

# Analytical Data

Client: Hercules Inc.

Job Number: 680-10222-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 680-10222-31TB

Date Sampled: 11/03/2005 0000

Client Matrix: Water

Date Received: 11/04/2005 0850

## 8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 680-28165

Instrument ID: GC/MS Volatiles - O

Preparation: 5030B

Lab File ID: o1788.d

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 11/10/2005 1531

Final Weight/Volume: 5 mL

Date Prepared: 11/10/2005 1531

Analyte	Result (ug/L)	Qualifier	RL
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0

Surrogate	%Rec	Acceptance Limits
4-Bromofluorobenzene	96	77 - 120
Dibromofluoromethane	99	75 - 123
Toluene-d8	94	79 - 122

## DATA REPORTING QUALIFIERS

Client: Hercules Inc.

Job Number: 680-10222-1

<u>Lab Section</u>	<u>Qualifier</u>	<u>Description</u>
GC/MS VOA	B	Compound was found in the blank and sample.
	*	LCS, LCSD, MS, MSD, MD, or Surrogate exceeds the control limits

# QUALITY CONTROL RESULTS

## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

### QC Association Summary

Lab Sample ID	Client Sample ID	Client Matrix	Method	Prep Batch
<b>GC/MS VOA</b>				
<b>Analysis Batch:680-28165</b>				
LCS 680-28165/4	Lab Control Spike	Water	8260B	
MB 680-28165/5	Method Blank	Water	8260B	
680-10222-21	HER-MW12-1105	Water	8260B	
680-10222-22	HER-MW06-1105	Water	8260B	
680-10222-23	HER-MW17-1105	Water	8260B	
680-10222-26FD	HER-FD2-1105	Water	8260B	
680-10222-27	HER-MW07-1105	Water	8260B	
680-10222-29	HER-MW19-1105	Water	8260B	
680-10222-30TB	TRIP BLANK	Water	8260B	
680-10222-31TB	TRIP BLANK	Water	8260B	
<b>Analysis Batch:680-28167</b>				
LCS 680-28167/3	Lab Control Spike	Water	8260B	
MB 680-28167/4	Method Blank	Water	8260B	
680-10222-17	HER-RS2-1105	Water	8260B	
680-10222-18	HER-MW03-1105	Water	8260B	
680-10222-19	HER-MW05-1105	Water	8260B	
680-10222-20	HER-MW14-1105	Water	8260B	
<b>Analysis Batch:680-28202</b>				
LCS 680-28202/2	Lab Control Spike	Water	8260B	
MB 680-28202/3	Method Blank	Water	8260B	
680-10222-4	HER-RS1-1105	Water	8260B	
680-10222-5	HER-CM02-1105	Water	8260B	
680-10222-6	HER-CM01-1105	Water	8260B	
680-10222-7	HER-CM00-1105	Water	8260B	
680-10222-8	HER-MW13-1105	Water	8260B	
680-10222-10	HER-MW16-1105	Water	8260B	
680-10222-12	HER-MW15-1105	Water	8260B	
680-10222-13	HER-MW04-1105	Water	8260B	
680-10222-14	HER-MW11-1105	Water	8260B	
680-10222-15	HER-MW10-1105	Water	8260B	
680-10222-16	HER-MW02-1105	Water	8260B	
<b>Analysis Batch:680-28203</b>				
LCS 680-28203/3	Lab Control Spike	Water	8260B	
MB 680-28203/4	Method Blank	Water	8260B	
680-10222-1	HER-CM05-1105	Water	8260B	
680-10222-2	HER-CM04-1105	Water	8260B	
680-10222-3	HER-CM03-1105	Water	8260B	
680-10222-3MS	Matrix Spike	Water	8260B	
680-10222-3MSD	Matrix Spike Duplicate	Water	8260B	
680-10222-8MS	Matrix Spike	Water	8260B	
680-10222-8MSD	Matrix Spike Duplicate	Water	8260B	
680-10222-9	HER-MW08-1105	Water	8260B	
680-10222-11FD	HER-FD1-1105	Water	8260B	

