Backfill

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 680-39892-1

Job Description: HERC Hattiesburg / IB Dirt Fill 8/26/08

For:
Hercules Inc.
Research Center - Bldg 8139/15
500 Hercules Road
Wilmington, DE 19808-1599

Attention: Mr. Timothy Hassett

Lidya Gulizia

Lidya Gulizia
Project Manager I
lidya.gulizia@testamericainc.com
09/05/2008

cc: Mr. Charlie Jordan

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project Manager who signed this test report.

Job Narrative
680-J39892-1

Receipt
All samples were received in good condition within temperature requirements.

GC/MS VOA
No analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 115709 were outside control limits. The associated laboratory control standard (LCS) met acceptance criteria.

No other analytical or quality issues were noted.

GC Semi VOA
No analytical or quality issues were noted.

General Chemistry
No analytical or quality issues were noted.

Comments
No additional comments.

METHOD SUMMARY

Client: Hercules Inc.

Job Number: 680-39892-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds by GC/MS	TAL SAV	SW846 8260B	
Purge and Trap	TAL SAV		SW846 5030A
Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	TAL SAV	SW846 8270C	
Ultrasonic Extraction	TAL SAV		SW846 3550B
Organochlorine Pesticides & Polychlorinated Biphenyls by Gas Chromatography	TAL SAV	SW846 8081A_8082	
Ultrasonic Extraction	TAL SAV		SW846 3550B
Chlorinated Herbicides by GC	TAL SAV	SW846 8151A	
Chlorinated Herbicides by GC - Solids Prep	TAL SAV		SW846 8151A

Lab References:

TAL SAV = TestAmerica Savannah

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: Hercules Inc.

Job Number: 680-39892-1

Method	Analyst	Analyst ID
SW846 8260B	LeSeane, Latika Rene	LL
SW846 8270C	Hall, Elizabeth	EH
SW846 8081A_8082	Kellar, Joshua	JK
SW846 8151A	Kellar, Joshua	JK
EPA PercentMoisture	Hardy, Donnetta	DM

SAMPLE SUMMARY

Client: Hercules Inc.

Job Number: 680-39892-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-39892-1	Dirt	Solid	08/26/2008 1030	08/27/2008 0905

SAMPLE RESULTS

Client: Hercules Inc.

Job Number: 680-39892-1

Client Sample ID: Dirt

Lab Sample ID: 680-39892-1
Client Matrix: Solid

% Moisture: 21.7

Date Sampled: 08/26/2008 1030
Date Received: 08/27/2008 0905

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030A
Dilution: 1.0
Date Analyzed: 08/30/2008 2239
Date Prepared: 08/30/2008 2239

Analysis Batch: 680-116035

Instrument ID: GC/MS Volatiles - M
Lab File ID: m0544.d
Initial Weight/Volume: 5 g
Final Weight/Volume: 5 mL

Analyte	DryWt Corrected: Y Result (ug/Kg)	Qualifier	RL
Acetone	<64		64
Acetonitrile	<260		260
Acrolein	<130		130
Acrylonitrile	<130		130
Benzene	<6.4		6.4
Bromodichloromethane	<6.4		6.4
Bromoform	<6.4		6.4
Bromomethane	<6.4		6.4
2-Butanone	<32		32
Carbon disulfide	<6.4		6.4
Carbon tetrachloride	<6.4		6.4
Chlorobenzene	<6.4		6.4
Chloroprene	<6.4		6.4
Chloroethane	<6.4		6.4
Chloroform	<6.4		6.4
Chloromethane	<6.4		6.4
3-Chloro-1-propene	<6.4		6.4
Dibromochloromethane	<6.4		6.4
1,2-Dibromo-3-Chloropropane	<13		13
1,2-Dibromoethane	<6.4		6.4
Dibromomethane	<6.4		6.4
trans-1,4-Dichloro-2-butene	<13		13
Dichlorodifluoromethane	<6.4		6.4
1,1-Dichloroethane	<6.4		6.4
1,2-Dichloroethane	<6.4		6.4
cis-1,2-Dichloroethene	<6.4		6.4
trans-1,2-Dichloroethene	<6.4		6.4
1,1-Dichloroethene	<6.4		6.4
1,2-Dichloropropane	<6.4		6.4
cis-1,3-Dichloropropene	<6.4		6.4
trans-1,3-Dichloropropene	<6.4		6.4
Ethylbenzene	<6.4		6.4
Ethyl methacrylate	<6.4		6.4
2-Hexanone	<32		32
Iodomethane	<6.4		6.4
Isobutanol	<260		260
Methacrylonitrile	<130		130
Methylene Chloride	<6.4		6.4
Methyl methacrylate	<6.4		6.4
4-Methyl-2-pentanone	<32		32
Pentachloroethane	<32		32
Propionitrile	<130		130
Styrene	<6.4		6.4
1,1,1,2-Tetrachloroethane	<6.4		6.4

Client: Hercules Inc. Job Number: 680-39892-1

Client Sample ID: Dirt

Lab Sample ID: 680-39892-1 Date Sampled: 08/26/2008 1030
Client Matrix: Solid % Moisture: 21.7 Date Received: 08/27/2008 0905

8260B Volatile Organic Compounds by GC/MS

Method: 8260B Analysis Batch: 680-116035 Instrument ID: GC/MS Volatiles - M
Preparation: 5030A Lab File ID: m0544.d
Dilution: 1.0 Initial Weight/Volume: 5 g
Date Analyzed: 08/30/2008 2239 Final Weight/Volume: 5 mL
Date Prepared: 08/30/2008 2239

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	RL
1,1,2,2-Tetrachloroethane		<6.4		6.4
Tetrachloroethene		17		6.4
Toluene		<6.4		6.4
1,1,1-Trichloroethane		<6.4		6.4
1,1,2-Trichloroethane		<6.4		6.4
Trichloroethene		<6.4		6.4
Trichlorofluoromethane		<6.4		6.4
1,2,3-Trichloropropane		<6.4		6.4
Vinyl acetate		<13		13
Vinyl chloride		<6.4		6.4
Xylenes, Total		<13		13

Surrogate	%Rec	Acceptance Limits
4-Bromofluorobenzene	106	65 - 124
Dibromofluoromethane	107	65 - 124
Toluene-d8 (Surr)	103	65 - 132

Client: Hercules Inc.

Job Number: 680-39892-1

Client Sample ID: Dirt

Lab Sample ID: 680-39892-1
Client Matrix: Solid

% Moisture: 21.7

Date Sampled: 08/26/2008 1030
Date Received: 08/27/2008 0905

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method: 8270C
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 08/29/2008 1324
Date Prepared: 08/28/2008 1220

Analysis Batch: 680-116072
Prep Batch: 680-115709

Instrument ID: GC/MS SemiVolatiles - T
Lab File ID: t0912.d
Initial Weight/Volume: 30.36 g
Final Weight/Volume: 1 mL
Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y Result (ug/Kg)	Qualifier	RL
Acenaphthene	<420		420
Thionazin	<420		420
Sulfotepp	<420		420
Pyridine	<420		420
1,1'-Biphenyl	<420		420
1,2,4,5-Tetrachlorobenzene	<420		420
1,2,4-Trichlorobenzene	<420		420
1,2-Dichlorobenzene	<420		420
1,3,5-Trinitrobenzene	<420		420
1,3-Dichlorobenzene	<420		420
1,3-Dinitrobenzene	<420		420
1,4-Dichlorobenzene	<420		420
1,4-Dioxane	<420		420
1,4-Naphthoquinone	<420		420
1-Naphthylamine	<420		420
2,3,4,6-Tetrachlorophenol	<420		420
2,4,5-Trichlorophenol	<420		420
2,4,6-Trichlorophenol	<420		420
2,4-Dichlorophenol	<420		420
2,4-Dimethylphenol	<420		420
2,4-Dinitrophenol	<2100		2100
2,4-Dinitrotoluene	<420		420
2,6-Dichlorophenol	<420		420
Dimethyl phthalate	<420		420
2,6-Dinitrotoluene	<420		420
2-Acetylaminofluorene	<420		420
2-Chlorophenol	<420		420
2-Chloronaphthalene	<420		420
2-Methylnaphthalene	<420		420
2-Methylphenol	<420		420
2-Naphthylamine	<420		420
2-Nitroaniline	<2100		2100
2-Nitrophenol	<420		420
2-Picoline	<420		420
2-Toluidine	<420		420
3 & 4 Methylphenol	<420		420
3,3'-Dichlorobenzidine	<830		830
3,3'-Dimethylbenzidine	<2100		2100
3-Methylcholanthrene	<420		420
3-Nitroaniline	<2100		2100
4,6-Dinitro-2-methylphenol	<2100		2100
4-Aminobiphenyl	<420		420
4-Bromophenyl phenyl ether	<420		420
4-Chloro-3-methylphenol	<420		420

Client: Hercules Inc.

Job Number: 680-39892-1

Client Sample ID: Dirt

Lab Sample ID: 680-39892-1
Client Matrix: Solid

% Moisture: 21.7

Date Sampled: 08/26/2008 1030
Date Received: 08/27/2008 0905

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method: 8270C
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 08/29/2008 1324
Date Prepared: 08/28/2008 1220

Analysis Batch: 680-116072
Prep Batch: 680-115709

Instrument ID: GC/MS SemiVolatiles - T
Lab File ID: t0912.d
Initial Weight/Volume: 30.36 g
Final Weight/Volume: 1 mL
Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y Result (ug/Kg)	Qualifier	RL
4-Chloroaniline	<830		830
4-Chlorophenyl phenyl ether	<420		420
4-Nitroaniline	<2100		2100
4-Nitrophenol	<2100		2100
4-Nitroquinoline-1-oxide	<4200		4200
7,12-Dimethylbenz(a)anthracene	<420		420
Acenaphthylene	<420		420
Acetophenone	<420		420
alpha,alpha-Dimethyl phenethylamine	<85000		85000
Aniline	<830		830
Anthracene	<420		420
Aramite, Total	<420		420
Benzo[a]anthracene	<420		420
Benzo[a]pyrene	<420		420
Benzo[b]fluoranthene	<420		420
Benzo[g,h,i]perylene	<420		420
Benzo[k]fluoranthene	<420		420
Benzyl alcohol	<420		420
Bis(2-chloroethoxy)methane	<420		420
Bis(2-chloroethyl)ether	<420		420
Bis(2-ethylhexyl) phthalate	<420		420
Chrysene	<420		420
Diallate	<420		420
Dibenz(a,h)anthracene	<420		420
Dibenzofuran	<420		420
Di-n-butyl phthalate	<420		420
Diethyl phthalate	<420		420
p-Dimethylamino azobenzene	<420		420
Dinoseb	<420		420
Di-n-octyl phthalate	<420		420
Ethyl methanesulfonate	<420		420
Fluoranthene	<420		420
Fluorene	<420		420
Hexachlorobenzene	<420		420
Hexachlorobutadiene	<420		420
Hexachlorocyclopentadiene	<420		420
Hexachloroethane	<420		420
Hexachlorophene	<210000		210000
Hexachloropropene	<420		420
Indeno[1,2,3-cd]pyrene	<420		420
Isophorone	<420		420
Isosafrole	<420		420
Methapyrilene	<85000		85000
Methyl methanesulfonate	<420		420

Client: Hercules Inc.

Job Number: 680-39892-1

Client Sample ID: Dirt

Lab Sample ID: 680-39892-1
Client Matrix: Solid

% Moisture: 21.7

Date Sampled: 08/26/2008 1030
Date Received: 08/27/2008 0905

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method: 8270C
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 08/29/2008 1324
Date Prepared: 08/28/2008 1220

Analysis Batch: 680-116072
Prep Batch: 680-115709

Instrument ID: GC/MS SemiVolatiles - T
Lab File ID: t0912.d
Initial Weight/Volume: 30.36 g
Final Weight/Volume: 1 mL
Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y Result (ug/Kg)	Qualifier	RL
Naphthalene	<420		420
Nitrobenzene	<420		420
N-Nitrosodi-n-butylamine	<420		420
N-Nitrosodiethylamine	<420		420
N-Nitrosodimethylamine	<420		420
N-Nitrosodiphenylamine	<420		420
N-Nitrosodi-n-propylamine	<420		420
N-Nitrosomethylethylamine	<420		420
N-Nitrosomorpholine	<420		420
N-Nitrosopiperidine	<420		420
N-Nitrosopyrrolidine	<420		420
N-Nitro-o-toluidine	<420		420
Pentachlorobenzene	<420		420
Pentachloronitrobenzene	<420		420
Pentachlorophenol	<2100		2100
Phenacetin	<420		420
Phenanthrene	<420		420
Phenol	<420		420
p-Phenylene diamine	<2100		2100
Pronamide	<420		420
Pyrene	<420		420
Safrole, Total	<420		420
o,o',o''-Triethylphosphorothioate	<420		420
Disulfoton	<420		420
Ethyl Parathion	<420		420
Methyl parathion	<420		420
Phorate	<420		420
Famphur	<420		420
Dimethoate	<420		420
Butyl benzyl phthalate	<420		420
bis(chloroisopropyl) ether	<420		420

Surrogate	%Rec	Acceptance Limits
2,4,6-Tribromophenol	52	36 - 128
2-Fluorobiphenyl	56	44 - 110
2-Fluorophenol	48	41 - 110
Terphenyl-d14	77	10 - 112
Phenol-d5	54	43 - 110
Nitrobenzene-d5	49	36 - 110

Client: Hercules Inc.

