactive Cyanide	mg/kg	ND	10.0	ND	Q2I4862
Reactive Sulfide	mg/kg	6800	20.0	ND	Q2I4861
Solids, Total	%	68.2	.100	-	
Total Organic Halides (TOX)	mg/kg	2050	50.0	ND	SUBTMA
pH (Electrode)	std	7.69	-	-	
Flash Point, Seta Flash	Deg C	>93	-	-	
Sulfur, Total as S	mg/kg	11100	532	ND	Q2O405

TARGET ANALYTE LIST TOTAL METALS ANALYSIS, (ME20)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	016441E	TANK6	JP1142

Compounds	Sample Results mg/kg	Detection Limits mg/kg	Blank Results mg/kg	Batch Number
Aluminum	1270	20.0	ND	Q2M7426
Antimony	36.4	8.00	ND	Q2M7426
Arsenic	ND	10.0	ND	Q2M7426
Barium	1080	4.00	ND	Q2M7426
Beryllium	ND	4.00	ND	Q2M7426
Cadmium	39.9	4.00	ND	Q2M7426
Calcium	1950	100	ND	Q2M7426
Chromium	275	4.00	ND	Q2M7426
Cobalt	54.5	4.00	ND	Q2M7426
Copper	283	4.00	ND	Q2M7426
Iron	45300	25.0	ND	Q2M7426
Lead	1930	8.00	ND	Q2M7426
Magnesium	412	100	ND	Q2M7426
Manganese	185	4.00	ND	Q2M7426
Mercury	7.75	.686	ND	Q2G7419
Nickel	19.7	4.00	ND	Q2M7426
Potassium	ND	200	ND	Q2M7426
Selenium	ND	10.0	ND	Q2M7426
Silver	ND	4.00	ND	Q2M7426
Sodium	1220	100	ND	Q2M7426
Thallium	12.2	10.0	ND	Q2M7426
Vanadium	6.67	4.00	ND	Q2M7426
Zinc	1110	4.00	ND	Q2M7426
Molybdenum	47.0	4.00	ND	Q2M7426

TOTAL HERBICIDE ANALYSIS, GC, (GS02)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	016441E	TANK6	JP1142

Compounds	Sample Results mg/kg	Detection Limits mg/kg	Blank Results mg/kg	Batch Number
2,4-D	.559	.086	ND	Q2H51853
2,4,5-T	1.04	.086	ND	Q2H51853
2,4,5-TP (Silvex)	ND	.086	ND	Q2H51853

TOTAL PESTICIDE AND PCB ANALYSIS, GC, (GS05)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	016441E	TANK6	JP1142

Compounds	Sample Results mg/kg	Detection Limits mg/kg	Blank Results mg/kg	Batch Number
Aldrin	ND	.329	ND	Q2P51854P
Alpha-BHC	ND	.329	ND	Q2P51854P
Beta-BHC	ND	.329	ND	Q2P51854P
Chlordane	ND	3.29	ND	Q2P51854P
4,4'-DDD	ND	.329	ND	Q2P51854P
4,4'-DDE	11.4	.329	ND	Q2P51854P
4,4'-DDT	14.0	.329	ND	Q2P51854P
Delta-BHC	ND	.329	ND	Q2P51854P
Dieldrin	ND	.329	ND	Q2P51854P
Endosulfan sulfate	ND	.329	ND	Q2P51854P
Endosulfan I	4.18	.329	ND	Q2P51854P
Endosulfan II	2.01	.329	ND	Q2P51854P
Endrin	ND	.329	ND	Q2P51854P
Endrin aldehyde	ND	.329	ND	Q2P51854P
Endrin ketone	ND	.329	ND	Q2P51854P
Gamma-BHC (Lindane)	ND	.329	ND	Q2P51854P
Heptachlor	ND	.329	ND	Q2P51854P
Heptachlor epoxide	4.34	.329	ND	Q2P51854P
Methoxychlor	ND	.329	ND	Q2P51854P
Toxaphene	ND	6.58	ND	Q2P51854P
Aroclor 1016	ND	3.29	ND	Q2P51854P
Aroclor 1221	ND	3.29	ND	Q2P51854P
Aroclor 1232	ND	3.29	ND	Q2P51854P
Aroclor 1242	ND	3.29	ND	Q2P51854P
Aroclor 1248	ND	3.29	ND	Q2P51854P
Aroclor 1254	ND	3.29	ND	Q2P51854P
Aroclor 1260	ND	3.29	ND	Q2P51854P

TOTAL BASE/NEUTRAL/ACID ANALYSIS, MS, (MS02)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	016441E	TANK6	JP1142

Compounds	Sample Results mg/kg	Detection Limits mg/kg	Blank Results mg/kg	Batch Number
Acenaphthene	ND	32.8	ND	Q2C51852
Acenaphthylene	ND	32.8	ND	Q2C51852
Anthracene	ND	32.8	ND	Q2C51852
Benzidine	ND	32.8	ND	Q2C51852
Benzo(a)anthracene	ND	32.8	ND	Q2C51852
Benzo(b)fluoranthene	ND	32.8	ND	Q2C51852
Benzo(k)fluoranthene	ND	32.8	ND	Q2C51852
Benzo(ghi)perylene	ND	32.8	ND	Q2C51852
Benzo(a)pyrene	ND	32.8	ND	Q2C51852
bis(2-Chloroethyl) ether	ND	32.8	ND	Q2C51852
bis(2-Chloroethoxy)methane	ND	32.8	ND	Q2C51852
bis(2-Chloroisopropyl)ether	ND	32.8	ND	Q2C51852
bis(2-Ethylhexyl)phthalate	183	32.8	ND	Q2C51852
4-Bromophenyl phenyl ether	ND	32.8	ND	Q2C51852
Butyl benzyl phthalate	68.5	32.8	ND	Q2C51852
Carbazole	ND	32.8	ND	Q2C51852
4-Chloroaniline	ND	32.8	ND	Q2C51852
p-Chloro-m-cresol	ND	32.8	ND	Q2C51852
2-Chloronaphthalene	ND	32.8	ND	Q2C51852
2-Chlorophenol	ND	32.8	ND	Q2C51852
4-Chlorophenyl phenyl ether	ND	32.8	ND	Q2C51852
Chrysene	ND	32.8	ND	Q2C51852
Dibenzo(a,h)anthracene	ND	32.8	ND	Q2C51852
Dibenzofuran	ND	32.8	ND	Q2C51852
Di-n-butyl phthalate	ND	32.8	ND	Q2C51852
1,2-Dichlorobenzene	73.1	32.8	ND	Q2C51852
1,3-Dichlorobenzene	ND	32.8	ND	Q2C51852
1,4-Dichlorobenzene	ND	32.8	ND	Q2C51852
3,3'-Dichlorobenzidine	ND	32.8	ND	Q2C51852
2,4-Dichlorophenol	ND	32.8	ND	Q2C51852
Diethyl phthalate	ND	32.8	ND	Q2C51852
Dimethyl phthalate	ND	32.8	ND	Q2C51852
2,4-Dimethylphenol	ND	32.8	ND	Q2C51852
4,6-Dinitro-o-cresol	ND	82.0	ND	Q2C51852
2,4-Dinitrophenol	ND	164	ND	Q2C51852
2,4-Dinitrotoluene	ND	32.8	ND	Q2C51852
2,6-Dinitrotoluene	ND	32.8	ND	Q2C51852
Di-n-octyl phthalate	ND	32.8	ND	Q2C51852
Fluoranthene	ND	32.8	ND	Q2C51852
Fluorene	ND	32.8	ND	Q2C51852
Hexachlorobenzene	ND	32.8	ND	Q2C51852
Hexachlorobutadiene	ND	32.8	ND	Q2C51852
Hexachlorocyclopentadiene	ND	32.8	ND	Q2C51852
Hexachloroethane	ND	32.8	ND	Q2C51852
Indeno(1,2,3-cd)pyrene	ND	32.8	ND	Q2C51852
Isophorone	ND	32.8	ND	Q2C51852
2-Methylnaphthalene	45.2	32.8	ND	Q2C51852
2-Methylphenol	ND	32.8	ND	Q2C51852
4-Methylphenol	ND	32.8	ND	Q2C51852
N-Nitrosodimethylamine	ND	32.8	ND	Q2C51852