STL Savannah

## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

### QC Association Summary

Lab Sample ID	Client Sample ID	Client Matrix	Method	Prep Batch
<b>GC/MS VOA</b>				
<b>Analysis Batch:680-28349</b>				
LCS 680-28349/3	Lab Control Spike	Water	8260B	
MB 680-28349/4	Method Blank	Water	8260B	
680-10222-25	HER-MW09-1105	Water	8260B	
<b>Analysis Batch:680-28350</b>				
LCS 680-28350/4	Lab Control Spike	Water	8260B	
MB 680-28350/5	Method Blank	Water	8260B	
680-10222-24FD	HER-FD3-1105	Water	8260B	
680-10222-28	HER-MW18-1105	Water	8260B	
680-10222-28MS	Matrix Spike	Water	8260B	
680-10222-28MSD	Matrix Spike Duplicate	Water	8260B	

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## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

### Surrogate Recovery Report

#### 8260B Volatile Organic Compounds by GC/MS

Client Matrix: Water

<u>Lab Sample ID</u>	<u>Client Sample</u>	<u>(BFB) (%Rec)</u>	<u>(DBFM) (%Rec)</u>	<u>(TOL) (%Rec)</u>
LCS 680-28165/4	LCS	99	104	99
LCS 680-28167/3	LCS	93	103	102
LCS 680-28202/2	LCS	96	100	98
LCS 680-28203/3	LCS	98	108	100
LCS 680-28349/3	LCS	95	98	99
LCS 680-28350/4	LCS	95	104	98
MB 680-28165/5	MB	98	97	101
MB 680-28167/4	MB	100	97	104
MB 680-28202/3	MB	95	100	100
MB 680-28203/4	MB	95	98	101
MB 680-28349/4	MB	94	102	102
MB 680-28350/5	MB	96	97	102
680-10222-1	HER-CM05-1105	95	97	100
680-10222-2	HER-CM04-1105	96	101	101
680-10222-3	HER-CM03-1105	96	99	100
680-10222-3MS	HER-CM03-1105	95	114	107
680-10222-3MSD	HER-CM03-1105	97	112	105
680-10222-4	HER-RS1-1105	93	100	101
680-10222-5	HER-CM02-1105	99	100	99
680-10222-6	HER-CM01-1105	100	99	99
680-10222-7	HER-CM00-1105	99	101	95
680-10222-8	HER-MW13-1105	98	103	100
680-10222-8MS	HER-MW13-1105	91	112	99
680-10222-8MSD	HER-MW13-1105	92	107	102
680-10222-9	HER-MW08-1105	95	99	100

## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

		(BFB) (%Rec)	(DBFM) (%Rec)	(TOL) (%Rec)
680-10222-10	HER-MW16-1105	99	102	100
680-10222-11FD	HER-FD1-1105	94	99	101
680-10222-12	HER-MW15-1105	97	100	100
680-10222-13	HER-MW04-1105	97	100	100
680-10222-14	HER-MW11-1105	99	98	101
680-10222-15	HER-MW10-1105	99	98	100
680-10222-16	HER-MW02-1105	98	100	99
680-10222-17	HER-RS2-1105	95	101	102
680-10222-18	HER-MW03-1105	94	100	101
680-10222-19	HER-MW05-1105	96	102	101
680-10222-20	HER-MW14-1105	94	103	97
680-10222-21	HER-MW12-1105	99	101	100
680-10222-22	HER-MW06-1105	99	99	99
680-10222-23	HER-MW17-1105	96	96	101
680-10222-24FD	HER-FD3-1105	99	101	101
680-10222-25	HER-MW09-1105	97	103	103
680-10222-26FD	HER-FD2-1105	99	104	99
680-10222-27	HER-MW07-1105	104	99	99
680-10222-28	HER-MW18-1105	98	100	103
680-10222-28MS	HER-MW18-1105	91	102	93
680-10222-28MSD	HER-MW18-1105	97	112	96
680-10222-29	HER-MW19-1105	98	101	101
680-10222-30TB	TRIP BLANK	96	99	100
680-10222-31TB	TRIP BLANK	96	99	94

**Surrogate**

**Acceptance Limits**

(BFB)	4-Bromofluorobenzene	77 - 120
(DBFM)	Dibromofluoromethane	75 - 123
(TOL)	Toluene-d8	79 - 122

## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

**Method Blank - Batch: 680-28165**

**Method: 8260B**  
**Preparation: 5030B**

Lab Sample ID: MB 680-28165/5  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/10/2005 1326  
Date Prepared: 11/10/2005 1326