Job Number: 680-39892-1

Client Sample ID: Dirt

Lab Sample ID: 680-39892-1
Client Matrix: Solid

% Moisture: 21.7

Date Sampled: 08/26/2008 1030
Date Received: 08/27/2008 0905

8081A_8082 Organochlorine Pesticides & Polychlorinated Biphenyls by Gas Chromatography

Method: 8081A_8082
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 09/04/2008 2213
Date Prepared: 08/28/2008 1131

Analysis Batch: 680-116395
Prep Batch: 680-115700

Instrument ID: GC SemiVolatiles - M
Lab File ID: mi03063.d
Initial Weight/Volume: 30.03 g
Final Weight/Volume: 10 mL
Injection Volume: 1.0 uL
Column ID: PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	RL
Aldrin		<2.2		2.2
alpha-BHC		<2.2		2.2
beta-BHC		<2.2		2.2
Chlordane (technical)		<22		22
Chlorobenzilate		<22		22
4,4'-DDD		<4.2		4.2
4,4'-DDE		<4.2		4.2
4,4'-DDT		<4.2		4.2
delta-BHC		<2.2		2.2
Dieldrin		<4.2		4.2
Endosulfan I		<2.2		2.2
Endosulfan II		<4.2		4.2
Endosulfan sulfate		<4.2		4.2
Endrin		<4.2		4.2
Endrin aldehyde		<4.2		4.2
Endrin ketone		<4.2		4.2
gamma-BHC (Lindane)		<2.2		2.2
Heptachlor		<2.2		2.2
Heptachlor epoxide		<2.2		2.2
Isodrin		<4.2		4.2
Kepone		<220		220
Methoxychlor		<22		22
Toxaphene		<220		220

Surrogate	%Rec		Acceptance Limits
DCB Decachlorobiphenyl	62		50 - 129
Tetrachloro-m-xylene	24	X	26 - 140

Client: Hercules Inc.

Job Number: 680-39892-1

Client Sample ID: Dirt

Lab Sample ID: 680-39892-1
Client Matrix: Solid

% Moisture: 21.7

Date Sampled: 08/26/2008 1030
Date Received: 08/27/2008 0905

8151A Chlorinated Herbicides by GC

Method: 8151A
Preparation: 8151A
Dilution: 1.0
Date Analyzed: 09/04/2008 0709
Date Prepared: 08/28/2008 1822

Analysis Batch: 680-116278
Prep Batch: 680-115835

Instrument ID: GC SemiVolatiles - S
Lab File ID: si02129.d
Initial Weight/Volume: 30.01 g
Final Weight/Volume: 10 mL
Injection Volume: 1 uL
Column ID: PRIMARY

Analyte	DryWt Corrected: Y Result (ug/Kg)	Qualifier	RL
2,4,5-T	<11		11
2,4-D	<11		11
Silvex (2,4,5-TP)	<11		11

Surrogate	%Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	72	58 - 110

Client: Hercules Inc.

Job Number: 680-39892-1

General Chemistry

Client Sample ID: Dirt

Lab Sample ID: 680-39892-1
Client Matrix: Solid

Date Sampled: 08/26/2008 1030
Date Received: 08/27/2008 0905

Analyte	Result	Qual	Units	RL	Dil	Method
Percent Moisture	22		%	0.010	1.0	PercentMoisture
	Anly Batch: 680-115722		Date Analyzed 08/28/2008 1020			

DATA REPORTING QUALIFIERS

Client: Hercules Inc.

Job Number: 680-39892-1

Lab Section	Qualifier	Description
GC Semi VOA		
	X	Surrogate exceeds the control limits

QUALITY CONTROL RESULTS

Client: Hercules Inc

Job Number: 680-39892-1

Surrogate Recovery Report

8260B Volatile Organic Compounds by GC/MS

Client Matrix: Solid

Lab Sample ID	Client Sample ID	BFB %Rec	DBFM %Rec	TOL %Rec
680-39892-1	Dirt	106	107	103
MB 680-116035/6		108	113	98
LCS 680-116035/4		108	114	109

Surrogate	Acceptance Limits
BFB = 4-Bromofluorobenzene	65-124
DBFM = Dibromofluoromethane	65-124
TOL = Toluene-d8 (Surr)	65-132

Client: Hercules Inc

Job Number: 680-39892-1

Surrogate Recovery Report

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	TBP %Rec	FBP %Rec	2FP %Rec	TPH %Rec	PHL %Rec	NBZ %Rec
680-39892-1	Dirt	52	56	48	77	54	49
MB 680-115709/9-A		56	66	57	82	66	59
LCS 680-115709/10-A		71	74	65	87	76	69

Surrogate	Acceptance Limits
TBP = 2,4,6-Tribromophenol	36-128
FBP = 2-Fluorobiphenyl	44-110
2FP = 2-Fluorophenol	41-110
TPH = Terphenyl-d14	10-112
PHL = Phenol-d5	43-110
NBZ = Nitrobenzene-d5	36-110

Client: Hercules Inc.

Job Number: 680-39892-1

Surrogate Recovery Report

8081A 8082 Organochlorine Pesticides & Polychlorinated Biphenyls by Gas Chromatography

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCB2 %Rec	TCX2 %Rec
680-39892-1	Dirt	62	24X
MB 680-115700/3-A		82	50
LCS 680-115700/4-A		85	53
LCS 680-115700/7-A		94	57
680-39892-1 MS	Dirt MS	51	31
680-39892-1 MS	Dirt MS	67	33
680-39892-1 MSD	Dirt MSD	53	34
680-39892-1 MSD	Dirt MSD	50	28

Surrogate	Acceptance Limits
DCB = DCB Decachlorobiphenyl	50-129
TCX = Tetrachloro-m-xylene	26-140

Client: Hercules Inc.

Job Number: 680-39892-1

Surrogate Recovery Report

8151A Chlorinated Herbicides by GC

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCPA1 %Rec
680-39892-1	Dirt	72
MB 680-115835/19-A		60
LCS 680-115835/20-A		59

Surrogate	Acceptance Limits
DCPA = 2,4-Dichlorophenylacetic acid	58-110

Client: Hercules Inc.

Job Number: 680-39892-1

Method Blank - Batch: 680-116035

Method: 8260B
Preparation: 5030A

Lab Sample ID: MB 680-116035/6
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 08/30/2008 2040
Date Prepared: 08/30/2008 2040

Analysis Batch: 680-116035
Prep Batch: N/A
Units: ug/Kg

Instrument ID: GC/MS Volatiles - M
Lab File ID: mq298.d
Initial Weight/Volume: 5 g
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
Acetone	<50		50
Acetonitrile	<200		200
Acrolein	<100		100
Acrylonitrile	<100		100
Benzene	<5.0		5.0
Bromodichloromethane	<5.0		5.0
Bromoform	<5.0		5.0
Bromomethane	<5.0		5.0
2-Butanone	<25		25
Carbon disulfide	<5.0		5.0
Carbon tetrachloride	<5.0		5.0
Chlorobenzene	<5.0		5.0
Chloroprene	<5.0		5.0
Chloroethane	<5.0		5.0
Chloroform	<5.0		5.0
Chloromethane	<5.0		5.0
3-Chloro-1-propene	<5.0		5.0
Dibromochloromethane	<5.0		5.0
1,2-Dibromo-3-Chloropropane	<10		10
1,2-Dibromoethane	<5.0		5.0
Dibromomethane	<5.0		5.0
trans-1,4-Dichloro-2-butene	<10		10
Dichlorodifluoromethane	<5.0		5.0
1,1-Dichloroethane	<5.0		5.0
1,2-Dichloroethane	<5.0		5.0
cis-1,2-Dichloroethene	<5.0		5.0
trans-1,2-Dichloroethene	<5.0		5.0
1,1-Dichloroethene	<5.0		5.0
1,2-Dichloropropane	<5.0		5.0
cis-1,3-Dichloropropene	<5.0		5.0
trans-1,3-Dichloropropene	<5.0		5.0
Ethylbenzene	<5.0		5.0
Ethyl methacrylate	<5.0		5.0
2-Hexanone	<25		25
Iodomethane	<5.0		5.0
Isobutanol	<200		200
Methacrylonitrile	<100		100
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<5.0		5.0
4-Methyl-2-pentanone	<25		25
Pentachloroethane	<25		25

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Hercules Inc.

Job Number: 680-39892-1

Method Blank - Batch: 680-116035

Method: 8260B
Preparation: 5030A

Lab Sample ID: MB 680-116035/6
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 08/30/2008 2040
Date Prepared: 08/30/2008 2040

Analysis Batch: 680-116035
Prep Batch: N/A
Units: ug/Kg

Instrument ID: GC/MS Volatiles - M
Lab File ID: mq298.d
Initial Weight/Volume: 5 g
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
Propionitrile	<100		100
Styrene	<5.0		5.0
1,1,1,2-Tetrachloroethane	<5.0		5.0
1,1,2,2-Tetrachloroethane	<5.0		5.0
Tetrachloroethene	<5.0		5.0
Toluene	<5.0		5.0
1,1,1-Trichloroethane	<5.0		5.0
1,1,2-Trichloroethane	<5.0		5.0
Trichloroethene	<5.0		5.0
Trichlorofluoromethane	<5.0		5.0
1,2,3-Trichloropropane	<5.0		5.0
Vinyl acetate	<10		10
Vinyl chloride	<5.0		5.0
Xylenes, Total	<10		10

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	108	65 - 124
Dibromofluoromethane	113	65 - 124
Toluene-d8 (Surr)	98	65 - 132

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Hercules Inc.

Job Number: 680-39892-1

Lab Control Spike - Batch: 680-116035

Method: 8260B
Preparation: 5030A

Lab Sample ID: LCS 680-116035/4
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 08/30/2008 1841
Date Prepared: 08/30/2008 1841

Analysis Batch: 680-116035
Prep Batch: N/A
Units: ug/Kg

Instrument ID: GC/MS Volatiles - M
Lab File ID: mq295.d
Initial Weight/Volume: 5 g
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	100	127	126	16 - 202	
Benzene	50.0	51.8	104	63 - 130	
Bromodichloromethane	50.0	53.0	106	64 - 137	
Bromoform	50.0	56.1	112	66 - 127	
Bromomethane	50.0	51.1	102	54 - 146	
2-Butanone	100	108	108	19 - 192	
Carbon disulfide	50.0	49.8	100	46 - 134	
Carbon tetrachloride	50.0	53.9	108	60 - 136	
Chlorobenzene	50.0	54.1	108	77 - 120	
Chloroethane	50.0	15.3	31	26 - 166	
Chloroform	50.0	57.6	115	68 - 127	
Chloromethane	50.0	54.4	109	46 - 137	
Dibromochloromethane	50.0	55.5	111	70 - 126	
1,2-Dibromo-3-Chloropropane	50.0	48.6	97	62 - 140	
1,2-Dibromoethane	50.0	54.1	108	61 - 138	
Dibromomethane	50.0	53.8	108	61 - 138	
Dichlorodifluoromethane	50.0	50.6	101	17 - 163	
1,1-Dichloroethane	50.0	54.1	108	65 - 130	
1,2-Dichloroethane	50.0	50.5	101	62 - 140	
cis-1,2-Dichloroethene	50.0	61.0	122	58 - 143	
trans-1,2-Dichloroethene	50.0	52.6	105	66 - 127	
1,1-Dichloroethene	50.0	55.0	110	59 - 137	
1,2-Dichloropropane	50.0	56.0	112	66 - 135	
cis-1,3-Dichloropropene	50.0	48.6	97	66 - 137	
trans-1,3-Dichloropropene	50.0	48.6	97	64 - 138	
Ethylbenzene	50.0	53.7	107	77 - 121	
2-Hexanone	100	98.7	99	47 - 151	
Methylene Chloride	50.0	53.8	108	65 - 126	
4-Methyl-2-pentanone	100	89.7	90	50 - 148	
Styrene	50.0	53.1	106	75 - 123	
1,1,1,2-Tetrachloroethane	50.0	56.2	112	72 - 124	
1,1,2,2-Tetrachloroethane	50.0	48.4	97	65 - 130	
Tetrachloroethene	50.0	56.8	114	76 - 120	
Toluene	50.0	53.5	107	67 - 132	
1,1,1-Trichloroethane	50.0	53.4	107	56 - 140	
1,1,2-Trichloroethane	50.0	55.6	111	62 - 138	
Trichloroethene	50.0	55.4	111	68 - 133	
Trichlorofluoromethane	50.0	58.2	116	33 - 152	
1,2,3-Trichloropropane	50.0	47.5	95	65 - 132	
Vinyl acetate	100	107	107	10 - 254	
Vinyl chloride	50.0	51.6	103	56 - 139	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Hercules Inc.