TOTAL BASE/NEUTRAL/ACID ANALYSIS, MS, (MS02)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	016441E	TANK6	JP1142

Compounds	Sample Results mg/kg	Detection Limits mg/kg	Blank Results mg/kg	Batch Number
N-Nitrosodi-n-propylamine	ND	32.8	ND	Q2C51852
N-Nitrosodiphenylamine	ND	32.8	ND	Q2C51852
Naphthalene	100	32.8	ND	Q2C51852
2-Nitroaniline	ND	32.8	ND	Q2C51852
3-Nitroaniline	ND	32.8	ND	Q2C51852
4-Nitroaniline	ND	32.8	ND	Q2C51852
Nitrobenzene	ND	32.8	ND	Q2C51852
2-Nitrophenol	ND	32.8	ND	Q2C51852
4-Nitrophenol	ND	164	ND	Q2C51852
Pentachlorophenol	ND	32.8	ND	Q2C51852
Phenanthrene	ND	32.8	ND	Q2C51852
Phenol	ND	32.8	ND	Q2C51852
Pyrene	ND	32.8	ND	Q2C51852
Pyridine	ND	32.8	ND	Q2C51852
1,2,4-Trichlorobenzene	104	32.8	ND	Q2C51852
2,4,5-Trichlorophenol	ND	32.8	ND	Q2C51852
2,4,6-Trichlorophenol	ND	32.8	ND	Q2C51852

3-Methyl- and 4-Methylphenol coelute and are reported as the total

SEMIVOLATILE TENTATIVELY IDENTIFIED COMPOUNDS, GC/MS, (CL1F)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	016441E	TANK6	JP1142

Compounds	Sample Results mg/kg	Detection Limits mg/kg	Blank Results mg/kg	Batch Number
unknown	121	-	-	Q2C51852
unknown	152	-	-	Q2C51852
unknown	127	-	-	Q2C51852
Unk hydrocarbon	171	-	-	Q2C51852
Oleic Acid	516	-	-	Q2C51852
Cyclohexanol, 2-methyl-5-(1-me	363	-	-	Q2C51852
Hexadecane	238	-	-	Q2C51852
Octadecane	112	-	-	Q2C51852
Benzene, 1-methyl-2-(1-methyle	162	-	-	Q2C51852
Tetradecane	221	-	-	Q2C51852
Decane	195	-	-	Q2C51852
Tridecane	75.5	-	-	Q2C51852
1-Hexanol, 2-ethyl-	202	-	-	Q2C51852
Heptadecane	210	-	-	Q2C51852
Phosphoric acid tributyl ester	202	-	-	Q2C51852
Pentadecane	226	-	-	Q2C51852
Undecane	308	-	-	Q2C51852
Benzene, 1,2,4,5-tetramethyl-	96.8	-	-	Q2C51852
1,2,4-Trimethylbenzene	169	-	-	Q2C51852
Hexadecanoic acid	224	-	-	Q2C51852

The results listed above for the Tentatively Identified Compounds are considered estimated concentrations since a 1:1 response is assumed.

TOTAL VOLATILE ANALYSIS, MS, (MV00)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	016441E	TANK6	JP1142

Compounds	Sample Results mg/kg	Detection Limits mg/kg	Blank Results mg/kg	Batch Number
Acetone	ND	119	ND	Q2V4836
Acrolein	ND	298	ND	Q2V4836
Acrylonitrile	ND	59.6	ND	Q2V4836
Benzene	ND	59.6	ND	Q2V4836
Bromoform	ND	59.6	ND	Q2V4836
Carbon disulfide	ND	59.6	ND	Q2V4836
Carbon tetrachloride	ND	59.6	ND	Q2V4836
Chlorobenzene	ND	59.6	ND	Q2V4836
Chlorodibromomethane	ND	59.6	ND	Q2V4836
Chloroethane	ND	59.6	ND	Q2V4836
Chloroform	ND	59.6	ND	Q2V4836
2-Chloroethylvinyl ether	ND	59.6	ND	Q2V4836
Dichlorobromomethane	ND	59.6	ND	Q2V4836
1,1-Dichloroethane	ND	59.6	ND	Q2V4836
1,2-Dichloroethane	ND	59.6	ND	Q2V4836
1,1-Dichloroethylene	ND	59.6	ND	Q2V4836
1,2-Dichloropropane	ND	59.6	ND	Q2V4836
cis-1,3-Dichloropropylene	ND	59.6	ND	Q2V4836
trans-1,3-Dichloropropylene	ND	59.6	ND	Q2V4836
Ethylbenzene	197	59.6	ND	Q2V4836
Ethylene dibromide	ND	59.6	ND	Q2V4836
Ethyl acetate	ND	238	ND	Q2V4836
Ethyl ether	ND	59.6	ND	Q2V4836
2-Hexanone	ND	59.6	ND	Q2V4836
Methyl bromide	ND	59.6	ND	Q2V4836
Methyl chloride	ND	59.6	.263	Q2V4836
Methylene chloride	ND	59.6	ND	Q2V4836
Methyl ethyl ketone	ND	59.6	ND	Q2V4836
Methyl-iso-butyl ketone	ND	119	ND	Q2V4836
Styrene	293	59.6	ND	Q2V4836
1,1,2,2-Tetrachloroethane	ND	59.6	ND	Q2V4836
Tetrachloroethylene	ND	59.6	ND	Q2V4836
Toluene	938	59.6	ND	Q2V4836
1,1,1-Trichloroethane	ND	59.6	ND	Q2V4836
1,1,2-Trichloroethane	ND	59.6	ND	Q2V4836
Trichloroethylene	ND	59.6	ND	Q2V4836
1,2-Trans-dichloroethylene	ND	59.6	ND	Q2V4836
Trichlorofluoromethane	ND	59.6	ND	Q2V4836
1,1,2-Trichlorotrifluoroethane	ND	119	ND	Q2V4836
Vinyl chloride	ND	59.6	ND	Q2V4836
Xylenes	1010	59.6	ND	Q2V4836

The sample was diluted due to the analyte concentrations found which resulted in elevated detection limits.

VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS , GC/MS, (CL1E)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	016441E	TANK6	JP1142

Compounds	Sample Results mg/kg	Detection Limits mg/kg	Blank Results mg/kg	Batch Number
Unk hydrocarbon	192	-	-	Q2V4836
Unk substituted aromatic	78.5	-	-	Q2V4836
Benzene, 1-ethyl-2,3-dimethyl-	91.9	-	-	Q2V4836
Benzene, 1-ethyl-2-methyl-	62.0	-	-	Q2V4836
Limonene	105	-	-	Q2V4836
Benzene, 1-methyl-2-(1-methyle	93.8	-	-	Q2V4836
Benzene, 4-ethyl-1,2-dimethyl-	70.6	-	-	Q2V4836
Benzene, 1,2,4,5-tetramethyl-	97.2	-	-	Q2V4836
Benzene, 1-methyl-3-propyl-	81.9	-	-	Q2V4836
Benzene, 1-methyl-4-(2-propeny	104	-	-	Q2V4836

The results listed above for the Tentatively Identified Compounds are considered estimated concentrations since a 1:1 response is assumed.