Analysis Batch: 680-28165  
Prep Batch: N/A  
Units: ug/L

Instrument ID: GC/MS Volatiles - O  
Lab File ID: oq1338.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
Methyl Ethyl Ketone	<10		10
Carbon disulfide	<1.0		1.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutanol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
methyl isobutyl ketone	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0

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



## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

Method Blank - Batch: 680-28165

Method: 8260B  
Preparation: 5030B

Lab Sample ID: MB 680-28165/5  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/10/2005 1326  
Date Prepared: 11/10/2005 1326

Analysis Batch: 680-28165  
Prep Batch: N/A  
Units: ug/L

Instrument ID: GC/MS Volatiles - O  
Lab File ID: oq1338.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
1,1,1,2-Tetrachloroethane	<1.0		1.0
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	98	77 - 120
Dibromofluoromethane	97	75 - 123
Toluene-d8	101	79 - 122

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

## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

Laboratory Control Sample - Batch: 680-28165

**Method: 8260B**  
**Preparation: 5030B**

Lab Sample ID: LCS 680-28165/4  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/10/2005 1153  
Date Prepared: 11/10/2005 1153

Analysis Batch: 680-28165  
Prep Batch: N/A  
Units: ug/L

Instrument ID: GC/MS Volatiles - O  
Lab File ID: oq1332.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	100	150	149	20 - 183	
Benzene	50.0	51	102	74 - 122	
Dichlorobromomethane	50.0	45	90	74 - 128	
Bromoform	50.0	49	98	64 - 132	
Bromomethane	50.0	36	73	21 - 176	
Methyl Ethyl Ketone	100	120	123	51 - 142	
Carbon disulfide	50.0	48	96	60 - 130	
Carbon tetrachloride	50.0	44	88	64 - 137	
Chlorobenzene	50.0	52	105	75 - 123	
Chloroethane	50.0	32	65	40 - 171	
Chloroform	50.0	55	109	74 - 124	
Chloromethane	50.0	37	74	51 - 133	
Chlorodibromomethane	50.0	46	93	75 - 126	
1,2-Dibromo-3-Chloropropane	50.0	52	104	14 - 147	
Ethylene Dibromide	50.0	50	100	60 - 118	
Dibromomethane	50.0	48	95	70 - 130	
Dichlorodifluoromethane	50.0	33	<del>57</del>	70 - 130	
1,1-Dichloroethane	50.0	55	111	70 - 127	
1,2-Dichloroethane	50.0	46	91	68 - 130	
1,1-Dichloroethene	50.0	46	93	64 - 132	
trans-1,2-Dichloroethene	50.0	53	106	67 - 130	
1,2-Dichloropropane	50.0	53	106	74 - 123	
cis-1,3-Dichloropropene	50.0	50	99	76 - 126	
trans-1,3-Dichloropropene	50.0	47	95	75 - 126	
Ethylbenzene	50.0	51	102	77 - 123	
2-Hexanone	100	120	117	58 - 139	
Methylene Chloride	50.0	50	99	67 - 128	
methyl isobutyl ketone	100	110	109	62 - 130	
Styrene	50.0	49	98	75 - 125	
1,1,1,2-Tetrachloroethane	50.0	47	94	62 - 107	
1,1,2,2-Tetrachloroethane	50.0	55	111	71 - 127	
Tetrachloroethene	50.0	52	104	70 - 133	
Toluene	50.0	49	99	75 - 122	
1,1,1-Trichloroethane	50.0	46	91	70 - 132	
1,1,2-Trichloroethane	50.0	51	101	75 - 122	
Trichloroethene	50.0	50	100	75 - 122	
Trichlorofluoromethane	50.0	40	81	74 - 165	
1,2,3-Trichloropropane	50.0	54	107	60 - 147	
Vinyl acetate	100	76	76	47 - 150	
Vinyl chloride	50.0	36	73	59 - 136	
Xylenes, Total	150	150	100	77 - 121	

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

## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	99	77 - 120
Dibromofluoromethane	104	75 - 123
Toluene-d8	99	79 - 122

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

## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

**Method Blank - Batch: 680-28167**

**Method: 8260B**  
**Preparation: 5030B**

Lab Sample ID: MB 680-28167/4  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/10/2005 1310  
Date Prepared: 11/10/2005 1310

Analysis Batch: 680-28167  
Prep Batch: N/A  
Units: ug/L

Instrument ID: GC/MS Volatiles - O  
Lab File ID: oq1337.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
Methyl Ethyl Ketone	<10		10
Carbon disulfide	<1.0		1.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutanol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
methyl isobutyl ketone	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0

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

**Quality Control Results**

Client: Hercules Inc.