Job Number: 680-39892-1

Lab Control Spike - Batch: 680-116035

Method: 8260B
Preparation: 5030A

Lab Sample ID: LCS 680-116035/4
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 08/30/2008 1841
Date Prepared: 08/30/2008 1841

Analysis Batch: 680-116035
Prep Batch: N/A
Units: ug/Kg

Instrument ID: GC/MS Volatiles - M
Lab File ID: mq295.d
Initial Weight/Volume: 5 g
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Xylenes, Total	150	159	106	76 - 122	

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	108	65 - 124
Dibromofluoromethane	114	65 - 124
Toluene-d8 (Surr)	109	65 - 132

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Hercules Inc.

Job Number: 680-39892-1

Method Blank - Batch: 680-115709

Method: 8270C
Preparation: 3550B

Lab Sample ID:	MB 680-115709/9-A	Analysis Batch:	680-116072	Instrument ID:	GC/MS SemiVolatiles - T
Client Matrix:	Solid	Prep Batch:	680-115709	Lab File ID:	t0910.d
Dilution:	1.0	Units:	ug/Kg	Initial Weight/Volume:	30.07 g
Date Analyzed:	08/29/2008 1212			Final Weight/Volume:	1 mL
Date Prepared:	08/28/2008 1220			Injection Volume:	1.0 uL

Analyte	Result	Qual	RL
Acenaphthene	<330		330
Thionazin	<330		330
Sulfotepp	<330		330
Pyridine	<330		330
1,1'-Biphenyl	<330		330
1,2,4,5-Tetrachlorobenzene	<330		330
1,2,4-Trichlorobenzene	<330		330
1,2-Dichlorobenzene	<330		330
1,3,5-Trinitrobenzene	<330		330
1,3-Dichlorobenzene	<330		330
1,3-Dinitrobenzene	<330		330
1,4-Dichlorobenzene	<330		330
1,4-Dioxane	<330		330
1,4-Naphthoquinone	<330		330
1-Naphthylamine	<330		330
2,3,4,6-Tetrachlorophenol	<330		330
2,4,5-Trichlorophenol	<330		330
2,4,6-Trichlorophenol	<330		330
2,4-Dichlorophenol	<330		330
2,4-Dimethylphenol	<330		330
2,4-Dinitrophenol	<1700		1700
2,4-Dinitrotoluene	<330		330
2,6-Dichlorophenol	<330		330
Dimethyl phthalate	<330		330
2,6-Dinitrotoluene	<330		330
2-Acetylaminofluorene	<330		330
2-Chlorophenol	<330		330
2-Chloronaphthalene	<330		330
2-Methylnaphthalene	<330		330
2-Methylphenol	<330		330
2-Naphthylamine	<330		330
2-Nitroaniline	<1700		1700
2-Nitrophenol	<330		330
2-Picoline	<330		330
2-Toluidine	<330		330
3 & 4 Methylphenol	<330		330
3,3'-Dichlorobenzidine	<660		660
3,3'-Dimethylbenzidine	<1700		1700
3-Methylcholanthrene	<330		330
3-Nitroaniline	<1700		1700
4,6-Dinitro-2-methylphenol	<1700		1700

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Hercules Inc.

Job Number: 680-39892-1

Method Blank - Batch: 680-115709

Method: 8270C
Preparation: 3550B

Lab Sample ID: MB 680-115709/9-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 08/29/2008 1212
Date Prepared: 08/28/2008 1220

Analysis Batch: 680-116072
Prep Batch: 680-115709
Units: ug/Kg

Instrument ID: GC/MS SemiVolatiles - T
Lab File ID: t0910.d
Initial Weight/Volume: 30.07 g
Final Weight/Volume: 1 mL
Injection Volume: 1.0 uL

Analyte	Result	Qual	RL
4-Aminobiphenyl	<330		330
4-Bromophenyl phenyl ether	<330		330
4-Chloro-3-methylphenol	<330		330
4-Chloroaniline	<660		660
4-Chlorophenyl phenyl ether	<330		330
4-Nitroaniline	<1700		1700
4-Nitrophenol	<1700		1700
4-Nitroquinoline-1-oxide	<3300		3300
7,12-Dimethylbenz(a)anthracene	<330		330
Acenaphthylene	<330		330
Acetophenone	<330		330
alpha,alpha-Dimethyl phenethylamine	<67000		67000
Aniline	<660		660
Anthracene	<330		330
Aramite, Total	<330		330
Benzo[a]anthracene	<330		330
Benzo[a]pyrene	<330		330
Benzo[b]fluoranthene	<330		330
Benzo[g,h,i]perylene	<330		330
Benzo[k]fluoranthene	<330		330
Benzyl alcohol	<330		330
Bis(2-chloroethoxy)methane	<330		330
Bis(2-chloroethyl)ether	<330		330
Bis(2-ethylhexyl) phthalate	<330		330
Chrysene	<330		330
Diallate	<330		330
Dibenz(a,h)anthracene	<330		330
Dibenzofuran	<330		330
Di-n-butyl phthalate	<330		330
Diethyl phthalate	<330		330
p-Dimethylamino azobenzene	<330		330
Dinoseb	<330		330
Di-n-octyl phthalate	<330		330
Ethyl methanesulfonate	<330		330
Fluoranthene	<330		330
Fluorene	<330		330
Hexachlorobenzene	<330		330
Hexachlorobutadiene	<330		330
Hexachlorocyclopentadiene	<330		330
Hexachloroethane	<330		330
Hexachlorophene	<170000		170000

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Hercules Inc.

Job Number: 680-39892-1

Method Blank - Batch: 680-115709

Method: 8270C
Preparation: 3550B

Lab Sample ID: MB 680-115709/9-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 08/29/2008 1212
Date Prepared: 08/28/2008 1220

Analysis Batch: 680-116072
Prep Batch: 680-115709
Units: ug/Kg

Instrument ID: GC/MS SemiVolatiles - T
Lab File ID: t0910.d
Initial Weight/Volume: 30.07 g
Final Weight/Volume: 1 mL
Injection Volume: 1.0 uL

Analyte	Result	Qual	RL
Hexachloropropene	<330		330
Indeno[1,2,3-cd]pyrene	<330		330
Isophorone	<330		330
Isosafrole	<330		330
Methapyrilene	<67000		67000
Methyl methanesulfonate	<330		330
Naphthalene	<330		330
Nitrobenzene	<330		330
N-Nitrosodi-n-butylamine	<330		330
N-Nitrosodiethylamine	<330		330
N-Nitrosodimethylamine	<330		330
N-Nitrosodiphenylamine	<330		330
N-Nitrosodi-n-propylamine	<330		330
N-Nitrosomethylethylamine	<330		330
N-Nitrosomorpholine	<330		330
N-Nitrosopiperidine	<330		330
N-Nitrosopyrrolidine	<330		330
N-Nitro-o-toluidine	<330		330
Pentachlorobenzene	<330		330
Pentachloronitrobenzene	<330		330
Pentachlorophenol	<1700		1700
Phenacetin	<330		330
Phenanthrene	<330		330
Phenol	<330		330
p-Phenylene diamine	<1700		1700
Pronamide	<330		330
Pyrene	<330		330
Safrole, Total	<330		330
o,o',o''-Triethylphosphorothioate	<330		330
Disulfoton	<330		330
Ethyl Parathion	<330		330
Methyl parathion	<330		330
Phorate	<330		330
Famphur	<330		330
Dimethoate	<330		330
Butyl benzyl phthalate	<330		330
bis(chloroisopropyl) ether	<330		330

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol	56	36 - 128
2-Fluorobiphenyl	66	44 - 110

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Hercules Inc.

Job Number: 680-39892-1

Surrogate	% Rec	Acceptance Limits
2-Fluorophenol	57	41 - 110
Terphenyl-d14	82	10 - 112
Phenol-d5	66	43 - 110
Nitrobenzene-d5	59	36 - 110

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Hercules Inc.

Job Number: 680-39892-1

Lab Control Spike - Batch: 680-115709

Method: 8270C
Preparation: 3550B

Lab Sample ID: LCS 680-115709/10-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 08/29/2008 1236
Date Prepared: 08/28/2008 1220

Analysis Batch: 680-116072
Prep Batch: 680-115709
Units: ug/Kg

Instrument ID: GC/MS SemiVolatiles - T
Lab File ID: t0911.d
Initial Weight/Volume: 30.17 g
Final Weight/Volume: 1 mL
Injection Volume: 1.0 uL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	3310	2280	69	44 - 110	
Pyridine	3310	1150	35	10 - 110	
1,2,4-Trichlorobenzene	3310	2040	62	42 - 110	
1,2-Dichlorobenzene	3310	2040	62	40 - 110	
1,3-Dichlorobenzene	3310	1900	57	37 - 110	
1,4-Dichlorobenzene	3310	1920	58	38 - 110	
1,4-Dioxane	3310	776	23	10 - 110	
2,4,5-Trichlorophenol	3310	2400	72	48 - 110	
2,4,6-Trichlorophenol	3310	2340	71	46 - 110	
2,4-Dichlorophenol	3310	2230	67	46 - 110	
2,4-Dimethylphenol	3310	2260	68	44 - 110	
2,4-Dinitrophenol	3310	<1700	43	10 - 119	
2,4-Dinitrotoluene	3310	2440	74	46 - 116	
Dimethyl phthalate	3310	2530	76	48 - 110	
2,6-Dinitrotoluene	3310	2480	75	45 - 118	
2-Chlorophenol	3310	2190	66	44 - 110	
2-Chloronaphthalene	3310	2290	69	46 - 110	
2-Methylnaphthalene	3310	2230	67	45 - 110	
2-Methylphenol	3310	2200	66	44 - 110	
2-Nitroaniline	3310	2530	76	42 - 110	
2-Nitrophenol	3310	2050	62	38 - 110	
3 & 4 Methylphenol	3310	2340	71	43 - 110	
3,3'-Dichlorobenzidine	3310	1650	50	27 - 110	
3-Nitroaniline	3310	2150	65	30 - 110	
4,6-Dinitro-2-methylphenol	3310	2460	74	10 - 126	
4-Bromophenyl phenyl ether	3310	2100	63	43 - 110	
4-Chloro-3-methylphenol	3310	2370	71	46 - 110	
4-Chloroaniline	3310	1790	54	21 - 110	
4-Chlorophenyl phenyl ether	3310	2370	72	47 - 110	
4-Nitroaniline	3310	2370	72	32 - 117	
4-Nitrophenol	3310	2390	72	30 - 119	
Acenaphthylene	3310	2440	74	49 - 110	
Aniline	3310	1530	46	10 - 110	
Anthracene	3310	2490	75	52 - 110	
Benzo[a]anthracene	3310	2490	75	53 - 113	
Benzo[a]pyrene	3310	2690	81	51 - 115	
Benzo[b]fluoranthene	3310	2560	77	45 - 119	
Benzo[g,h,i]perylene	3310	2400	73	49 - 116	
Benzo[k]fluoranthene	3310	2680	81	50 - 115	
Benzyl alcohol	3310	2280	69	38 - 110	
Bis(2-chloroethoxy)methane	3310	2450	74	46 - 110	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Hercules Inc.