RCRA TCLP LEACHATE HERBICIDE ANALYSIS, GC, (GS52)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	016441E	TANK6	JP1142

Compounds	Sample Results mg/L	Detection Limits mg/L	Blank Results mg/L	Batch Number
2,4-D	ND	.250	ND	Q7H51871
2,4,5-TP (Silvex)	ND	.250	ND	Q7H51871

RCRA TCLP LEACHATE PESTICIDE ANALYSIS, GC, (GS54)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	016441E	TANK6	JP1142

Compounds	Sample Results mg/L	Detection Limits mg/L	Blank Results mg/L	Batch Number
Chlordane	ND	.020	ND	Q7P51872
Endrin	ND	.002	ND	Q7P51872
Heptachlor	ND	.002	ND	Q7P51872
Heptachlor epoxide	ND	.002	ND	Q7P51872
Methoxychlor	ND	.002	ND	Q7P51872
Toxaphene	ND	.040	ND	Q7P51872
alpha-Chlordane	ND	.002	ND	Q7P51872
gamma-Chlordane	.002	.002	ND	Q7P51872
Gamma-BHC (Lindane)	ND	.002	ND	Q7P51872

RCRA TCLP LEACHATE METALS ANALYSIS, (ME52)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	016441E	TANK6	JP1142

Compounds	Sample Results mg/L	Detection Limits mg/L	Blank Results mg/L	Batch Number
Arsenic	ND	.100	ND	Q7M7430
Barium	1.53	.100	ND	Q7M7430
Cadmium	.005	.005	ND	Q7M7430
Chromium	ND	.020	ND	Q7M7430
Lead	.152	.100	ND	Q7M7430
Mercury	.0002	.0001	ND	Q7G7423
Selenium	ND	.100	ND	Q7M7430
Silver	ND	.020	ND	Q7M7430

RCRA TCLP Leachate Base/Neutral/Acid Analysis, MS, (MS52)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	016441E	TANK6	JP1142

Compounds	Sample Results mg/L	Detection Limits mg/L	Blank Results mg/L	Batch Number
2,4-Dinitrotoluene	ND	.500	ND	Q7C51869
Hexachlorobenzene	ND	.500	ND	Q7C51869
Hexachloroethane	ND	.500	ND	Q7C51869
Hexachlorobutadiene	ND	.500	ND	Q7C51869
2-Methylphenol	ND	.500	ND	Q7C51869
4-Methylphenol	1.57	.500	ND	Q7C51869
Nitrobenzene	ND	.500	ND	Q7C51869
Pentachlorophenol	ND	.500	ND	Q7C51869
Pyridine	ND	.500	ND	Q7C51869
2,4,5-Trichlorophenol	ND	.500	ND	Q7C51869
2,4,6-Trichlorophenol	ND	.500	ND	Q7C51869

3-Methyl- and 4-Methylphenol coelute and are reported as the total

RCRA TCLP LEACHATE (ZHE) VOLATILE ANALYSIS, MS, (MV50)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	016441E	TANK6	JP1142

Compounds	Sample Results mg/L	Detection Limits mg/L	Blank Results mg/L	Batch Number
Benzene	.130	.125	ND	Q7V4829
Carbon tetrachloride	ND	.125	ND	Q7V4829
Chlorobenzene	.370	.125	ND	Q7V4829
Chloroform	ND	.125	ND	Q7V4829
1,4-Dichlorobenzene	ND	.125	ND	Q7V4829
1,2-Dichloroethane	ND	.125	ND	Q7V4829
1,1-Dichloroethylene	ND	.125	ND	Q7V4829
Methyl ethyl ketone	ND	.125	ND	Q7V4829
Tetrachloroethylene	ND	.125	ND	Q7V4829
Trichloroethylene	.155	.125	ND	Q7V4829
Vinyl chloride	ND	.125	ND	Q7V4829

APPENDIX C

QUALITY ASSURANCE DATA

QUALITY ASSURANCE REPORT

Joblink: 619344

Compound(s)		METHOD SPIKE Blank Conc.	Added Conc.	Spiked Conc.	% Rec.	Rec. Limits	MATRIX SPIKE Spiked Sample Id.	Unspk Conc.	Added Conc.	Spiked Conc.	% Rec.	Rec. Limits	SPIKE DUPLICATE Added Conc.	Spiked Conc.	% Rec.	RPD	RPD Limit	% COMPLETE Batch #	%
1,2,4-Trichlorobenzene	mg/kg	0	3.33	2.80	84	52-110L 44-142M	TANK6	104	3.26	89.7	0 M	46-110L 44-142M	3.29	130	790M	37 L	0-20C	Q2C51852	56L 68M
1,4-Dichlorobenzene	mg/kg	0	3.33	2.61	78	47-110L 20-124M	TANK6	0	3.26	0	0 M	39-110L 20-124M							
2,4-Dinitrotoluene	mg/kg	0	3.33	2.79	84	57-112L 39-139M	TANK6	0	3.26	0	0 M	46-117L 39-139M							
2-Chlorophenol	mg/kg	0	5.00	3.79	76	45-110L 23-134M	TANK6	0	4.89	1.25	26 L	41-110L 23-134M	4.94	2.26	46	56 L	0-19L		
4-Nitrophenol	mg/kg	0	5.00	3.97	79	52-114L 1-132M	TANK6	0	4.89	0	0 M	50-119L 1-132M							
Acenaphthene	mg/kg	0	3.33	2.85	86	56-111L 47-145M	TANK6	0	3.26	3.46	106	51-121L 47-145M	3.29	4.05	123L	15	0-16L		
Isophorone	mg/kg	0	3.33	2.37	71	53-110L 21-196M	TANK6	0	3.26	1.11	34 L	53-110L	3.29	2.00	61	57 L	0-30L		
N-Nitrosodi-n-propylamine	mg/kg	0	3.33	2.62	79	45-110L 1-230M	TANK6	0	3.26	0	0 M	35-115L 1-230M							
Pentachlorophenol	mg/kg	0	5.00	4.25	85	42-130L 14-176M	TANK6	0	4.89	2.47	51	36-135L 14-176M	4.94	2.92	59	15	0-24L		
Phenol	mg/kg	0	5.00	3.90	78	42-110L 5-112M	TANK6	30.8	4.89	26.5	0 M	40-111L 5-112M							
Pyrene	mg/kg	0	3.33	2.88	86	58-118L 52-115M	TANK6	0	3.26	3.33	102	55-128L 52-115M	3.29	5.40	164M	47 L	0-27L		
p-Chloro-m-cresol	mg/kg	0	5.00	3.90	78	51-110L 22-147M	TANK6	0	4.89	0	0 M	51-110L 22-147M							
2,4,5-T	mg/kg	0	1.00	.870	87	63-139L	TANK6	1.04	.844	1.57	63	56-144L	.717	1.39	49 L	25 L	0-20L	Q2H51853	75L
2,4,5-TP (Silvex)	mg/kg	0	1.00	1.02	102	63-143L	TANK6	.0821	.844	.785	83	53-148L	.717	.651	79	5	0-20L		
2,4-D	mg/kg	0	1.00	.840	84	71-132L	TANK6	.559	.844	1.15	70	64-144L	.717	.989	60 L	15	0-20L		
4,4'-DDD	mg/kg	0	.167	.233	140L	64-118L 31-141M	TANK6	0	.166	2.45	NVR*	49-111L 31-141M	.166	2.62	NVR*		0-24L	Q2P51854P	15L 32M
4,4'-DDE	mg/kg	0	.167	.220	132L	65-118L 30-145M	TANK6	11.4	.166	12.9	904M	48-126L 30-145M	.166	13.2	NVR*		0-25L		
4,4'-DDT	mg/kg	0	.167	.250	150L	70-128L 25-160M	TANK6	14.0	.166	13.5	0 M	46-140L 25-160M	.166	13.6	0 M	.7	0-23C		
Aldrin	mg/kg	0	.167	.197	118L	57-110L 42-122M	TANK6	0	.166	2.58	NVR*	44-123L 42-122M	.166	2.58	NVR*		0-25L		
Alpha-BHC	mg/kg	0	.167	.182	109	56-110L 37-134M	TANK6	0	.166	0	0 M	39-111L 37-134M							
Beta-BHC	mg/kg	0	.167	.195	117L	62-111L 17-147M	TANK6	0	.166	0	0 M	43-133L 17-147M							
Chlordane	mg/kg	0	.333	.198	59 L	64-112L 45-119M	TANK6	0	.331	3.21	970M	53-131L 45-119M	.331	3.25	982M	1	0-23L		
Delta-BHC	mg/kg	0	.167	.185	111	53-115L 32-137M	TANK6	0	.166	2.25	NVR*	30-127L 32-137M	.166	2.22	NVR*		0-20L		
Dieldrin	mg/kg	0	.167	.227	136L	64-119L 36-146M	TANK6	0	.166	0	0 M	47-131L 36-146M							
Endosulfan I	mg/kg	0	.167	.212	127L	67-112L 45-153M	TANK6	4.18	.166	1.16	0 M	54-131L 45-153M	.166	1.06	0 M	9	0-21C		
Endosulfan II	mg/kg	0	.167	.210	126L	48-117L 1-202M	TANK6	2.01	.166	1.69	0 M	47-126L 1-202M	.166	4.57	NVR*		0-21C		