Job Number: 680-10222-1

**Method Blank - Batch: 680-28167**

**Method: 8260B  
Preparation: 5030B**

Lab Sample ID: MB 680-28167/4  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/10/2005 1310  
Date Prepared: 11/10/2005 1310

Analysis Batch: 680-28167  
Prep Batch: N/A  
Units: ug/L

Instrument ID: GC/MS Volatiles - O  
Lab File ID: oq1337.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
1,1,1,2-Tetrachloroethane	<1.0		1.0
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	100	77 - 120
Dibromofluoromethane	97	75 - 123
Toluene-d8	104	79 - 122

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

## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

Laboratory Control Sample - Batch: 680-28167

Method: 8260B  
Preparation: 5030B

Lab Sample ID: LCS 680-28167/3  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/10/2005 1137  
Date Prepared: 11/10/2005 1137

Analysis Batch: 680-28167  
Prep Batch: N/A  
Units: ug/L

Instrument ID: GC/MS Volatiles - O  
Lab File ID: oq1331.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	100	97	97	20 - 183	
Benzene	50.0	50	101	74 - 122	
Dichlorobromomethane	50.0	47	94	74 - 128	
Bromoform	50.0	46	93	64 - 132	
Bromomethane	50.0	37	74	21 - 176	
Methyl Ethyl Ketone	100	110	113	51 - 142	
Carbon disulfide	50.0	54	108	60 - 130	
Carbon tetrachloride	50.0	43	86	64 - 137	
Chlorobenzene	50.0	52	104	75 - 123	
Chloroethane	50.0	38	76	40 - 171	
Chloroform	50.0	54	108	74 - 124	
Chloromethane	50.0	41	82	51 - 133	
Chlorodibromomethane	50.0	46	91	75 - 126	
1,2-Dibromo-3-Chloropropane	50.0	49	98	14 - 147	
Ethylene Dibromide	50.0	51	103	60 - 118	
Dibromomethane	50.0	48	95	70 - 130	
Dichlorodifluoromethane	50.0	36	71	70 - 130	
1,1-Dichloroethane	50.0	56	112	70 - 127	
1,2-Dichloroethane	50.0	46	92	68 - 130	
1,1-Dichloroethene	50.0	51	101	64 - 132	
trans-1,2-Dichloroethene	50.0	53	107	67 - 130	
1,2-Dichloropropane	50.0	54	107	74 - 123	
cis-1,3-Dichloropropene	50.0	50	100	76 - 126	
trans-1,3-Dichloropropene	50.0	48	96	75 - 126	
Ethylbenzene	50.0	51	102	77 - 123	
2-Hexanone	100	110	115	58 - 139	
Methylene Chloride	50.0	54	109	67 - 128	
methyl isobutyl ketone	100	110	110	62 - 130	
Styrene	50.0	49	97	75 - 125	
1,1,1,2-Tetrachloroethane	50.0	48	95	62 - 107	
1,1,2,2-Tetrachloroethane	50.0	44	88	71 - 127	
Tetrachloroethene	50.0	52	104	70 - 133	
Toluene	50.0	52	104	75 - 122	
1,1,1-Trichloroethane	50.0	47	93	70 - 132	
1,1,2-Trichloroethane	50.0	52	103	75 - 122	
Trichloroethene	50.0	51	101	75 - 122	
Trichlorofluoromethane	50.0	43	87	74 - 165	
1,2,3-Trichloropropane	50.0	43	86	60 - 147	
Vinyl acetate	100	77	77	47 - 150	
Vinyl chloride	50.0	39	78	59 - 136	
Xylenes, Total	150	150	99	77 - 121	

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

## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	93	77 - 120
Dibromofluoromethane	103	75 - 123
Toluene-d8	102	79 - 122