Job Number: 680-39892-1

Lab Control Spike - Batch: 680-115709

Method: 8270C
Preparation: 3550B

Lab Sample ID: LCS 680-115709/10-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 08/29/2008 1236
Date Prepared: 08/28/2008 1220

Analysis Batch: 680-116072
Prep Batch: 680-115709
Units: ug/Kg

Instrument ID: GC/MS SemiVolatiles - T
Lab File ID: t0911.d
Initial Weight/Volume: 30.17 g
Final Weight/Volume: 1 mL
Injection Volume: 1.0 uL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Bis(2-chloroethyl)ether	3310	2080	63	39 - 110	
Bis(2-ethythexyl) phthalate	3310	2930	88	51 - 120	
Chrysene	3310	2500	75	54 - 115	
Dibenz(a,h)anthracene	3310	2500	75	50 - 115	
Dibenzofuran	3310	2380	72	48 - 110	
Di-n-butyl phthalate	3310	2720	82	49 - 115	
Diethyl phthalate	3310	2620	79	47 - 110	
Di-n-octyl phthalate	3310	2770	84	49 - 122	
Fluoranthene	3310	2450	74	48 - 116	
Fluorene	3310	2410	73	48 - 110	
Hexachlorobenzene	3310	2280	69	50 - 110	
Hexachlorobutadiene	3310	2040	62	44 - 110	
Hexachlorocyclopentadiene	3310	2160	65	26 - 110	
Hexachloroethane	3310	1960	59	36 - 110	
Indeno[1,2,3-cd]pyrene	3310	2120	64	45 - 128	
Isophorone	3310	2200	66	44 - 110	
Naphthalene	3310	2150	65	44 - 110	
Nitrobenzene	3310	2110	64	41 - 110	
N-Nitrosodimethylamine	3310	2070	62	26 - 110	
N-Nitrosodiphenylamine	3310	2560	77	53 - 110	
N-Nitrosodi-n-propylamine	3310	2460	74	41 - 110	
Pentachlorophenol	3310	2020	61	28 - 117	
Phenanthrene	3310	2530	76	51 - 110	
Phenol	3310	2340	71	41 - 110	
Pyrene	3310	2680	81	54 - 112	
Butyl benzyl phthalate	3310	3010	91	54 - 124	
bis(chloroisopropyl) ether	3310	2370	71	31 - 110	

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol	71	36 - 128
2-Fluorobiphenyl	74	44 - 110
2-Fluorophenol	65	41 - 110
Terphenyl-d14	87	10 - 112
Phenol-d5	76	43 - 110
Nitrobenzene-d5	69	36 - 110

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Hercules Inc.

Job Number: 680-39892-1

Method Blank - Batch: 680-115700

Method: 8081A_8082
Preparation: 3550B

Lab Sample ID: MB 680-115700/3-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 09/04/2008 2016
Date Prepared: 08/28/2008 1131

Analysis Batch: 680-116395
Prep Batch: 680-115700
Units: ug/Kg

Instrument ID: GC SemiVolatiles - M
Lab File ID: mi03057.d
Initial Weight/Volume: 30.13 g
Final Weight/Volume: 10 mL
Injection Volume: 1.0 uL
Column ID: PRIMARY

Analyte	Result	Qual	RL
Aldrin	<1.7		1.7
alpha-BHC	<1.7		1.7
beta-BHC	<1.7		1.7
Chlordane (technical)	<17		17
Chlorobenzilate	<17		17
4,4'-DDD	<3.3		3.3
4,4'-DDE	<3.3		3.3
4,4'-DDT	<3.3		3.3
delta-BHC	<1.7		1.7
Dieldrin	<3.3		3.3
Endosulfan I	<1.7		1.7
Endosulfan II	<3.3		3.3
Endosulfan sulfate	<3.3		3.3
Endrin	<3.3		3.3
Endrin aldehyde	<3.3		3.3
Endrin ketone	<3.3		3.3
gamma-BHC (Lindane)	<1.7		1.7
Heptachlor	<1.7		1.7
Heptachlor epoxide	<1.7		1.7
Isodrin	<3.3		3.3
Kepone	<170		170
Methoxychlor	<17		17
PCB-1260	<33		33
PCB-1016	<33		33
Toxaphene	<170		170

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	82	50 - 129
Tetrachloro-m-xylene	50	26 - 140

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Hercules Inc.

Job Number: 680-39892-1

Lab Control Spike - Batch: 680-115700

Method: 8081A_8082
Preparation: 3550B

Lab Sample ID: LCS 680-115700/4-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 09/04/2008 2036
Date Prepared: 08/28/2008 1131

Analysis Batch: 680-116395
Prep Batch: 680-115700
Units: ug/Kg

Instrument ID: GC SemiVolatiles - M
Lab File ID: mi03058.d
Initial Weight/Volume: 30.18 g
Final Weight/Volume: 10 mL
Injection Volume: 1.0 uL
Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aldrin	3.31	2.08	63	29 - 116	
alpha-BHC	3.31	<1.7	41	24 - 118	
beta-BHC	3.31	<1.7	43	30 - 161	
4,4'-DDD	6.63	5.18	78	34 - 162	
4,4'-DDE	6.63	4.29	65	25 - 136	
4,4'-DDT	6.63	5.76	87	14 - 134	
delta-BHC	3.31	<1.7	50	21 - 120	
Dieldrin	6.63	4.45	67	41 - 128	
Endosulfan I	3.31	2.27	68	30 - 133	
Endosulfan II	6.63	5.33	80	25 - 130	
Endosulfan sulfate	6.63	7.02	106	42 - 118	
Endrin	6.63	4.87	74	30 - 135	
Endrin aldehyde	6.66	5.44	82	31 - 115	
Endrin ketone	6.63	6.68	101	43 - 132	
gamma-BHC (Lindane)	3.31	2.22	67	30 - 121	
Heptachlor	3.31	2.36	71	32 - 130	
Heptachlor epoxide	3.31	2.09	63	30 - 123	
Methoxychlor	6.66	<17	76	10 - 188	

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	85	50 - 129
Tetrachloro-m-xylene	53	26 - 140

Lab Control Spike - Batch: 680-115700

Method: 8081A_8082
Preparation: 3550B

Lab Sample ID: LCS 680-115700/7-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 09/04/2008 2055
Date Prepared: 08/28/2008 1131

Analysis Batch: 680-116395
Prep Batch: 680-115700
Units: ug/Kg

Instrument ID: GC SemiVolatiles - M
Lab File ID: mi03059.d
Initial Weight/Volume: 30.39 g
Final Weight/Volume: 10 mL
Injection Volume: 1.0 uL
Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
PCB-1260	329	341	104	53 - 133	
PCB-1016	329	294	89	43 - 136	

Surrogate	% Rec	Acceptance Limits

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Hercules Inc

Job Number: 680-39892-1

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	94	50 - 129
Tetrachloro-m-xylene	57	26 - 140

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Hercules Inc.

Job Number: 680-39892-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 680-115700

Method: 8081A_8082
Preparation: 3550B

MS Lab Sample ID:	680-39892-1	Analysis Batch: 680-116395	Instrument ID: GC SemiVolatiles - M
Client Matrix:	Solid	Prep Batch: 680-115700	Lab File ID: mi03065.d
Dilution:	1.0		Initial Weight/Volume: 30.08 g
Date Analyzed:	09/04/2008 2251		Final Weight/Volume: 10 mL
Date Prepared:	08/28/2008 1131		Injection Volume: 1.0 uL
			Column ID: PRIMARY
MSD Lab Sample ID:	680-39892-1	Analysis Batch: 680-116395	Instrument ID: GC SemiVolatiles - M
Client Matrix:	Solid	Prep Batch: 680-115700	Lab File ID: mi03066.d
Dilution:	1.0		Initial Weight/Volume: 30.27 g
Date Analyzed:	09/04/2008 2311		Final Weight/Volume: 10 mL
Date Prepared:	08/28/2008 1131		Injection Volume: 1.0 uL
			Column ID: PRIMARY

	% Rec.					
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual MSD Qual
Aldrin	33	44	29 - 116	27	50	
alpha-BHC	36	37	24 - 118	1	50	
beta-BHC	41	45	30 - 161	8	50	
4,4'-DDD	76	83	34 - 162	9	50	
4,4'-DDE	42	66	25 - 136	43	50	
4,4'-DDT	22	30	14 - 134	28	50	
delta-BHC	61	62	21 - 120	0	50	
Dieldrin	60	64	41 - 128	6	50	
Endosulfan I	56	58	30 - 133	4	50	
Endosulfan II	76	76	25 - 130	0	50	
Endosulfan sulfate	84	84	42 - 118	1	50	
Endrin	67	70	30 - 135	4	50	
Endrin aldehyde	71	75	31 - 115	6	50	
Endrin ketone	77	79	43 - 132	2	50	
gamma-BHC (Lindane)	49	48	30 - 121	3	50	
Heptachlor	35	42	32 - 130	17	50	
Heptachlor epoxide	47	50	30 - 123	4	50	
Methoxychlor	39	43	10 - 188	10	50	

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
DCB Decachlorobiphenyl	51	53	50 - 129
Tetrachloro-m-xylene	31	34	26 - 140

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Hercules Inc.

Job Number: 680-39892-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 680-115700

Method: 8081A_8082
Preparation: 3550B

MS Lab Sample ID:	680-39892-1	Analysis Batch: 680-116395	Instrument ID: GC SemiVolatiles - M
Client Matrix:	Solid	Prep Batch: 680-115700	Lab File ID: mi03067.d
Dilution:	1.0		Initial Weight/Volume: 30.11 g
Date Analyzed:	09/04/2008 2330		Final Weight/Volume: 10 mL
Date Prepared:	08/28/2008 1131		Injection Volume: 1.0 uL
			Column ID: PRIMARY
MSD Lab Sample ID:	680-39892-1	Analysis Batch: 680-116395	Instrument ID: GC SemiVolatiles - M
Client Matrix:	Solid	Prep Batch: 680-115700	Lab File ID: mi03068.d
Dilution:	1.0		Initial Weight/Volume: 30.04 g
Date Analyzed:	09/04/2008 2350		Final Weight/Volume: 10 mL
Date Prepared:	08/28/2008 1131		Injection Volume: 1.0 uL
			Column ID: PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
PCB-1260	97	72	53 - 133	29	50		
PCB-1016	64	48	43 - 136	29	50		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
DCB Decachlorobiphenyl	67	50	50 - 129
Tetrachloro-m-xylene	33	28	26 - 140

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Hercules Inc.

Job Number: 680-39892-1

Method Blank - Batch: 680-115835

Method: 8151A
Preparation: 8151A

Lab Sample ID: MB 680-115835/19-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 09/04/2008 0115
Date Prepared: 08/28/2008 1822

Analysis Batch: 680-116278
Prep Batch: 680-115835
Units: ug/Kg

Instrument ID: GC SemiVolatiles - S
Lab File ID: si02110.d
Initial Weight/Volume: 30.32 g
Final Weight/Volume: 10 mL
Injection Volume: 1 uL
Column ID: PRIMARY

Analyte	Result	Qual	RL
2,4,5-T	<8.2		8.2
2,4-D	<8.2		8.2
Silvex (2,4,5-TP)	<8.2		8.2

Surrogate	% Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	60	58 - 110

Lab Control Spike - Batch: 680-115835

Method: 8151A
Preparation: 8151A

Lab Sample ID: LCS 680-115835/20-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 09/04/2008 0134
Date Prepared: 08/28/2008 1822

Analysis Batch: 680-116278
Prep Batch: 680-115835
Units: ug/Kg

Instrument ID: GC SemiVolatiles - S
Lab File ID: si02111.d
Initial Weight/Volume: 30.25 g
Final Weight/Volume: 10 mL
Injection Volume: 1 uL
Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
2,4,5-T	66.1	48.4	73	52 - 113	
2,4-D	66.1	69.3	105	55 - 112	
Silvex (2,4,5-TP)	66.1	49.9	76	52 - 110	

Surrogate	% Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	59	58 - 110

Calculations are performed before rounding to avoid round-off errors in calculated results.

Serial Number 011482

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.testamericainc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

○ Alternate Laboratory Name/Location

Phone:
Fax:

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
I. B. Dirt Fill		MS.
TAL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
CLIENT (SITE) PM: Charles Jordan	CLIENT PHONE: 601 466 3048	CLIENT FAX
CLIENT NAME: Hercules Inc.	CLIENT E-MAIL	
CLIENT ADDRESS: 613 W 7th Street Hattiesburg MS 39401		
COMPANY CONTRACTING THIS WORK (if applicable)		

PAGE 1 OF 1

STANDARD REPORT DELIVERY ○

DATE DUE _____

EXPEDITED REPORT DELIVERY (SURCHARGE) ○

DATE DUE _____

NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX TYPE: COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	REQUIRED ANALYSIS: VOC	SVOC, PCB, Metals	PRESERVATIVE	NUMBER OF CONTAINERS SUBMITTED			REMARKS
8/26/08	10:30AM	Dirt Amber	G		X						1			
8/26/08	10:30AM	Dirt	G		X							1		
		BLANK		X									1	

Page 37 of 38

EMP. 08.8

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
	082708	0905	YES ○ NO ○		680-39892	

TAL8240-680 (1207)

Login Sample Receipt Check List

Client: Hercules Inc.