Joblink: 619344

QUALITY ASSURANCE REPORT

Compound(s)		METHOD SPIKE					MATRIX SPIKE						SPIKE DUPLICATE					% COMPLETE	
		Blank Conc.	Added Conc.	Spiked Conc.	% Rec.	Rec. Limits	Spiked Sample Id.	Unspk Conc.	Added Conc.	Spiked Conc.	% Rec.	Rec. Limits	Added Conc.	Spiked Conc.	% Rec.	RPD	RPD Limit	Batch #	%
Endosulfan sulfate	mg/kg	0	.167	.227	136L	39-119L	TANK6	0	.166	6.52	NVR*	34-114L	.166	6.69	NVR*		0-26L		
Endrin	mg/kg	0	.167	.225	135L	26-144M 64-118L 30-147M	TANK6	0	.166	2.52	NVR*	26-144M 57-121L 30-147M	.166	2.72	NVR*		0-22L		
Endrin aldehyde	mg/kg	0	.167	.141	84	33-110L	TANK6	0	.166	3.05	NVR*	27-110L	.166	3.31	NVR*		0-28L		
Endrin ketone	mg/kg	0	.167	.233	140L	47-121L	TANK6	0	.166	0	0 L	41-118L							
Gamma-BHC (Lindane)	mg/kg	0	.167	.192	115	30-130L	TANK6	0	.166	3.01	NVR*	30-130L	.166	2.78	NVR*		0-20L		
Heptachlor	mg/kg	0	.167	.203	122M	32-127M 57-110L 34-111M	TANK6	0	.166	5.56	NVR*	32-127M 54-131L 34-111M	.166	5.63	NVR*		0-21L		
Heptachlor epoxide	mg/kg	0	.167	.208	125L	63-113L	TANK6	4.34	.166	5.03	416M	57-133L	.166	5.07	440M	6	0-23L		
Methoxychlor	mg/kg	0	.167	.255	153L	37-142M 62-133L	TANK6	0	.166	0	0 L	37-142M 53-138L							
alpha-Chlordane	mg/kg	0	.167	.195	117L	67-110L	TANK6	0	.166	0	0 M	54-134L							
gamma-Chlordane	mg/kg	0	.167	.202	121M	45-119M 67-111L 45-119M	TANK6	5.43	.166	6.19	458M	45-119M 57-130L 45-119M	.166	6.26	500M	9	0-23L		
1,1-Dichloroethylene	mg/kg	0	2.50	3.30	132L	76-118L	TANK6	0	596	548	92	80-117L	596	658	110	18 L	0-13L	Q2V4836	80L
Benzene	mg/kg	.0332	2.50	2.88	114	1-234M 87-114L 37-151M	TANK6	0	596	582	98	1-234M 89-116L 37-151M	596	600	101	3	0-8 L		100M
Chlorobenzene	mg/kg	0	2.50	2.42	97	86-112L	TANK6	55.3	596	630	96	86-112L	596	641	98	2	0-11L		
Toluene	mg/kg	.112	2.50	2.82	108	37-160M 84-114L 47-150M	TANK6	938	596	1360	71 L	37-160M 83-121L 47-150M	596	1510	96	30 L	0-15L		
Trichloroethylene	mg/kg	0	2.50	2.58	103	87-113L	TANK6	0	596	556	93	83-117L	596	596	100	7	0-8 L		
2,4,5-Trichlorophenol	mg/l	0	.253	.186	74	71-157M 61-118L	TANK6	0	.253	.223	88	71-157M 46-130L	.253	.223	88	0	0-18L	Q7C51869	89L 90M
2,4,6-Trichlorophenol	mg/l	0	.274	.202	74	58-114L	TANK6	0	.274	.251	92	42-126L	.274	.249	91	1	0-26L		
2,4-Dinitrotoluene	mg/l	0	.268	.156	58	37-144M 49-134L 39-139M	TANK6	0	.268	.145	54	37-144M 35-140L 39-139M	.268	.144	54	0	0-20L		
2-Methylphenol	mg/l	0	.251	.206	82	61-117L	TANK6	.416	.251	.655	95	50-126L	.251	.670	101	6	0-25L		
4-Methylphenol	mg/l	0	.524	.405	77	50-132L	TANK6	1.57	.524	2.05	92	39-138L	.524	2.05	92	0	0-23L		
Hexachlorobenzene	mg/l	0	.259	.247	95	64-145L	TANK6	0	.259	.186	72	26-138L	.259	.182	70	3	0-23L		
Hexachlorobutadiene	mg/l	0	.250	.113	45	1-152M 36-114L 24-116M	TANK6	0	.250	.286	114L	1-152M 11-110L 24-116M	.250	.272	109	4	0-28L		
Hexachloroethane	mg/l	0	.259	.118	46	35-110L	TANK6	0	.259	.232	90	13-110L	.259	.234	90	0	0-29L		
Nitrobenzene	mg/l	0	.251	.205	82	40-113M 62-115L 35-180M	TANK6	0	.251	.515	205M	40-113M 47-116L 35-180M	.251	.497	198M	3	0-20L		
Pentachlorophenol	mg/l	0	.255	.209	82	43-140L	TANK6	0	.255	.245	96	35-147L	.255	.244	96	0	0-20L		
Pyridine	mg/l	0	.254	.173	68	14-176M 50-110L	TANK6	0	.254	.281	111L	14-176M 31-110L	.254	.290	114L	3	0-25L		