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

## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

**Method Blank - Batch: 680-28202**

**Method: 8260B**  
**Preparation: 5030B**

Lab Sample ID: MB 680-28202/3  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/09/2005 2349  
Date Prepared: 11/09/2005 2349

Analysis Batch: 680-28202  
Prep Batch: N/A  
Units: ug/L

Instrument ID: GC/MS Volatiles - O  
Lab File ID: oq1326.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	1.9		1.0
Methyl Ethyl Ketone	<10		10
Carbon disulfide	<1.0		1.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutanol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
methyl isobutyl ketone	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0

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



## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

Method Blank - Batch: 680-28202

Method: 8260B  
Preparation: 5030B

Lab Sample ID: MB 680-28202/3  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/09/2005 2349  
Date Prepared: 11/09/2005 2349

Analysis Batch: 680-28202  
Prep Batch: N/A  
Units: ug/L

Instrument ID: GC/MS Volatiles - O  
Lab File ID: oq1326.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
1,1,1,2-Tetrachloroethane	<1.0		1.0
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	95	77 - 120
Dibromofluoromethane	100	75 - 123
Toluene-d8	100	79 - 122

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

## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

Laboratory Control Sample - Batch: 680-28202

Method: 8260B  
Preparation: 5030B

Lab Sample ID: LCS 680-28202/2  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/09/2005 2216  
Date Prepared: 11/09/2005 2216

Analysis Batch: 680-28202  
Prep Batch: N/A  
Units: ug/L

Instrument ID: GC/MS Volatiles - O  
Lab File ID: oq1320.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	100	160	155	20 - 183	
Benzene	50.0	48	95	74 - 122	
Dichlorobromomethane	50.0	44	88	74 - 128	
Bromoform	50.0	46	92	64 - 132	
Bromomethane	50.0	28	57	21 - 176	B
Methyl Ethyl Ketone	100	120	123	51 - 142	
Carbon disulfide	50.0	50	99	60 - 130	
Carbon tetrachloride	50.0	40	79	64 - 137	
Chlorobenzene	50.0	51	101	75 - 123	
Chloroethane	50.0	34	68	40 - 171	
Chloroform	50.0	53	106	74 - 124	
Chloromethane	50.0	38	75	51 - 133	
Chlorodibromomethane	50.0	43	86	75 - 126	
1,2-Dibromo-3-Chloropropane	50.0	51	102	14 - 147	
Ethylene Dibromide	50.0	51	101	60 - 118	
Dibromomethane	50.0	49	98	70 - 130	
Dichlorodifluoromethane	50.0	33	<del>66</del>	70 - 130	
1,1-Dichloroethane	50.0	53	106	70 - 127	
1,2-Dichloroethane	50.0	46	91	68 - 130	
1,1-Dichloroethene	50.0	46	91	64 - 132	
trans-1,2-Dichloroethene	50.0	51	103	67 - 130	
1,2-Dichloropropane	50.0	52	104	74 - 123	
cis-1,3-Dichloropropene	50.0	48	96	76 - 126	
trans-1,3-Dichloropropene	50.0	46	92	75 - 126	
Ethylbenzene	50.0	49	97	77 - 123	
2-Hexanone	100	120	117	58 - 139	
Methylene Chloride	50.0	50	100	67 - 128	
methyl isobutyl ketone	100	110	111	62 - 130	
Styrene	50.0	49	98	75 - 125	
1,1,1,2-Tetrachloroethane	50.0	45	91	62 - 107	
1,1,2,2-Tetrachloroethane	50.0	54	109	71 - 127	
Tetrachloroethene	50.0	47	95	70 - 133	
Toluene	50.0	49	97	75 - 122	
1,1,1-Trichloroethane	50.0	43	87	70 - 132	
1,1,2-Trichloroethane	50.0	50	101	75 - 122	
Trichloroethene	50.0	48	95	75 - 122	
Trichlorofluoromethane	50.0	38	76	74 - 165	
1,2,3-Trichloropropane	50.0	52	105	60 - 147	
Vinyl acetate	100	71	71	47 - 150	
Vinyl chloride	50.0	37	73	59 - 136	
Xylenes, Total	150	140	96	77 - 121	

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

## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	96	77 - 120
Dibromofluoromethane	100	75 - 123
Toluene-d8	98	79 - 122