Job Number: 680-39892-1

Login Number: 39892
Creator: Hall, Karl I
List Number: 1

List Source: TestAmerica Savannah

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.8 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	False	NO LABEL/ID
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	

ESI

ATTACHMENT G

MDEQ APPROVAL LETTER

STATE OF MISSISSIPPI
HALEY BARBOUR
GOVERNOR
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
TRUDY D. FISHER, EXECUTIVE DIRECTOR

September 19, 2008

via fax: 601-545-6665

Mr. James A. Harrison, Executive Director
Pine Belt Regional Solid Waste Management Authority
P. O. Box 389
Petal, Mississippi 39465

Dear Mr. Harrison:

Re: Disposal of Two Waste Streams, SS2 and SS3 from Hercules Corporation, Hattiesburg, MS at the Pine Belt Landfill, SW0560010436 Perry County

We have reviewed the Industrial Waste Profile sheets and TCLP analyses submitted by facsimile on September 15 & 18, 2008 for the two waste streams from Hercules Corporation, Hattiesburg, MS. The wastes are industrial wastewater treatment sludges. You indicate that any needed solidification will be done at Hercules prior to delivery to the landfill. Based on the information submitted, the MDEQ has no objection to the disposal of these two waste streams at the Pine Belt Regional Landfill in accordance with all pertinent laws, ordinances, regulations and permit conditions.

If you have any questions or comments, please call me at (601) 961-5074.

Sincerely,

Louis Lavallee, P.E.
Solid Waste & Mining Compliance

Dear Mr. Harrison:

Re: Disposal of Two Waste Streams, SS2 and SS3
from Hercules Corporation, Hattiesburg, MS
at the Pine Belt Landfill, SW0560010436
Perry County

We have reviewed the Industrial Waste Profile sheets and TCLP analyses submitted by facsimile on September 15 & 18, 2008 for the two waste streams from Hercules Corporation, Hattiesburg, MS. The wastes are industrial wastewater treatment sludges. You indicate that any needed solidification will be done at Hercules prior to delivery to the landfill. Based on the information submitted, the MDEQ has no objection to the disposal of these two waste streams at the Pine Belt Regional Landfill in accordance with all pertinent laws, ordinances, regulations and permit conditions.

If you have any questions or comments, please call me at (601) 961-5074.

Sincerely,

Louis Lavallee, P.E.
Solid Waste & Mining Compliance

OFFICE OF POLLUTION CONTROL
POST OFFICE BOX 2261 • JACKSON, MISSISSIPPI 39225-2261 • TEL: (601) 961-5171 • FAX: (601) 354-6612 • www.deq.state.ms.us
AN EQUAL OPPORTUNITY EMPLOYER

HERCULES

Hercules Incorporated
613 West 7th Street
Hattiesburg, MS 39401
(601) 545-3450
Fax: (601) 584-3226
www.herc.com

September 29, 2008

Mayor, City of Hattiesburg
Director Public services, City of Hattiesburg
Executive Director, EMD
Project Manager, MDEQ
Hercules Hattiesburg CAP members
Area Residents

Dear Neighbor,

The purpose of this letter is to make our community leaders and neighbors aware of current and future planned activities at the Hercules Incorporated Hattiesburg, Mississippi, plant. The company is working towards completing two years of major downsizing operations, while at the same time, improving the few operations remaining at Hattiesburg.

This is most evident in the plant's physical change with the removal of several past plant operating structures at the facility. The plant is also exiting both its industrial wastewater impounding basin and a five million gallon wastewater equalization tank. This is possible because of the major downsizing of operations that has taken place. The site will no longer generate wastewater that contains solids, which in the past had to be separated from the water utilizing these two units.

The exiting of both of these wastewater units will involve the cleanout of residual wastewater sludge. This work will be completed in concurrence with the Mississippi Department of Environmental Quality (MDEQ) oversight. The sludge will be removed and properly disposed of offsite in an approved landfill.

We expect this project to start in early October of this year. During the final cleanout we would anticipate some localized odor as a result of disturbing the sludge upon its removal. Any odor will most likely be a mercaptan, or sulfur, type odor. We will utilize the latest technology-based techniques, such as the possibility of pH adjustment, to minimize the generation of any odors. We anticipate both starting and completing this work during the 4th quarter of 2008.

If you have any questions, or we can provide any additional information, please contact myself at 601-584-3220, Abraham Escutia at 601-584-3233, or Charles Jordan at 601-545-3450.

Sincerely,

HERCULES INCORPORATED

Gary F. Shelley
Operations Manager

MEMORANDUM

To: Timothy Hassett
Hercules, Incorporated

From: Charles Coney
Eco-Systems, Inc.

Date: September 22, 2008

Re: Sludge Sample Analyses
Hattiesburg, Mississippi

At your request, Eco-Systems has conducted sampling of sludges from the wastewater impoundment and the wastewater holding tank and submitted those samples for analysis. In general, the sampling was conducted and the samples were analyzed according to information supplied by Hercules. Initial sampling was conducted on July 1, 2008, and re-sampling of one area was conducted on July 30, 2008 and September 4, 2008. Samples were submitted to TestAmerica Laboratories, Inc. (TestAmerica) of Savannah, Georgia for analysis. A split of the sample collected on July 30, 2008 was also submitted to Bonner Analytical and Testing Company (BATCO).

Samples Collected July 1, 2008

During the initial sampling, three composite samples were collected. Samples SS-1 & SS-2 were collected from the wastewater impoundment, and sample SS-3 was collected from the wastewater holding tank. Samples SS-1 and SS-2 were each composed of 5 aliquots collected from the perimeter of the wastewater impoundment. The aliquots for sample SS-1 were collected from the west end of the impoundment, and the aliquots for SS-2 were collected from the east end of the impoundment. The western end of the wastewater impoundment, which is the influent end of the impoundment, is approximately one third of the total area of the impoundment and is separated from the eastern end of the impoundment by a baffle. The baffle slows the flow of wastewater through the impoundment, which forces heavier solid material to precipitate. Consequently, sludge on the west side of the baffle generally has a higher solid content that sludge on the eastern side of the baffle. Much of the sludge on the western side of the baffle is also covered by resinous cap of dried sludge ranging from approximately six inches to one foot in thickness. Aliquot locations for SS-1 and SS-2 are shown on the attached Figure 1.

Sample SS-3 was composed of two aliquots collected from the platform on the western rim of the tank and one aliquot collected from the platform on the eastern rim of the tank.

Each sample aliquot was collected with a decontaminated hand auger. The samples were collected by pushing the hand auger through the upper, relatively solid, surficial sludge and then, to the extent practical, vertically mixing the aliquot location. This was accomplished by pumping the hand auger from the surface to the base of the sludge or the limit of the auger rods, whichever was shallower. After mixing, the aliquot was collected and placed on clean plastic sheeting. Aliquots were composited in the field using stainless steel spoons and placed in laboratory supplied containers. Samples collected on July 1, 2008 were analyzed according to the TCLP for VOCs, SVOCs, Pesticides, PCB, Herbicides, and Metals, and also for reactive cyanide, reactive sulfide, pH (corrosivity) and percent solids.

Analysis for sample SS-1 detected 1.3 mg/L of benzene in the leachate. Per federal regulations, if TCLP benzene concentrations are 0.5 mg/L, or above, the waste is considered hazardous by the characteristic of toxicity. Benzene was detected in sample SS-2 at a concentration of 0.21 mg/L and was not detected in sample SS-3.Chloroform was also detected in the sample collected from SS-1 at a concentration of 0.19 mg/L, which is less than the TCLP limit of 6 mg/L. Other VOCs were not detected in the three samples.

Total methyl phenols, which are SVOCs, were detected in the three sludge samples at concentrations ranging from 0.18 mg/L in sample SS-3 to 0.72 mg/L in sample SS-2. Methyl Phenols are not listed in 40CRF 261.24, therefore the maximum concentration for toxicity characteristic is not available.

Pesticides, PCBs, herbicides, and metals were not detected. PH ranged from 5.59 in sample SS-1 to 6.89 in sample SS-3. Reactive cyanide and sulfide were not detected.

Sample Collected July 30, 2007

At the request of Hercules, Eco-Systems conducted re-sampling of SS-1 to confirm the presence of benzene at concentrations above the TCLP limit in the western end of the wastewater impoundment. Sample SS-1-073008 was composited from five aliquots that were collected in approximately the same locations as the previous sample SS-1-070108. (The last 6 digits of the sample I.D. are the collection date.) Sample SS-1-073008 was submitted to TestAmerica for analysis of VOCs by the TCLP. A split of the sample was also submitted to BATCO for the same analysis.

Analytical results of the sample split submitted to TestAmerica detected benzene at a concentration of 0.44 mg/L. Analytical results of the sample split submitted to BATCO detected benzene at a concentration of 0.586 mg/L. Other VOCs were not detected in either split of sample SS-1-073008.

Samples Collected September 4, 2008

After consideration of previous sludge sample analytical results, a third sampling event was conducted to investigate whether benzene concentrations detected in previous

samples collected from the western end of the wastewater impoundment were the result of influence from aliquots collected from a localized area of elevated benzene concentration. During the third sampling event, six samples, SS-5 through SS-10, were collected from discrete locations, which are shown on Figure 1. Samples collected from each of the six locations were mixed vertically, as described for the July 1, 2008 sampling event. The six discrete samples were submitted to TestAmerica for analysis of VOCs by the TCLP.

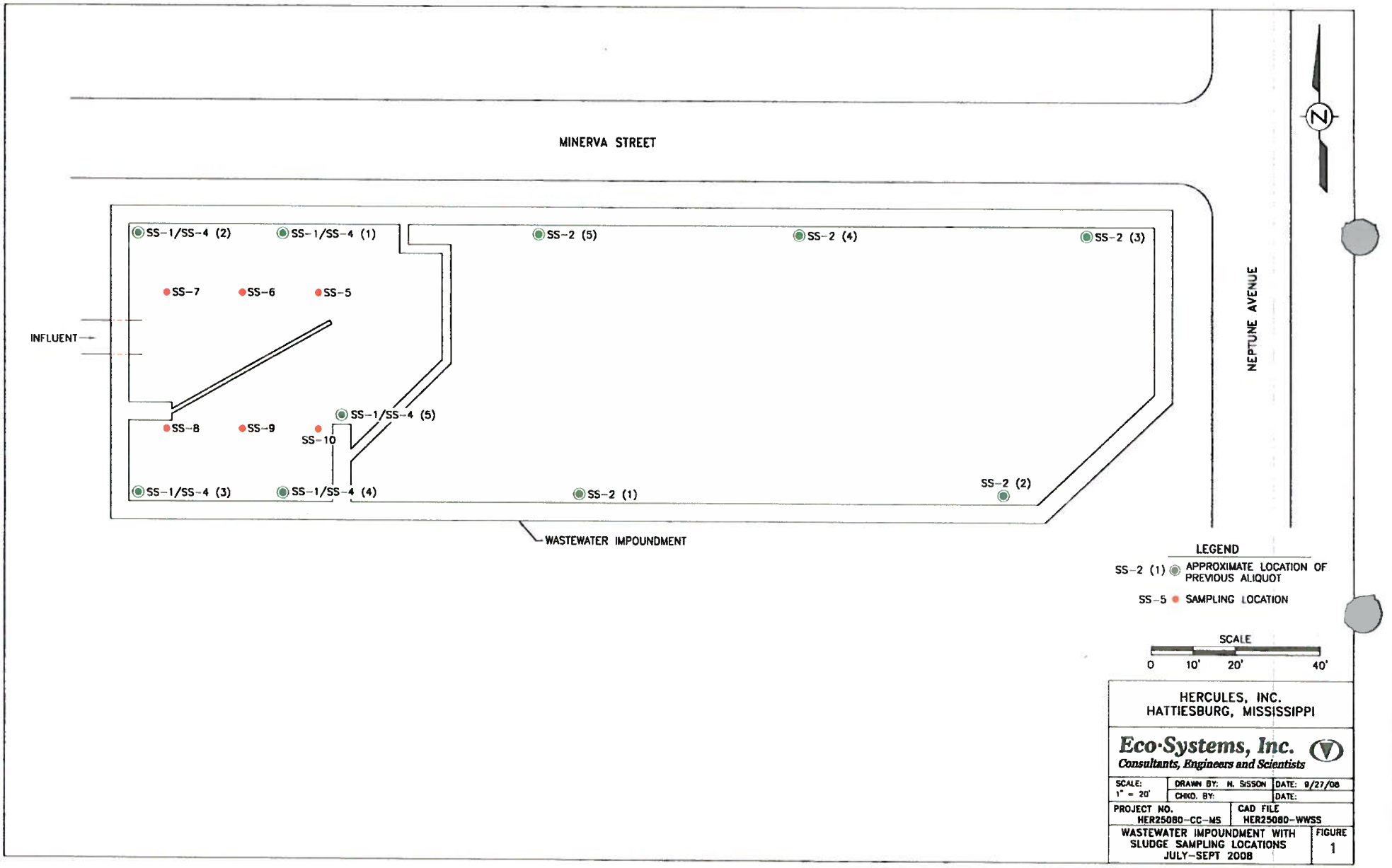
Benzene concentrations detected in the samples are shown in the Table 1. Benzene concentrations in samples SS-5, SS-6, and SS-8 are above the TCLP limit for benzene. Benzene concentrations in samples SS-7, SS-9, and SS-10 are below the TCLP limit for benzene. Carbon tetrachloride and chloroform were also detected in sample SS-8 at concentrations less than TCLP limits for those compounds.