QUALITY ASSURANCE REPORT

Joblink: 619344

Compound(s)		METHOD SPIKE					MATRIX SPIKE						SPIKE DUPLICATE					% COMPLETE	
		Blank Conc.	Added Conc.	Spiked Conc.	% Rec.	Rec. Limits	Spiked Sample Id.	Unspk Conc.	Added Conc.	Spiked Conc.	% Rec.	Rec. Limits	Added Conc.	Spiked Conc.	% Rec.	RPD	RPD Limit	Batch #	%
2,4,5-TP (Silvex)	mg/l	0	2.00	2.65	133L	60-124L	TANK6	.0422	2.00	2.05	100	26-125L	2.00	2.00	98	2	0-23L	Q7H51871	88L
2,4-D	mg/l	0	10.0	9.67	97	45-126L	TANK6	0	10.0	7.62	76	20-122L	10.0	7.50	75	1	0-23L		
Chlordane	mg/l	0	.0400	.0448	112	80-120L 45-119M	TANK6	.00220	.0400	.0518	124M	68-122L 45-119M	.0400	.0414	98	23 L	0-12L	Q7P51872	66L 81M
Endrin	mg/l	0	.0200	.0234	117	76-130L 30-147M	TANK6	0	.0200	.0304	152M	71-134L 30-147M	.0200	.0216	108	34 L	0-17L		
Gamma-BHC (Lindane)	mg/l	0	.200	.214	107	30-130L 32-127M	TANK6	0	.200	.194	97	30-130L 32-127M	.200	.178	89	9	0-20L		
Heptachlor	mg/l	0	.0100	.00960	96	65-127L 34-111M	TANK6	0	.0100	.0124	124M	49-129L 34-111M	.0100	.00880	88	34 L	0-20L		
Heptachlor epoxide	mg/l	0	.0100	.0102	102	69-118L 37-142M	TANK6	0	.0100	.0122	122L	62-120L 37-142M	.0100	.00860	86	35 L	0-14L		
Methoxychlor	mg/l	0	.200	.218	109	74-139L	TANK6	0	.200	.250	125	73-137L	.200	.220	110	13 L	0-9 L		
alpha-Chlordane	mg/l	0	.0200	.0232	116	81-120L 45-119M	TANK6	0	.0200	.0296	148M	71-121L 45-119M	.0200	.0234	117	23 L	0-14L		
gamma-Chlordane	mg/l	0	.0200	.0216	108	77-119L 45-119M	TANK6	.00220	.0200	.0222	100	64-123L 45-119M	.0200	.0180	79	23 L	0-13L		
1,1-Dichloroethylene	mg/l	0	2.50	2.55	102	75-110L 1-234M	TANK6	0	2.50	2.83	113L	70-111L 1-234M	2.50	2.85	114L	.9	0-9 L	Q7V4829	95L 100M
1,2-Dichloroethane	mg/l	0	2.50	2.47	99	87-117L 49-155M	TANK6	0	2.50	2.85	114	87-119L 49-155M	2.50	2.77	111	3	0-7 L		
1,4-Dichlorobenzene	mg/l	0	2.50	2.15	86	75-110L 18-190M	TANK6	0	2.50	2.43	97	75-110L 18-190M	2.50	2.45	98	1	0-9 L		
Benzene	mg/l	0	2.50	2.34	94	86-110L 37-151M	TANK6	.130	2.50	2.68	102	84-110L 37-151M	2.50	2.75	105	3	0-9 L		
Carbon tetrachloride	mg/l	0	2.50	2.25	90	83-112L 70-140M	TANK6	0	2.50	2.50	100	86-110L 70-140M	2.50	2.60	104	4	0-11L		
Chlorobenzene	mg/l	0	2.50	2.31	92	86-110L 37-160M	TANK6	.370	2.50	2.75	95	85-110L 37-160M	2.50	2.77	96	1	0-8 L		
Chloroform	mg/l	0	2.50	2.23	89	87-114L 51-138M	TANK6	0	2.50	2.58	103	86-115L 51-138M	2.50	2.50	100	3	0-7 L		
Methyl ethyl ketone	mg/l	0	5.00	3.48	70	55-126L	TANK6	.385	5.00	5.25	97	59-121L	5.00	4.85	89	9	0-19L		
Tetrachloroethylene	mg/l	0	2.50	2.25	90	84-110L 64-148M	TANK6	0	2.50	2.43	97	85-110L 64-148M	2.50	2.50	100	3	0-7 L		
Trichloroethylene	mg/l	0	2.50	2.19	88	86-110L 71-157M	TANK6	.155	2.50	2.48	93	86-110L 71-157M	2.50	2.55	96	3	0-8 L		
Vinyl chloride	mg/l	0	2.50	2.29	92	68-116L 1-251M	TANK6	0	2.50	2.52	101	66-117L 1-251M	2.50	2.47	99	2	0-10L		