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

## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

**Method Blank - Batch: 680-28203**

**Method: 8260B**  
**Preparation: 5030B**

Lab Sample ID: MB 680-28203/4  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/12/2005 0138  
Date Prepared: 11/12/2005 0138

Analysis Batch: 680-28203  
Prep Batch: N/A  
Units: ug/L

Instrument ID: GC/MS Volatiles - O  
Lab File ID: oq1362.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
Methyl Ethyl Ketone	<10		10
Carbon disulfide	<1.0		1.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutanol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
methyl isobutyl ketone	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0

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

## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

**Method Blank - Batch: 680-28203**

**Method: 8260B**  
**Preparation: 5030B**

Lab Sample ID: MB 680-28203/4  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/12/2005 0138  
Date Prepared: 11/12/2005 0138

Analysis Batch: 680-28203  
Prep Batch: N/A  
Units: ug/L

Instrument ID: GC/MS Volatiles - O  
Lab File ID: oq1362.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
1,1,1,2-Tetrachloroethane	<1.0		1.0
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0

  

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	95	77 - 120
Dibromofluoromethane	98	75 - 123
Toluene-d8	101	79 - 122

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

## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

**Laboratory Control Sample - Batch: 680-28203**

**Method: 8260B**  
**Preparation: 5030B**

Lab Sample ID: LCS 680-28203/3  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/11/2005 2319  
Date Prepared: 11/11/2005 2319

Analysis Batch: 680-28203  
Prep Batch: N/A  
Units: ug/L

Instrument ID: GC/MS Volatiles - O  
Lab File ID: oq1354.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	100	150	150	20 - 183	
Benzene	50.0	48	97	74 - 122	
Dichlorobromomethane	50.0	44	89	74 - 128	
Bromoform	50.0	45	90	64 - 132	
Bromomethane	50.0	33	66	21 - 176	
Methyl Ethyl Ketone	100	120	119	51 - 142	
Carbon disulfide	50.0	51	101	60 - 130	
Carbon tetrachloride	50.0	44	88	64 - 137	
Chlorobenzene	50.0	49	98	75 - 123	
Chloroethane	50.0	32	64	40 - 171	
Chloroform	50.0	56	112	74 - 124	
Chloromethane	50.0	36	71	51 - 133	
Chlorodibromomethane	50.0	42	85	75 - 126	
1,2-Dibromo-3-Chloropropane	50.0	44	89	14 - 147	
Ethylene Dibromide	50.0	49	99	60 - 118	
Dibromomethane	50.0	47	93	70 - 130	
Dichlorodifluoromethane	50.0	31	62	70 - 130	
1,1-Dichloroethane	50.0	57	114	70 - 127	
1,2-Dichloroethane	50.0	44	87	68 - 130	
1,1-Dichloroethene	50.0	48	96	64 - 132	
trans-1,2-Dichloroethene	50.0	53	106	67 - 130	
1,2-Dichloropropane	50.0	52	104	74 - 123	
cis-1,3-Dichloropropene	50.0	50	100	76 - 126	
trans-1,3-Dichloropropene	50.0	48	95	75 - 126	
Ethylbenzene	50.0	48	95	77 - 123	
2-Hexanone	100	100	100	58 - 139	
Methylene Chloride	50.0	51	102	67 - 128	
methyl isobutyl ketone	100	100	103	62 - 130	
Styrene	50.0	47	94	75 - 125	
1,1,1,2-Tetrachloroethane	50.0	44	88	62 - 107	
1,1,2,2-Tetrachloroethane	50.0	52	104	71 - 127	
Tetrachloroethene	50.0	48	95	70 - 133	
Toluene	50.0	50	100	75 - 122	
1,1,1-Trichloroethane	50.0	46	92	70 - 132	
1,1,2-Trichloroethane	50.0	50	100	75 - 122	
Trichloroethene	50.0	49	98	75 - 122	
Trichlorofluoromethane	50.0	40	79	74 - 165	
1,2,3-Trichloropropane	50.0	50	101	60 - 147	
Vinyl acetate	100	78	78	47 - 150	
Vinyl chloride	50.0	34	67	59 - 136	
Xylenes, Total	150	140	95	77 - 121	