TABLE 1
SUMMARY OF TCLP BENZENE ANALYTICAL RESULTS
Samples Collected September 4, 2008

Location	Date Collected	TCLP Benzene (mg/L)
SS-5	9/4/2008	**5.5**
SS-6	9/4/2008	**3.2**
SS-7	9/4/2008	0.4
SS-8	9/4/2008	**3.2**
SS-9	9/4/2008	0.043
SS-10	9/4/2008	0.062
TCLP Limit		0.5

Conclusions

Based on the analytical results of the discrete samples collected on September 4, 2008, there would not appear to be a discrete area of the western end of the wastewater impoundment that is the source of the benzene detected in the earlier, composite samples.


MINERVA STREET
NEPTUNE AVENUE
N
SS-1/SS-4 (2)
SS-1/SS-4 (1)
SS-2 (5)
SS-2 (4)
SS-2 (3)
SS-7
SS-6
SS-5
INFLUENT
SS-1/SS-4 (5)
SS-8
SS-9
SS-10
SS-1/SS-4 (3)
SS-1/SS-4 (4)
SS-2 (1)
SS-2 (2)
WASTEWATER IMPOUNDMENT
LEGEND
SS-2 (1) APPROXIMATE LOCATION OF PREVIOUS ALIQUOT
SS-5 SAMPLING LOCATION
SCALE
0 10' 20' 40'
HERCULES, INC.
HATTIESBURG, MISSISSIPPI
Eco·Systems, Inc.
Consultants, Engineers and Scientists
SCALE: 1" = 20'
DRAWN BY: N. SISSON
DATE: 9/27/08
CHKD. BY:
DATE:
PROJECT NO. HER25080-CC-MS
CAD FILE HER25080-WWSS
WASTEWATER IMPOUNDMENT WITH SLUDGE SAMPLING LOCATIONS JULY-SEPT 2008
FIGURE 1

STATE OF MISSISSIPPI

HALEY BARBOUR

GOVERNOR

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

TRUDY D. FISHER, EXECUTIVE DIRECTOR

September 9, 2008

FILE COPY

Wayne McVaugh
Aon Risk Services
One Liberty Place, 1650 Market Street, Suite 1000
Philadephia, Pennsylvania 19103

Re: Hercules, Inc.
Safeco Insurance Company of America Bond No. 6502348
Westchester Fire Insurance Company No. K08181688

Dear Mr. McVaugh:

The Mississippi Department of Environmental Quality (MDEQ) has completed its review of the letter and enclosures you supplied dated July 24, 2008. At this time, MDEQ is returning to you the executed Westchester Fire Insurance Company No. K08181688 Surety Bond. This bond is intended to replace the previously executed bond held by MDEQ, Safeco Insurance Company of America Bond No. 6502348. In order to release the Safeco Insurance Company of America Bond, MDEQ is returning its copy of the bond in order to allow Safeco Insurance Company of America to close their file.

If you have any questions or comments, please contact me at (601) 961-5731.

Sincerely,

William McKercher

William McKercher, P.E.
Project Manager
Groundwater Assessment and
Remediation Division (GARD)

Enclosures

cc: Michael T. Slack, P.E. – MDEQ
Trey Smith – Legal, MDEQ
Tim Hassett – Hercules, Inc.

Safeco Insurance Company of America
Remedial Action Plan Bond

BOND #**6502348**

COPY

KNOW ALL MEN BY THESE PRESENTS: That Hercules Incorporated (hereinafter called the Principal), and Safeco Insurance Company of America (hereinafter called the Surety), are held and firmly bound unto the State of Mississippi (hereinafter called the Obligee), in the full and just sum of One Million Four Hundred Seventy Two Thousand and 00/100 Dollars ($ *), the payment of which sum, well and truly to be made, the said Principal and Surety bind themselves, and each of their heirs, administrators, executors, and assigns, jointly and severally, firmly by these presents.

*** $1,472,000.00**

WHEREAS, the Principal has entered into a Corrective Action Plan Agreement with the Obligee at the Principal's site located at 617 West 7 Street, Hattiesburg, Mississippi. In such agreement, the Principal has agreed to undertake certain actions (hereinafter the "Corrective Action Plan Work").

WHEREAS, in accordance with Mississippi Commission on Environmental Quality Regulation HW-2, Subpart I, Chapter 2, Section 201 Part (H), the Obligee has agreed to accept this bond as financial assurance to guarantee performance of the Corrective Action Plan Work under the supervision of the Office of Pollution Control pursuant to the above referenced regulations governing brownfield voluntary cleanup and redevelopment in Mississippi (the "State").

NOW, THEREFORE, THE CONDITIONS OF THE SURETY'S OBLIGATION HEREUNDER IS SUCH, that if the Principal shall well and truly perform the Corrective Action Plan Work at the time and in the manner specified by the State during the term of this bond or, if upon failure to perform the Corrective Action Work and demand by the State the Principal shall

establish a remediation trust in amount of this bond or such lesser amount that the State shall require, then Surety shall have no obligation under this Bond, otherwise to remain in full force and effect. The Surety shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above. Upon notification by the State that the Principal has failed to perform as guaranteed by this bond, the Surety shall place funds in the amount guaranteed for the facility into a standby trust fund as directed by the State.

PROVIDED, HOWEVER, That this bond is subject to the following conditions:

1. This bond shall be effective from **August 23rd**, 2007 to **August 23rd**, 2008. This is an annually renewable bond which shall automatically renew unless terminated in accordance with the provisions of this bond. The bond may be extended for additional terms at the option of the Surety, by continuation certificate executed by the Surety. Surety's liability under said bond shall not be cumulative and shall in no event exceed the penal amount as set forth in this bond. The Surety has no obligation to perform any remediation work and no responsibility involving any hazardous waste at the site. The Surety's obligation under this bond consists of the payment of sums found to be due the Obligee and no other obligation.

2. In the event of a default by the Principal in the performance of the contract during the term of this bond, the Surety shall be liable only for the loss to the Obligee due to actual costs of performance for the failure to perform that occurred during the effective period of the bond, up to the maximum penalty of this bond.

3. No claim, action, suit or proceeding, except as hereinafter set forth, shall be had or maintained against the Surety on this instrument unless same be brought

or instituted upon the Surety within one year from termination or expiration of the bond term.

4. Neither non-renewal by the surety, nor failure, nor inability of the Principal to file a replacement bond shall constitute loss to the Obligee recoverable under this bond.

5. No right of action shall accrue on this bond to or for the use of any person or corporation other than the Obligee named herein or the heirs, executors, administrator or successors of Obligee.

6. This bond may be canceled or modified by the Surety at any time by giving one hundred twenty (120) days written notice to the Obligee and Principal, in which event, the Surety's liability at the expiration of said one hundred twenty (120) days shall terminate or be modified as specified in the notice, except as to such liability of the Principal as may have accrued prior to the expiration of said one hundred twenty (120) days.

7. The Principal may or modify terminate this bond by sending written notice to the Surety; provided, however, that no such notice shall become effective until the Surety receives written authorization for termination of the bond by the State.

Signed and sealed this **23rd** day of **August**, 2007.

_____ (seal)
Safeco Insurance Company of America (seal)
Darella E. White, Attorney-In-Fact

Acknowledged and Accepted by the Obligee:
By: _____
_____
Printed Name and Title
Date: 11/3/08

Safeco

POWER OF ATTORNEY

Safeco Insurance Companies
PO Box 34526
Seattle, WA 98124-1526

No. 5014

KNOW ALL BY THESE PRESENTS:

That **SAFECO INSURANCE COMPANY OF AMERICA** and **GENERAL INSURANCE COMPANY OF AMERICA,** each a Washington corporation, does each hereby appoint

**********SANDRA E. BRONSON; RICHARD A. JACOBUS; ANNETTE M. LEUSCHNER; MAUREEN MCNEILL; MARY C. O'LEARY; NANCY K. WALLACE; DOUGLAS R. WHEELER; DARELLA E. WHITE; Philadelphia, Pennsylvania***

its true and lawful attorney(s)-in-fact, with full authority to execute on its behalf fidelity and surety bonds or undertakings and other documents of a similar character issued in the course of its business, and to bind the respective company thereby.

IN WITNESS WHEREOF, SAFECO INSURANCE COMPANY OF AMERICA and GENERAL INSURANCE COMPANY OF AMERICA have each executed and attested these presents

this 3rd day of January, 2006.

Stephanie Daley-Watson — Mike Peters

STEPHANIE DALEY-WATSON,SECRETARY — **MIKE PETERS, PRESIDENT, SURETY**

CERTIFICATE

Extract from the By-Laws of **SAFECO INSURANCE COMPANY OF AMERICA** and of **GENERAL INSURANCE COMPANY OF AMERICA:**

"Article V, Section 13. - FIDELITY AND SURETY BONDS ... the President, any Vice President, the Secretary, and any Assistant Vice President appointed for that purpose by the officer in charge of surety operations, shall each have authority to appoint individuals as attorneys-in-fact or under other appropriate titles with authority to execute on behalf of the company fidelity and surety bonds and other documents of similar character issued by the company in the course of its business... On any instrument making or evidencing such appointment, the signatures may be affixed by facsimile. On any instrument conferring such authority or on any bond or undertaking of the company, the seal, or a facsimile thereof, may be impressed or affixed or in any other manner reproduced; provided, however, that the seal shall not be necessary to the validity of any such instrument or undertaking."

Extract from a Resolution of the Board of Directors of **SAFECO INSURANCE COMPANY OF AMERICA** and of **GENERAL INSURANCE COMPANY OF AMERICA** adopted July 28, 1970.

"On any certificate executed by the Secretary or an assistant secretary of the Company setting out,

(i) The provisions of Article V, Section 13 of the By-Laws, and
(ii) A copy of the power-of-attorney appointment, executed pursuant thereto, and
(iii) Certifying that said power-of-attorney appointment is in full force and effect,

the signature of the certifying officer may be by facsimile, and the seal of the Company may be a facsimile thereof."

I, Stephanie Daley-Watson, Secretary of **SAFECO INSURANCE COMPANY OF AMERICA** and of **GENERAL INSURANCE COMPANY OF AMERICA,** do hereby certify that the foregoing extracts of the By-Laws and of a Resolution of the Board of Directors of these corporations, and of a Power of Attorney issued pursuant thereto, are true and correct, and that both the By-Laws, the Resolution and the Power of Attorney are still in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the facsimile seal of said corporation

this 23rd day of August, 2007.

SAFECO INSURANCE COMPANY OF AMERICA CORPORATE SEAL 1953 STATE OF WASHINGTON

GENERAL INSURANCE COMPANY OF AMERICA CORPORATE SEAL 1923 State of Washington

Stephanie Daley-Watson

STEPHANIE DALEY-WATSON, SECRETARY

Remedial Action Plan Bond

BOND #K08181688

COPY

KNOW ALL MEN BY THESE PRESENTS: That Hercules Incorporated (hereinafter called the Principal), and Westchester Fire Insurance Company (hereinafter called the Surety), are held and firmly bound unto the State of Mississippi (hereinafter called the Obligee), in the full and just sum of One Million Four Hundred Seventy Two Thousand and 00/100 Dollars ($ *), the payment of which sum, well and truly to be made, the said Principal and Surety bind themselves, and each of their heirs, administrators, executors, and assigns, jointly and severally, firmly by these presents.

* **$1,472,000.00**

WHEREAS, the Principal has entered into a Corrective Action Plan Agreement with the Obligee at the Principal's site located at 617 West 7 Street, Hattiesburg, Mississippi. In such agreement, the Principal has agreed to undertake certain actions (hereinafter the "Corrective Action Plan Work").