Joblink: 619344

QUALITY ASSURANCE REPORT

Compound(s)		METHOD SPIKE					MATRIX SPIKE						SPIKE DUPLICATE					% COMPLETE	
		Blank Conc.	Added Conc.	Spiked Conc.	% Rec.	Rec. Limits	Spiked Sample Id.	Unspk Conc.	Added Conc.	Spiked Conc.	% Rec.	Rec. Limits	Added Conc.	Spiked Conc.	% Rec.	RPD	RPD Limit	Batch #	%
Cyanide, Total	mg/kg	0	20.2	18.9	94	60-140L 80-120M	CPPWP-04A	.915	11.0	12.9	109	60-140L	12.0	13.0	101	.8	0-20C	N2I4872	100L 100M
Mercury	mg/kg	0	.250	.253	101	81-114L 75-125M	C7004	.0169	.254	.266	98	53-117L 80-120M	.264	.265	94	.4	0-26C 0-20M	Q2G7419	100L 80M
Reactive Sulfide	mg/kg	0	925	800	86	53-118L 50-150M												Q2I4861	100L 100M
Reactive Cyanide	mg/kg	0	1200	939	78	43-110L 50-150M												Q2I4862	100L 100M
Aluminum	mg/kg	0	1000	965	96	85-110L 75-125M	BACK-202	5430	1230	7800	193		1190	7530	176	4	0-38C 0-20M	Q2M7426	100L 97M
Antimony	mg/kg	0	51.9	51.0	98	82-110L 75-125M	BACK-202	0	63.3	24.9	39 M	10-119L 80-120M	61.5	24.3	40 M	2	0-39C 0-20M		
Arsenic	mg/kg	0	205	199	97	83-110L 75-125M	BACK-202	4.62	250	250	98	62-110L 80-120M	242	239	97	4	0-17C 0-20M		
Barium	mg/kg	0	200	193	96	88-110L 75-125M	BACK-202	400	244	673	112	60-116L 80-120M	237	649	105	4	0-18C 0-20M		
Beryllium	mg/kg	0	4.92	4.73	96	87-110L 75-125M	BACK-202	.401	6.01	6.32	98	67-110L 80-120M	5.83	6.11	98	3	0-19C 0-20M		
Cadmium	mg/kg	0	5.27	5.02	95	83-110L 75-125M	BACK-202	1.36	6.43	7.52	96	44-110L 80-120M	6.25	7.28	95	3	0-27C 0-20M		
Calcium	mg/kg	0	1000	990	99	78-114L 75-125M	BACK-202	5670	1220	7070	115		1190	6810	96	4	0-28C 0-20M		
Chromium	mg/kg	0	22.2	19.6	88	80-110L 75-125M	BACK-202	10.3	27.1	34.9	91	40-127L 80-120M	26.3	33.9	90	3	0-26C 0-20M		
Cobalt	mg/kg	0	50.1	48.7	97	85-110L 75-125M	BACK-202	6.39	61.2	65.9	97	58-110L 80-120M	59.4	63.5	96	4	0-19C 0-20M		
Copper	mg/kg	0	24.4	24.3	100	80-110L 75-125M	BACK-202	14.9	29.8	44.2	98	51-126L 80-120M	29.0	42.7	96	3	0-25C 0-20M		
Iron	mg/kg	0	1010	974	96	86-110L 75-125M	BACK-202	12200	1230	14500	187		1200	14000	150	4	0-34C 0-20M		
Lead	mg/kg	0	52.4	51.7	99	78-111L 75-125M	BACK-202	38.8	64.0	105	103	44-124L 80-120M	62.2	99.5	98	5	0-32C 0-20M		
Magnesium	mg/kg	0	1010	984	97	85-110L 75-125M	BACK-202	3090	1240	4530	116	38-136L 80-120M	1200	4360	106	4	0-28C 0-20M		
Manganese	mg/kg	0	50.6	49.9	99	78-112L 75-125M	BACK-202	508	61.8	573	105		60.0	545	62	5	0-33C 0-20M		
Molybdenum	mg/kg	0	49.9	47.6	95	84-110L 75-125M	BACK-202	0	60.9	55.2	91	39-112L 80-120M	59.1	53.2	90	4	0-16C 0-20M		
Nickel	mg/kg	0	49.6	48.3	97	78-110L 75-125M	BACK-202	12.5	60.6	72.3	99	60-110L 80-120M	58.9	69.7	97	4	0-17C 0-20M		
Potassium	mg/kg	0	1020	1030	101	82-111L 75-125M	BACK-202	904	1240	2200	105	54-128L 80-120M	1200	2120	101	4	0-29C 0-20M		
Selenium	mg/kg	0	194	186	96	83-110L 75-125M	BACK-202	0	237	225	95	61-110L 80-120M	230	217	94	4	0-18C 0-20M		
Silver	mg/kg	0	5.35	4.73	88	68-121L 75-125M	BACK-202	.884	6.53	7.50	101	31-110L 80-120M	6.34	6.94	96	8	0-39C 0-20M		
Sodium	mg/kg	0	1320	1140	86	81-110L 75-125M	BACK-202	0	1610	1470	91	67-111L 80-120M	1560	1410	90	4	0-17C 0-20M		
Thallium	mg/kg	0	198	185	93	83-110L 75-125M	BACK-202	11.6	242	236	93	47-110L 80-120M	235	229	93	3	0-15C 0-20M		
Vanadium	mg/kg	0	50.8	48.9	96	85-110L 75-125M	BACK-202	16.5	62.0	78.3	100	67-110L 80-120M	60.2	75.4	98	4	0-21C 0-20M		

QUALITY ASSURANCE REPORT

Joblink: 619344

Compound(s)		METHOD SPIKE					MATRIX SPIKE						SPIKE DUPLICATE					% COMPLETE	
		Blank Conc.	Added Conc.	Spiked Conc.	% Rec.	Rec. Limits	Spiked Sample Id.	Unspk Conc.	Added Conc.	Spiked Conc.	% Rec.	Rec. Limits	Added Conc.	Spiked Conc.	% Rec.	RPD	RPD Limit	Batch #	%
Zinc	mg/kg	0	50.2	48.3	96	81-110L 75-125M	BACK-202	176	61.3	250	121M	43-129L 80-120M	59.6	243	112	3	0-24C 0-20M		
Chloride	mg/kg	0	1000	1000	100	60-140L	C7004	264000	277000	585000	116	60-140L	292000	594000	113	3	0-20L	Q2O405	88L
Sulfur, Total as S	mg/kg	0	334	330	99	88-108L	TANK6	11100	8880	20000	100	82-114L	8880	19900	99	1 M	0- L 0- M		
Mercury	mg/l	0	.00200	.00203	102	82-113L 75-125M	TANK6	2.-04	.00200	.00196	87	68-121L 80-120M	.00200	.00208	93	6	0-16C 0-20M	Q7G7423	100L 100M
Arsenic	mg/l	0	5.06	5.31	105	86-112L 75-125M	864-32	0	5.06	4.97	98	85-117L 80-120M	5.06	5.05	100	2	0-8 C 0-20M	Q7M7430	96L 94M
Barium	mg/l	0	7.42	7.57	102	85-111L 75-125M	864-32	.553	7.42	7.59	95	77-113L 80-120M	7.42	7.73	97	2	0-11C 0-20M		
Cadmium	mg/l	0	1.03	1.07	104	88-111L 75-125M	864-32	.205	1.03	1.13	90	81-112L 80-120M	1.03	1.15	92	2	0-9 C 0-20M		
Chromium	mg/l	0	4.98	5.16	104	85-111L 75-125M	864-32	.00826	4.98	4.57	92	78-112L 80-120M	4.98	4.64	93	2	0-10C 0-20M		
Lead	mg/l	0	5.19	5.49	106	85-112L 75-125M	864-32	10.4	5.19	15.2	92	74-117L 80-120M	5.19	15.4	96	1	0-12C 0-20M		
Selenium	mg/l	0	.995	1.00	101	81-113L 75-125M	864-32	.458	.995	1.40	95	80-119L 80-120M	.995	1.43	98	2	0-10C 0-20M		
Silver	mg/l	0	.0977	.109	112L	86-110L 75-125M	864-32	0	.0977	.0870	89	78-110L 80-120M	.0977	.0837	86	4	0-11C 0-20M		