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

## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	98	77 - 120
Dibromofluoromethane	108	75 - 123
Toluene-d8	100	79 - 122

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

## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 680-28203**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 680-10222-3  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/12/2005 0441  
Date Prepared: 11/12/2005 0441

Analysis Batch: 680-28203  
Prep Batch: N/A

Instrument ID: GC/MS Volatiles - O  
Lab File ID: o1866.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

MSD Lab Sample ID: 680-10222-3  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/12/2005 0511  
Date Prepared: 11/12/2005 0511

Analysis Batch: 680-28203  
Prep Batch: N/A

Instrument ID: GC/MS Volatiles - O  
Lab File ID: o1868.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Acetone	95	92	20 - 183	3	50		
Benzene	106	105	74 - 122	1	30		
Dichlorobromomethane	94	92	74 - 128	2	30		
Bromoform	82	82	64 - 132	1	30		
Bromomethane	71	81	21 - 176	13	50		
Methyl Ethyl Ketone	96	94	51 - 142	1	30		
Carbon disulfide	119	118	60 - 130	1	30		
Carbon tetrachloride	90	91	64 - 137	1	30		
Chlorobenzene	98	98	75 - 123	1	30		
Chloroethane	74	74	40 - 171	0	50		
Chloroform	114	115	74 - 124	1	30		
Chloromethane	101	99	51 - 133	2	50		
Chlorodibromomethane	88	91	75 - 126	4	30		
1,2-Dibromo-3-Chloropropane	87	88	14 - 147	1	30		
Ethylene Dibromide	96	96	60 - 118	0	30		
Dibromomethane	94	94	70 - 130	1	30		
Dichlorodifluoromethane	113	112	70 - 130	1	30	*	*
1,1-Dichloroethane	118	115	70 - 127	3	30		
1,2-Dichloroethane	90	89	68 - 130	1	30		
1,1-Dichloroethene	113	109	64 - 132	3	30		
trans-1,2-Dichloroethene	118	117	67 - 130	1	30		
1,2-Dichloropropane	106	104	74 - 123	2	30		
cis-1,3-Dichloropropene	95	95	76 - 126	1	30		
trans-1,3-Dichloropropene	92	91	75 - 126	1	30		
Ethylbenzene	100	102	77 - 123	2	30		
2-Hexanone	85	87	58 - 139	2	30		
Methylene Chloride	106	106	67 - 128	0	30		
methyl isobutyl ketone	99	98	62 - 130	1	30		
Styrene	96	96	75 - 125	0	30		
1,1,1,2-Tetrachloroethane	90	91	62 - 107	1	30		

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



## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 680-28203**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 680-10222-3  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/12/2005 0441  
Date Prepared: 11/12/2005 0441

Analysis Batch: 680-28203  
Prep Batch: N/A

Instrument ID: GC/MS Volatiles - O  
Lab File ID: o1866.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

MSD Lab Sample ID: 680-10222-3  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/12/2005 0511  
Date Prepared: 11/12/2005 0511

Analysis Batch: 680-28203  
Prep Batch: N/A

Instrument ID: GC/MS Volatiles - O  
Lab File ID: o1868.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
1,1,2,2-Tetrachloroethane	96	97	71 - 127	1	30		
Tetrachloroethene	94	95	70 - 133	1	30		
Toluene	105	103	75 - 122	2	30		
1,1,1-Trichloroethane	93	95	70 - 132	2	30		
1,1,2-Trichloroethane	100	97	75 - 122	3	30		
Trichloroethene	101	98	75 - 122	2	30		
Trichlorofluoromethane	98	98	74 - 165	0	50		
1,2,3-Trichloropropane	93	91	60 - 147	3	30		
Vinyl acetate	104	102	47 - 150	2	30		
Vinyl chloride	89	85	59 - 136	4	50		
Xylenes, Total	97	99	77 - 121	2	30		
<b>Surrogate</b>	<b>MS % Rec</b>		<b>MSD % Rec</b>		<b>Acceptance Limits</b>		
4-Bromofluorobenzene	95		97		77 - 120		
Dibromofluoromethane	114		112		75 - 123		
Toluene-d8	107		105		79 - 122		

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

## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 680-28203**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 680-10222-8  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/12/2005 0542  
Date Prepared: 11/12/2005 0542