WHEREAS, in accordance with Mississippi Commission on Environmental Quality Regulation HW-2, Subpart I, Chapter 2, Section 201 Part (H), the Obligee has agreed to accept this bond as financial assurance to guarantee performance of the Corrective Action Plan Work under the supervision of the Office of Pollution Control pursuant to the above referenced regulations governing brownfield voluntary cleanup and redevelopment in Mississippi (the "State").

NOW, THEREFORE, THE CONDITIONS OF THE SURETY'S OBLIGATION HEREUNDER IS SUCH, that if the Principal shall well and truly perform the Corrective Action Plan Work at the time and in the manner specified by the State during the term of this bond or, if upon failure to perform the Corrective Action Work and demand by the State the Principal shall

AON

Aon Risk Services

Wayne McVaugh
(215) 255-1871

July 24, 2008

STATE OF MISSISSIPPI - Department of Environmental Quality
P.O. Box 20307
Jackson, MS 39289-1307

FILE COPY

RE: Hercules, Inc.
Safeco Insurance Company of America Bond No 6502348
Westchester Fire Insurance Company No K08181688

To whom it may concern:

Our client is in the process of placing their Surety Bond Business with Westchester Fire Insurance Company and will voluntarily replace the Safeco Insurance Company of America Bond that you are holding with a new bond issued by of equal value.

I would request that you "acknowledge" this substitution by signing and returning the enclosed release to my office in the prepaid envelope that is attached. (Alternately, you may provide your standard letter of release or return of the original old Safeco Insurance Company of America in the prepaid envelope that I have provided.) By doing this, you will allow Safeco Insurance Company of America to close their file and return any unearned premium to the Principal.

I thank you for your assistance in this process and encourage you to call me if you have any questions on the transfer of liability from Safeco Insurance Company of America to Westchester Fire Insurance Company.

Best regards,

Wayne McVaugh

Remedial Action Plan Bond

BOND #K08181688

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*** $1,472,000.00**

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WHEREAS, in accordance with Mississippi Commission on Environmental Quality Regulation HW-2, Subpart I, Chapter 2, Section 201 Part (H), the Obligee has agreed to accept this bond as financial assurance to guarantee performance of the Corrective Action Plan Work under the supervision of the Office of Pollution Control pursuant to the above referenced regulations governing brownfield voluntary cleanup and redevelopment in Mississippi (the "State").

NOW, THEREFORE, THE CONDITIONS OF THE SURETY'S OBLIGATION HEREUNDER IS SUCH, that if the Principal shall well and truly perform the Corrective Action Plan Work at the time and in the manner specified by the State during the term of this bond or, if upon failure to perform the Corrective Action Work and demand by the State the Principal shall

establish a remediation trust in amount of this bond or such lesser amount that the State shall require, then Surety shall have no obligation under this Bond, otherwise to remain in full force and effect. The Surety shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above. Upon notification by the State that the Principal has failed to perform as guaranteed by this bond, the Surety shall place funds in the amount guaranteed for the facility into a standby trust fund as directed by the State.

PROVIDED, HOWEVER, That this bond is subject to the following conditions:

1. This bond shall be effective from **August 23rd**, 2008 to **August 23rd**, 2009. This is an annually renewable bond which shall automatically renew unless terminated in accordance with the provisions of this bond. The bond may be extended for additional terms at the option of the Surety, by continuation certificate executed by the Surety. Surety's liability under said bond shall not be cumulative and shall in no event exceed the penal amount as set forth in this bond. The Surety has no obligation to perform any remediation work and no responsibility involving any hazardous waste at the site. The Surety's obligation under this bond consists of the payment of sums found to be due the Obligee and no other obligation.

2. In the event of a default by the Principal in the performance of the contract during the term of this bond, the Surety shall be liable only for the loss to the Obligee due to actual costs of performance for the failure to perform that occurred during the effective period of the bond, up to the maximum penalty of this bond.

3. No claim, action, suit or proceeding, except as hereinafter set forth, shall be had or maintained against the Surety on this instrument unless same be brought

or instituted upon the Surety within one year from termination or expiration of the bond term.

4. Neither non-renewal by the surety, nor failure, nor inability of the Principal to file a replacement bond shall constitute loss to the Obligee recoverable under this bond.

5. No right of action shall accrue on this bond to or for the use of any person or corporation other than the Obligee named herein or the heirs, executors, administrator or successors of Obligee.

6. This bond may be canceled or modified by the Surety at any time by giving one hundred twenty (120) days written notice to the Obligee and Principal, in which event, the Surety's liability at the expiration of said one hundred twenty (120) days shall terminate or be modified as specified in the notice, except as to such liability of the Principal as may have accrued prior to the expiration of said one hundred twenty (120) days.

7. The Principal may or modify terminate this bond by sending written notice to the Surety; provided, however, that no such notice shall become effective until the Surety receives written authorization for termination of the bond by the State.

Signed and sealed this 24th day of July, 2008.

_____ (seal)
Westchester Fire Insurance Company (seal)
Wayne G. McVaugh, Attorney-In-Fact

Acknowledged and Accepted by the Obligee:
By: _____
JERRY B. BANKS, CHIEF, GARD
Printed Name and Title
Date: 9/9/08

Power of Attorney

165004

WESTCHESTER FIRE INSURANCE COMPANY 1263816

Know all men by these presents: That **WESTCHESTER FIRE INSURANCE COMPANY**, a corporation of the State of New York, having its principal office in the City of Atlanta, Georgia, pursuant to the following Resolution, adopted by the Board of Directors of the said Company on December 11, 2006, to wit:

"RESOLVED, that the following authorizations relate to the execution, for and on behalf of the Company, of bonds, undertakings, recognizances, contracts and other written commitments of the Company entered into the ordinary course of business(each a "Written Commitment"):

(1) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise.

(2) Each duly appointed attorney-in-fact of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise, to the extent that such action is authorized by the grant of powers provided for in such persons written appointment as such attorney-in-fact.

(3) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to appoint in writing any person the attorney-in-fact of the Company with full power and authority to execute, for and on behalf of the Company, under the seal of the Company or otherwise, such Written Commitments of the Company as may be specified in such written appointment, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments

(4) Each of the Chairman, the President and Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to delegate in writing to any other officer of the Company the authority to execute, for and on behalf of the Company, under the Company's seal or otherwise, such Written Commitments of the Compoany as are specified in such written delegation, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.

(5) The signature of any officer or other person executing any Written Commitment or appointment or delegation pursuant to this Resolution, and the seal of the Company, may be affixed by facsimile on such Written Commitment or written appointment or delegation.

FURTHER RESOLVED, that the foregoing Resolution shall not be deemed to be an exclusive statement of the powers and authority of officers, employees and other persons to act for and on behalf of the Company, and such Resolution shall not limit or otherwise affect the exercise of any such power or authority otherwise validly granted or vested.

FURTHER RESOLVED, that the Resolution of the Board of Directors of the Company adopted at the meeting held on November 8, 1999 relating to the authorization of certain persons to execute, for and on behalf of the Company, Written Commitments and appointments and delegations, is hereby rescinded.

Does hereby nominate, constitute and appoint DARELLA WHITE, MARY C. O'LEARY, MAUREEN MCNEILL, RICHARD A. JACOBUS, DOUGLAS R. WHEELER, SANDRA E. BRONSON, WAYNE G. MCVAUGH, ROSEMARIE CAPONI, DENNIS LAUSIER and ELIZABETH MARRERO all of the City of Philadelphia, Commonwealth of Pennsylvania, each individually if there be more than one named, its true and lawful attorney-in-fact, to make, execute, seal and deliver on its behalf, and as its act and deed any and all bonds, undertakings, recognizances, contracts and other writings in the nature thereof in penalties not exceeding Twenty Million Dollars ($20,000,000) and the execution of such writings in pursuance of these presents shall be as binding upon said Company, as fully and amply as if they had been duly executed and ackowledged by the regularly elected officers of the Company at its principal office.

IN WITNESS WHEREOF, the said Stephen M. Haney, Vice-President, has hereunto subscribed his name and affixed the corporate seal of the said **WESTCHESTER FIRE INSURANCE COMPANY** this 13th day of June 2008.

WESTCHESTER FIRE INSURANCE COMPANY

Stephen M. Haney, Vice President

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF PHILADELPHIA ss.

On this 13th day of June, A.D. 2008, before me, a Notary Public of the Commonwealth of Pennsylvania in and for the County of Philadelphia came Stephen M. Haney, Vice-President of the **WESTCHESTER FIRE INSURANCE COMPANY** to me personally known to be the individual and officer who executed the preceding instrument, and he acknowledged that he executed the same, and that the seal affixed to the preceding instrument is the corporate seal of said Company; that the said corporate seal and his signature were duly affixed by the authority and direction of the said corporation, and that Resolution, adopted by the Board of Directors of said Company, referred to in the preceding instrument, is now in force.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal at the City of Philadelphia the day and year first above written.

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
KAREN E. BRANDT, Notary Public
City of Philadelphia, Phila. County
My Commission Expires September 26, 2010

Notary Public

I, the undersigned Assistant Secretary of **WESTCHESTER FIRE INSURANCE COMPANY**, do hereby certify that the original POWER OF ATTORNEY, of which the foregoing is a substantially true and correct copy, is in full force and effect.

In witness whereof, I have hereunto subscribed my name as Assistant Secretary, and affixed the corporate seal of the Corporation, this 24TH day of July 2008

William L. Kelly, Assistant Secretary

THIS POWER OF ATTORNEY MAY NOT BE USED TO EXECUTE ANY BOND WITH AN INCEPTION DATE AFTER June 13, 2010.

STATE OF MISSISSIPPI

HALEY BARBOUR

GOVERNOR

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

TRUDY D. FISHER, EXECUTIVE DIRECTOR

September 5, 2008

Tim Hassett
Hercules Incorporated
Hercules Plaza
1313 North Market Street
Wilmington, DE 19894-0001

FILE COPY

Re: Semi-Annual Groundwater Monitoring Report dated May 2008
Hercules Inc. Hattiesburg facility
Hattiesburg, Forrest County, Mississippi

Dear Mr. Hassett:

The Mississippi Department of Environmental Quality (MDEQ) has completed a review of the above referenced document. In the report, Eco-Systems, Inc. makes the recommendation that the sampling frequency of five monitoring wells in the sludge pit area and the six surface water sampling locations be reduced to annual monitoring. At this time, MDEQ will not approve this recommendation. Following the November 2008 sampling event, Hercules, Inc. will complete a two year cycle of semi-annual sampling at the facility. Based on the data collected in November 2008, MDEQ would evaluate a request to reduce the sampling frequency of all groundwater monitoring wells and surface water locations on site to annual monitoring if so requested by Hercules, Inc. If you have any questions or comments, please contact me at (601) 961-5731.

Sincerely,

William McKercher

William McKercher
Project Manager
Groundwater Assessment and
Remediation Division (GARD)

cc: Michael T. Slack, P.E. – MDEQ
Charlie Jordan – Hercules, Inc.
Charles Coney – Eco-Systems, Inc.

Eco•Systems, Inc.
Consultants, Engineers, and Scientists

August 12, 2008

Mr. William McKercher
Environmental Engineer
Office of Pollution Control
Mississippi Department of Environmental Quality (MDEQ)
P.O. Box 10385
Jackson, Mississippi 39289-0385

Re: ***Annual Monitoring Report***
Hercules Incorporated
Hattiesburg, Mississippi
ESI Project No. HER25080

Dear Mr. McKercher:

Eco-Systems, Inc. (Eco-Systems) is pleased to submit the enclosed two copies of the Annual Monitoring Report prepared on behalf of Hercules, Incorporated. The report includes discussion of the May 2008 surface water and groundwater monitoring event.

If you have any questions or require additional information, please do not hesitate to call Mr. Timothy Hassett at (302) 995-3456 or Charles Coney (Eco-Systems) at (601) 936-4440.

Sincerely,

Charles V. Coney, RPG
Senior Scientist

cc: Timothy Hassett – Hercules Inc. w/ enclosure
C. S. Jordan – Hercules, Hattiesburg w/ enclosure

s:\projects\HER\HER25080\HER Annual Report MDEQ transmittal letter

HERCULES

Hercules Incorporated
613 West 7th Street
Hattiesburg, MS 39401
(601) 545-3450
Fax: (601) 584-3226
www.herc.com

July 7, 2008

Mr. Jerry B. Banks- PE, BCEE- Chief
MDEQ- GARD
Office of Pollution Control
P.O. Box 2261
Jackson, MS 39225-2261

Dear Mr. Banks:

This letter responds to your letter of June 9, 2008 in which you asked a series of questions related to our planned closure of our impounding basin and equalization tank.