QUALITY ASSURANCE REPORT

Joblink: 619344

Compound(s)		SAMPLE DUPLICATE					POST SPIKE						ICP SERIAL DILUTION					
		Sample Id.	Sample Conc.	Dup. Conc.	RPD	RPD Limit	Spiked Sample Id.	Unspk Conc. mg/l	Added Conc. mg/l	Spiked Conc. mg/l	% Rec.	Rec. Limits	Sample Id.	Sample Conc. mg/l	Dil. Conc. mg/l	% Diff	Limit	Batch #
Mercury	mg/kg	C7004	.0169	.0275	.01M	.011M												Q2G7419
Aluminum	mg/kg	BACK-202	5430	5310	2	0-20M							BACK-202	44.0	46.1	5	0-10M	Q2M7426
Antimony	mg/kg	BACK-202	3.71	3.70									BACK-202	.0301	.0262			Q2M7426
Arsenic	mg/kg	BACK-202	4.62	4.64	.020								BACK-202	.0375	.0264	100		Q2M7426
Barium	mg/kg	BACK-202	400	392	2	0-20M							BACK-202	3.24	3.39	5	0-10M	Q2M7426
Beryllium	mg/kg	BACK-202	.401	.356	.045								BACK-202	.00325	.00355	9		Q2M7426
Cadmium	mg/kg	BACK-202	1.36	1.36	0								BACK-202	.0110	.0133	21		Q2M7426
Calcium	mg/kg	BACK-202	5670	5550	2	0-20M							BACK-202	46.0	48.8	6	0-10M	Q2M7426
Chromium	mg/kg	BACK-202	10.3	9.93	.37	4.9M							BACK-202	.0837	.105	25		Q2M7426
Cobalt	mg/kg	BACK-202	6.39	6.37	.020	4.9M							BACK-202	.0518	.0570	10		Q2M7426
Copper	mg/kg	BACK-202	14.9	14.3	.60	4.9M							BACK-202	.121	.139	15		Q2M7426
Iron	mg/kg	BACK-202	12200	11900	2	0-20M							BACK-202	98.6	105	6	0-10M	Q2M7426
Lead	mg/kg	BACK-202	38.8	37.2	2	9.8M							BACK-202	.315	.389	23		Q2M7426
Magnesium	mg/kg	BACK-202	3090	3030	2	0-20M							BACK-202	25.1	26.6	6	0-10M	Q2M7426
Manganese	mg/kg	BACK-202	508	499	2	0-20M							BACK-202	4.12	4.36	6	0-10M	Q2M7426
Molybdenum	mg/kg	BACK-202	.571	.870	.87								BACK-202	.00463	.00500			Q2M7426
Nickel	mg/kg	BACK-202	12.5	13.2	.70	4.9M							BACK-202	.101	.126	25		Q2M7426
Potassium	mg/kg	BACK-202	904	855	49	240 M							BACK-202	7.33	9.55	30		Q2M7426
Selenium	mg/kg	BACK-202	.656	2.22									BACK-202	.00532	.0685			Q2M7426
Silver	mg/kg	BACK-202	.884	.702	.18								BACK-202	.00717	-1.-02	100		Q2M7426
Sodium	mg/kg	BACK-202	57.0	53.8									BACK-202	.462	.955			Q2M7426
Thallium	mg/kg	BACK-202	11.6	10.7	.90								BACK-202	.0942	.133	41		Q2M7426
Vanadium	mg/kg	BACK-202	16.5	16.1	.40	4.9M							BACK-202	.134	.134	0		Q2M7426
Zinc	mg/kg	BACK-202	176	175	.6	0-20M							BACK-202	1.43	1.57	10	0-10M	Q2M7426
Mercury	mg/l	TANK6	2.-04	2.-04	NVR*	####M												Q7G7423
Arsenic	mg/l	864-32	-.0265	-.0329									864-32	-.0265	-.0810			Q7M7430
Barium	mg/l	864-32	.553	.546	1	0-20M							864-32	.553	.590	7	0-10M	Q7M7430
Cadmium	mg/l	864-32	.205	.205	0	0-20M							864-32	.205	.228	11 M	0-10M	Q7M7430
Chromium	mg/l	864-32	.00826	.00934	.001								864-32	.00826	.0555	572		Q7M7430
Lead	mg/l	864-32	10.4	10.4	0	0-20M							864-32	10.4	11.6	12 M	0-10M	Q7M7430
Selenium	mg/l	864-32	.458	.477	.019	.10M							864-32	.458	.459	.2		Q7M7430
Silver	mg/l	864-32	-.0161	-9.-03									864-32	-.0161	-.0380			Q7M7430

QUALITY ASSURANCE DATA
SURROGATE SUMMARY REPORT

SURROGATE ID	A159	B732	A121	A884	A158	B142	# OUT
QC BATCH: Q2C51852 Solid (Semi-Volatile organics by MS)							
SAMPLE ID							
BLANK	62	75	72	66	71	81	0
BLANK SPIKE	74	78	84	72	80	87	0
TANK6	30 D	37 D	60 D	82 D	54 D	57 D	0
TANK6 MD	35 D	29 D	43 D	83 D	58 D	72 D	0
TANK6 MS	24 D	27 D	30 D	55 D	35 D	43 D	0
QC LIMITS	(25-121)	(24-113)	(19-122)	(23-120)	(30-115)	(18-137)	
QC BATCH: Q7C51869 Leachate (Semi-Volatile organics by MS)							
SAMPLE ID							
BLANK	76	70	78	78	71	84	0
BLANK SPIKE	73	69	79	78	70	82	0
TANK6	83	71	80	101	84	85	0
TANK6 MD	89	79	96	108	88	77	0
TANK6 MS	85	76	84	114	90	80	0
QC LIMITS	(21-110)	(10-110)	(10-123)	(35-114)	(43-116)	(33-141)	

SURROGATE ID	F047	# OUT
QC BATCH: Q2H51853 Solid (Herbicide compounds by GC)		
SAMPLE ID		
BLANK	67	0
BLANK SPIKE	79	0
TANK6	244 *	1
TANK6 MD	227 *	1
TANK6 MS	211 *	1
QC LIMITS	(30-130)	
QC BATCH: Q7H51871 Leachate (Herbicide compounds by GC)		
SAMPLE ID		
BLANK	123	0
BLANK SPIKE	138 *	1
TANK6	160 *	1
TANK6 MD	118	0
TANK6 MS	120	0
QC LIMITS	(30-130)	

SURROGATE ID

A047 = 1,2-Dichloroethane-D4
B185 = Toluene-D8
B668 = Bromofluorobenzene
A159 = 2-Fluorophenol
B732 = Phenol-D6
A121 = 2,4,6-Tribromophenol
A884 = Nitrobenzene-D5
A158 = 2-Fluorobiphenyl
B142 = Terphenyl-D14
B816 = 2,4,5,6-Tetrachloro-m-xylene

A500 = Decachlorobiphenyl
F047 = 2,4-Dichlorophenylacetic-acid

* Values outside of method quality control limits
D Sample was diluted, however, some surrogates may be reported if results were observed.

It is laboratory policy to allow one surrogate per sample fraction (acid, base-neutral or pesticide) to exceed the stated QC limits. This policy is based upon the USEPA SOW for the Contract Laboratory Program (CLP).

QUALITY ASSURANCE DATA
SURROGATE SUMMARY REPORT

SURROGATE ID	B816	A500	# OUT
QC BATCH: Q2P51854P Solid (Pesticide compounds by GC)			
SAMPLE ID			
BLANK	104	115	0
BLANK SPIKE	112	145 *	1
TANK6	200 D	360 D	0
TANK6 MD	920 D	1840 D	0
TANK6 MS	880 D	1400 D	0
QC LIMITS	(30-130)	(30-130)	

SURROGATE ID	B816	A500	# OUT
QC BATCH: Q7P51872 Leachate (Pesticide compounds by GC)			
SAMPLE ID			
BLANK	106	105	0
BLANK SPIKE	98	99	0
TANK6	97	113	0
TANK6 MD	81	85	0
TANK6 MS	95	104	0
QC LIMITS	(30-130)	(30-130)	

SURROGATE ID	A047	B185	B668	# OUT
QC BATCH: Q2V4836 Solid (Volatile organics by MS)				
SAMPLE ID				
BLANK	111	116	106	0
BLANK SPIKE	118	112	104	0
TANK6	102	106	111	0
TANK6 MD	119	107	107	0
TANK6 MS	93	91	102	0
QC LIMITS	(70-121)	(81-117)	(74-121)	
QC BATCH: Q7V4829 Leachate (Volatile organics by MS)				
SAMPLE ID				
BLANK	109	103	103	0
BLANK SPIKE	96	96	97	0
TANK6	92	93	94	0
TANK6 MD	98	99	102	0
TANK6 MS	90	88	86	0
QC LIMITS	(70-121)	(81-117)	(74-121)	

SURROGATE ID

A047 = 1,2-Dichloroethane-D4
B185 = Toluene-D8
B668 = Bromofluorobenzene
A159 = 2-Fluorophenol
B732 = Phenol-D6
A121 = 2,4,6-Tribromophenol
A884 = Nitrobenzene-D5
A158 = 2-Fluorobiphenyl
B142 = Terphenyl-D14
B816 = 2,4,5,6-Tetrachloro-m-xylene

A500 = Decachlorobiphenyl
F047 = 2,4-Dichlorophenylacetic-acid

* Values outside of method quality control limits
D Sample was diluted, however, some surrogates may be reported if results were observed.