By way of background, Hercules intends to take out of service two components of its existing wastewater system. The system discharges to the local POTW pursuant to a permit with the City of Hattiesburg issued by the MDEQ. Prior to discharging to the POTW, it was under a NPDES permit issued by the MDEQ. The components are an in-ground impounding basin (the "basin") and an above ground equalization tank.[1] As described to you in our October 25, 2005 letter to the MDEQ, changes in our plant operations resulted in Hercules modifying its system to have the industrial wastewater bypass the impounding basin and go straight to the equalization tank. Thereafter, the impounding basin only received potentially contaminated storm water from areas of the plant that were undergoing D&M.

As we notified you in our letter of April 22, 2008, we plan to proceed with the closure of the impounding basin and equalization tank starting in July, as originally outlined in our letter to MDEQ in October 2005. We welcome a meeting with you and desire to satisfy any questions you may have regarding this project, if this meeting would be beneficial to MDEQ following your review of our responses below.

To make our responses easier to follow, I have reprinted your questions preceding each response.

MDEQ Question 1. *A description of the historical background of the subject wastewater treatment lagoon and wastewater equalization lagoon proposed to be closed, including the year of beginning operation at the lagoons, the date when the lagoons were taken offline, the area of the lagoons in acres, materials that may be present in the lagoons and any other pertinent information.*

[1] Hercules does not refer to either of these units as "lagoons", a term used in your letter. Hercules will respond with information regarding these units whenever the term lagoon or lagoons is used in a MDEQ question.

Hercules Response

The treatment basin has been used for many years to collect the plant's industrial wastewaters. There is information suggesting its use for some pH adjustment prior to 1970. In the early 1970's, improvements were made, including stability improvements, by adding straight wall sides and a concrete cap around the basin perimeter. The equalization tank was installed ca 1979 for equalization of the plant's wastewater streams. Currently, both units remain operational. They are expected to be taken offline this year. The basin area is ca 17,500 sq ft or 0.40 Acres and the tank is ca 162 ft diameter or 0.47Acres. Materials that may be present are best described in all the previous NPDES and POTW wastewater permit applications to the MDEQ, which contain certain requested data analysis, and also in the seven different TCLP analyses recently submitted that are similar to the data requested in your item # 4. Hercules will properly characterize the sludge in each unit prior to disposal.

MDEQ Question 2. *A U. S. Geological Survey (USGS) topographical quadrangle map showing the lagoons and surrounding areas. The property boundaries of the proposed site and the lagoon area should be depicted on the map, At a minimum, a 2-mile radius from the lagoon boundary should be shown on the topo map. Adjacent topo maps may be attached. If necessary;*

Hercules Response. See attached map.

MDEQ Question 3. *A clear description ot the current conditions at the subject lagoons proposed for closure, including:*

a, An estimated quantity of existing wastewater to be removed from the proposed lagoons, Also, include a description of how and where this wastewater would be treated and disposed of;

b. An estimated quantity of sludge that needs to be removed from the proposed lagoons for ultimate disposal. Please describe how and where these sludge materials would be taken for disposal. Please note that a permitted municipal solid waste landfill can be used for disposal of the dredged sludge jf it is characterized as nonhazardous. Please include the name and location of the landfill that would be utilized for ultimate disposal of this sludge, if known.

Hercules Response

3a.)The basin has very little free water, it contains mostly sludge. The water it contains now is mostly rainwater influent. Prior to the start of sludge removal, the rainwater influent will be stopped and any excess liquid will be pumped into the existing wastewater system and discharged to the POTW. The tank, which currently contains all the wastewater being discharged to the POTW, will be addressed in a similar manner. Wastewater influent will be prevented from entering the tank and directed into the POTW discharge. Any excess free liquid remaining in the tank will be drained into the POTW system.

3b.)The estimated amount of sludge in the basin is ca 5,185 cu yd. The estimated amount of sludge in the tank is ca 4,578 cu yd. The sludge is approved for disposal at the two following Waste Management subtitle D landfills. The Central landfill in McNeil, Ms., which has no stabilization capabilities and the Pecan Grove landfill in Pass Christian, Ms., which does have stabilization capability.

MDEQ Question 4. *An analyses of sludge contained in the proposed lagoons. The analyses of a minimum of 2 (two) composite sludge samples from each of the lagoons. depending on the depth and potential layering of the sludges in the lagoons, should include pH, percent solids, sulfide, cyanide, including TCLP analyses for metals, volatiles, semi-volatiles. herbicides, and pesticides. Each composite sample should be comprised of 5 representative sludge samples collected from 5 different areas of the proposed lagoon. In order to process this matter effectively and efficiently the MDEQ recommends that you use an independent third party laboratory for sampling and analysis of these samples.*

Hercules Response

Two composite sludge samples have been taken from each unit by an independent third party laboratory and are being analyzed as requested.

MDEQ Question 5. *A description of how the emptied lagoons would be backfilled (to bring it back to the existing grade). sloped and seeded;*

Hercules Response

The basin will utilize ordinary backfill with any necessary compaction. Because of the concrete cap perimeter the slope will be from the center to the sides to minimize any possible water retention. The area will be maintained the same as any other area within the plant. The equalization tank is above ground and will not have to be backfilled once it is removed.

MDEQ Question 6. *The anticipated time for completion of the proposed closure;*

Hercules Response

We plan to start the work in early in the third quarter. The work is planned for completion in 2008.

MDEQ Question 7. *A description of any potential future use of the lagoons after closure;*

Hercules Response

There are no plans for future use for the area occupied by either unit at this time.

MDEQ Question 8. *A copy of any designs, specifications or plans for the existing wastewater treatment facilities,*

Hercules Response

Currently, the plant does not have its own wastewater treatment facilities. These two units are being, or have been replaced, with a smaller above ground tank, all hard piped to the city POTW. Attached is an engineering schematic of the current system.

MDEQ Question 9. *Any additional information that might be pertinent to the proposed lagoon closure (e.g. wetlands issues, etc.). Note that in some instances older lagoons may develop characteristics of jurisdictional wetlands and in that case you may need to obtain an approval from the US Army*

Hercules Response

Since the units being closed are not lagoons, but engineered wastewater units, they are not wetlands. The basin will be backfilled and graded to avoid retaining water after it is closed.

MDEQ Question 10. *A plan to effectively manage odor during the sludge removal process must be developed. Also, notification of the Mayor and other stakeholders of the proposed closure project should be done well in advance of the actual closure because of all the recent problems in Hattiesburg with odor complaints. Also, we suggest that you include references to the removal of wastewater for treatment and disposal in the letter of notification, especially*

Hercules Response

We are requiring bidders in the contractor bid process for the sludge removal to include a plan for how they will manage odor control. As indicated in the two letters we previously sent MDEQ, we have implemented, or will implement prior to taking the units out of service, all the suggestions that you have provided.

MDEQ Question. *An additional item for discussion is the "closure" of the old sludge disposal pits that were taken out of operation many years ago. The sludges in these pits are solid wastes and it appears that the closure should have included removal of the sludges or appropriate capping of these pits. Therefore we believe that discussions between Hercules and the MDEQ toward a resolution of this matter needs to continue on the condition of these old pits and any necessary corrective actions needed for proper closure.*

Hercules Response

The sludge pits in the northwest area of the site were idled/exited in September, 2002.[2] Following an interim groundwater report, a site investigation report, and a

[2] In this section the acronyms have the following meanings:
GARD= Groundwater Assessment and Remediation Division
CAP= Corrective Action Plan
VEP= Voluntary Evaluation Program
USP= Uncontrolled Site Program
RUAO= Restrictive Use Agreed Order
RAE= Remedial Action Plan

supplemental site investigation report, Hercules Incorporated submitted a RAE in January, 2004. In July 2004, Hercules Incorporated, submitted the RAE to reach a better understanding of MDEQ's program requirements which standardized Brownfields, VEP, and USP cleanups. By this time Hercules Incorporated had entered into the VEP in August 2003.

In August, 2004, GARD requested Hercules Incorporated submit a CAP and include a compliance monitoring plan and a contingency plan. The contingency plan was to include the discussion of "triggers" that would call for the implementation of the contingency plan as well as necessary financial assurance.

The CAP was submitted in November, 2004 and after final discussions the RUAO and deed restrictions were finalized, signed, and recorded. In the CAP contingency plan it states if it is determined that a sustained significant increase in constituents is present, contingent measures, if deemed necessary, will consist of installation of the cap as described in the RAE. The Order and deed restrictions were filed with the Chancery Clerk of Forrest County on 2/21/08. They are attached as Exhibit I.

Specifically, paragraph 4 of the Order provides:

> The staff of the Commission has evaluated this Restrictive Use Agreed Order and believes once the requirements of it have been completed that (1) the Site will be protective of the public health and the environment and (2) no further corrective action will be required at this time.

Based upon the Order and the findings in the CAP that have been agreed to by the MDEQ, our understanding is that the RUAO establishes Hercules obligations relating to remediation of its Hattiesburg facility and that so long as Hercules complies with the Order and the requirements of the CAP, no further action will be required by the MDEQ. While we are willing to review the history in greater detail, our understanding is that theses issues have been fully resolved.

As indicated above, Hercules looks forward to meeting with the MDEQ to answer any questions your or your staff may have and to resolve any concerns at your earliest convenience, as Hercules is planning to begin its work this Summer. Please feel free to contact me at (414) 461-4000, ext. 157, Tim Hassett at (302) 995-3456 or Charlie Jordan at (601) 584-3360 to set up the meeting, or if you have any questions we may answer by phone.

Sincerely,

RS Bolton

Rod Bolton
Regional Manager

CC: Rich Williams- Hercules
Tim Haset- Hercules

BONNER ANALYTICAL TESTING COMPANY

QUANTITATIVE RESULTS AND QUALITY ASSURANCE DATA
PESTICIDES & HERBICIDES - ECD ANALYSIS DATA

Chain of Custody Data Required for BATCO Data Management Summary Reports
Analysis Method - CLP Statement of Work for Organic Analysis

HERO90490-19 — BATCO File #
HERCULES COMPANY
SLUDGE — SAMPLE TYPE
SAMPLE POINT
Collected: 09/04/90
Analyzed: 09/13/90 — DATE
1030 — TIME

Compound	MDL ug/L (ppb)	SAMPLE Detected Concen. ug/L (ppb)	SAMPLE Spike Amt. ug	SAMPLE Spike % Recov	BLANK Detected Concen. ug/L (ppb)	BLANK Spike Amt. ug	BLANK Spike % Recov	MATRIX Detected Concen. ug/L (ppb)	MATRIX Spike Amt. ug	MATRIX Spike % Recov	DUPLICATE MATRIX Detected Concen. ug/L (ppb)	DUPLICATE MATRIX Spike Amt. ug	DUPLICATE MATRIX Spike % Recov
Lindane *	1.0	ND			ND			0.167	0.20	83.5	0.163	0.20	81.5
Heptachlor *	1.0	ND			ND			0.151	0.20	75.5	0.173	0.20	86.5
Aldrin	1.0	ND			ND			0.168	0.20	84.0	0.181	0.20	90.5
Dieldrin	1.0	13.4			ND			0.430	0.50	86.0	0.425	0.50	85.0
Endrin *	1.0	ND			ND			0.506	0.50	101.6	0.505	0.50	101.0
p,p-DDT	1.0	ND			ND			0.475	0.50	95.0	0.459	0.50	91.8
Alpha-BHC	1.0	ND			ND			ND			ND		
Beta-BHC	1.0	ND			ND			ND			ND		
Delta-BHC	1.0	ND			ND			ND			ND		
Heptachlor epoxide	1.0	ND			ND			ND			ND		
Endosulfan I	1.0	ND			ND			ND			ND		
4,4-DDE	1.0	ND			ND			ND			ND		
Methoxychlor *	1.0	ND			ND			ND			ND		
Chlordane *(alpha and gamma)	1.0	ND			ND			ND			ND		
Toxaphene *	1.0	ND			ND			ND			ND		
p,p-DDD	1.0	ND			ND			ND			ND		
Endosulfan sulfate	1.0	ND			ND			ND			ND		
Endrin ketone	1.0	ND			ND			ND			ND		
Endosulfan II	1.0	ND			ND			ND			ND		
2,4,5-TP (Silvex) *	1.0	ND			ND			ND			ND		
2,4-Dichlorophenoxy acetic * acid	1.0	ND			ND			ND			ND		
Surrogate:													
Dibutylchlorendate		0.0551	0.1	55.1	0.078	0.1	78.0	0.0915	0.1	91.5	0.077	0.1	77.0
Dichlorophenylacetic acid		0.300	0.5	60.0	0.465	0.5	93.0						

* TCLP PESTICIDES & HERBICIDES

Certified by:

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