It is laboratory policy to allow one surrogate per sample fraction (acid, base-neutral or pesticide) to exceed the stated QC limits. This policy is based upon the USEPA SOW for the Contract Laboratory Program (CLP).

SUMMARY OF ANALYTICAL METHODOLOGY

Joblink # 619344

REFERENCE		TITLE
1.7.1.1	CLP	pH, Electrometric
1020	SW-846	Flash Point, Setaflash
1311	SW-846	Toxicity Characteristic Leaching Procedure
1311-ZHE	SW-846	TCLP, Zero Headspace Extraction
160.3	MCAWW	Residue, Total, Gravimetric, Dried at 103-105 C
5050/300.0	SW846/CAWW	Bomb Combustion Method for Solid Waste / Ion Chromatography
6010	SW-846	Inductively Coupled Plasma Atomic Emmision Spectroscopy
7.3.3.2	SW-846	Test Method to Determine HCN Released from Wastes
7.3.4.2	SW-846	Test Method to Determine HS Released from Wastes
7470	SW-846	Mercury in Liquid Waste (Manual Cold-Vapor Technique)
7471	SW-846	Mercury in Solid Waste (Manual Cold-Vapor Technique)
8080	SW-846	Organochlorine Pesticides and/or PCBs
8150	SW-846	Chlorinated Herbicides
8240	SW-846	GC/MS for Volatile Organics
8270	SW-846	GC/MS for Semivolatile Organics
9010	SW-846	Total and/or Amenable Cyanide
9022	SW-846	Total Organic Halides (TOX) by Neutron Activation
9095	SW-846	Paint Filter Liquids Test
D240-76	ASTM	BTU
D482-95	ASTM	Test Method for Ash

METHODOLOGY REFERENCES

ASTM	*American Society for Testing and Materials*, 1985 edition.
MCAWW	*Methods for Chemical Analysis of Water and Wastes*, April 1979 and Updated #1 March 1983.
CLP	*USEPA Contract Laboratory Program*, Document #OLMO3.0, update August 1994 #OLMO3.1 and Document #ILMO4.0.
EPA-500	*USEPA Methods for the Determination of Organic Compounds in Drinking Water,* EPA-600/4-88/039 December 1988.
EPA-600	*USEPA Test Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater*, EPA-600/4-82-057 July 1982.
NIOSH	*National Institute for Occupational Safety and Health*, 3rd edition, 1984.
SMEWW	*Standard Methods for the Examination of Water and Wastewater*, 17th edition, 1989.
STOA	*Spot Tests In Organic Analysis*, 7th edition, 1966.
SW-846	*Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods*, 3rd edition, September 1986 and Update #1 July 1992.
(1)	This method was modified to incorporate the use of Boron Trifluoride (BF3) as the derivatizing reagent according to Method 6640 in *SMEWW*, 17th edition, 1989.
Title 22	*Waste Extraction Test*, Title 22, Section 66261.126 Appendix 2 of the California Administrative Code, May 1991.

Laboratory Certifications

State	Agency	Certification #
Alabama	ADEM	40830
California	CADOH	1178
Colorado	CODOH	OH113
Connecticut	CDPH & AS	PH-0154
Delaware	DEHSS	OH113
Kansas	KSDHE	E-202 & E-1173
Louisiana	LADOHH	92-10
Maryland	MDDHMH	210
Massachusetts	MADEP	M-OH113
New Jersey	NJDEPE	74603
New York	NYDOH	10712
North Carolina	NCDEM	392
Ohio	OHEPA	OH113
Oklahoma	OKDEQ	9216
Pennsylvania	PADER	68-450
Rhode Island	RIDOH	214/142
South Carolina	SCDEHNR	92002
Tennessee	TNDOH/TNDEC	2978
Virginia	VADGS	00011
Washington	WADOE	C154
Wisconsin	WIDNR	999037160

Validated by:

- US Army Corps of Engineers ..... Chemical Analysis in Various Matrices

Approvals:

- Envirosafe ..... Waste Characterization Analysis
- USDA ..... Permit for Importing Soils
- Florida DEP ..... Quality Assurance Plan #930034G
- Naval Facilities Engineering Service Center ..... Chemical Analysis in Various Matrices

REPORT KEY

mg/kg	=	milligram per kilogram (ppm)
Mg/m^3	=	milligram per cubic meter
ug/kg	=	microgram per kilogram (ppb)
mg/L	=	milligram per liter (ppm)
ug/L	=	microgram per liter (ppb)
mg/W	=	milligram per wipe
ug/W	=	microgram per wipe
mg/SMP	=	milligram per sample
ug/SMP	=	microgram per sample (Tedlar Bag)
ug/smp	=	microgram per sample
um/cm	=	microMho per centimeter
pCi/l	=	picocurie per liter
gm/cc	=	grams per cubic centimeter
ppm	=	parts per million
ppb	=	parts per billion
ND	=	Not detected at or above stated detection limit
<	=	less than
>	=	greater than
%	=	percent
BTU/lb	=	British Thermal Units per pound
Deg. C	=	Degrees Celsius
n/a	=	not applicable
Unk	=	unknown
std	=	result is relative to standard pH units
CV	=	Conventionals
IR	=	Infrared Spectrophotometric
GC	=	Gas Chromatograph Instrument
GC/MS	=	Gas Chromatography/Mass Spectrometer Instrument
GRO	=	Gasoline Range Organics
DRO	=	Diesel Range Organics
PCB	=	Polychlorinated Biphenyls (PCBs)
EP TOX	=	Extraction Procedure Toxicity
TCLP	=	Toxicity Characteristic Leaching Procedure
RCRA	=	Resource Conservation and Recovery Act
SOW	=	Statement of Work

APPENDIX D

CHAIN-OF-CUSTODY RECORD(S)

OHM Remediation Services Corp.

CHAIN-OF-CUSTODY RECORD

LAB COPY

Form 0019
Field Technical Services
Rev. 08/89

160601

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME: Bayonne Barrel + Drum	PROJECT LOCATION: Newark, NJ
PROJ. NO.: 16441	PROJECT CONTACT: Stephen Weitzburger
PROJECT TELEPHONE NO.: 609-588-6356	
CLIENT'S REPRESENTATIVE: Joseph Casentino	PROJECT MANAGER/SUPERVISOR: Thomas O'Hara

ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS): Land-Fill / Incineration Disposal / Analysis

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	Land-Fill	Incineration Disposal							REMARKS
1	Tank 6	12/6/95	1145		X	Black Sludge from Tank 6.	2-3 oz	X	X							
2																
3																
4																
5																
6																
7																
8																
9																
10																

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	1	[illegible]	FED EX	12/6	1920
2	1	Fedex	Dmitri Jusen	12-7-95	1102
3					
4					

REMARKS
7 - day Turnaround -
- ANALYTICAL PACKAGE A, B, & C

SAMPLER'S SIGNATURE: [illegible]