Analysis Batch: 680-28203  
Prep Batch: N/A

Instrument ID: GC/MS Volatiles - O  
Lab File ID: o1870.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

MSD Lab Sample ID: 680-10222-8  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/12/2005 0612  
Date Prepared: 11/12/2005 0612

Analysis Batch: 680-28203  
Prep Batch: N/A

Instrument ID: GC/MS Volatiles - O  
Lab File ID: o1872.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Acetone	74	75	20 - 183	2	50		
Benzene	148	<u>129</u>	74 - 122	7	30		
Dichlorobromomethane	90	92	74 - 128	2	30		
Bromoform	84	81	64 - 132	4	30		
Bromomethane	69	71	21 - 176	2	50		
Methyl Ethyl Ketone	93	90	51 - 142	3	30		
Carbon disulfide	120	116	60 - 130	3	30		
Carbon tetrachloride	134	122	64 - 137	5	30		
Chlorobenzene	105	97	75 - 123	7	30		
Chloroethane	79	<u>81</u>	40 - 171	2	50		
Chloroform	145	<u>135</u>	74 - 124	4	30		
Chloromethane	91	95	51 - 133	4	50		
Chlorodibromomethane	88	86	75 - 126	2	30		
1,2-Dibromo-3-Chloropropane	86	90	14 - 147	5	30		
Ethylene Dibromide	91	91	60 - 118	0	30		
Dibromomethane	90	92	70 - 130	2	30		
Dichlorodifluoromethane	101	104	70 - 130	3	30	*	*
1,1-Dichloroethane	116	111	70 - 127	4	30		
1,2-Dichloroethane	91	91	68 - 130	1	30		
1,1-Dichloroethene	107	106	64 - 132	1	30		
trans-1,2-Dichloroethene	122	112	67 - 130	8	30		
1,2-Dichloropropane	102	102	74 - 123	0	30		
cis-1,3-Dichloropropene	92	93	76 - 126	2	30		
trans-1,3-Dichloropropene	87	88	75 - 126	1	30		
Ethylbenzene	101	98	77 - 123	3	30		
2-Hexanone	84	85	58 - 139	1	30		
Methylene Chloride	105	100	67 - 128	5	30		
methyl isobutyl ketone	89	95	62 - 130	6	30		
Styrene	98	96	75 - 125	1	30		
1,1,1,2-Tetrachloroethane	90	85	62 - 107	6	30		

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

## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 680-28203**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 680-10222-8  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/12/2005 0542  
Date Prepared: 11/12/2005 0542

Analysis Batch: 680-28203  
Prep Batch: N/A

Instrument ID: GC/MS Volatiles - O  
Lab File ID: o1870.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

MSD Lab Sample ID: 680-10222-8  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/12/2005 0612  
Date Prepared: 11/12/2005 0612

Analysis Batch: 680-28203  
Prep Batch: N/A

Instrument ID: GC/MS Volatiles - O  
Lab File ID: o1872.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
1,1,2,2-Tetrachloroethane	95	93	71 - 127	2	30		
Tetrachloroethene	95	93	70 - 133	2	30		
Toluene	100	100	75 - 122	0	30		
1,1,1-Trichloroethane	94	93	70 - 132	1	30		
1,1,2-Trichloroethane	93	95	75 - 122	2	30		
Trichloroethene	99	97	75 - 122	2	30		
Trichlorofluoromethane	92	92	74 - 165	0	50		
1,2,3-Trichloropropane	90	87	60 - 147	3	30		
Vinyl acetate	99	97	47 - 150	2	30		
Vinyl chloride	80	80	59 - 136	0	50		
Xylenes, Total	97	95	77 - 121	2	30		
<b>Surrogate</b>	<b>MS % Rec</b>		<b>MSD % Rec</b>	<b>Acceptance Limits</b>			
4-Bromofluorobenzene	91		92	77 - 120			
Dibromofluoromethane	112		107	75 - 123			
Toluene-d8	99		102	79 - 122			

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

## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

**Method Blank - Batch: 680-28349**

**Method: 8260B**  
**Preparation: 5030B**

Lab Sample ID: MB 680-28349/4  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/11/2005 1120  
Date Prepared: 11/11/2005 1120

Analysis Batch: 680-28349  
Prep Batch: N/A  
Units: ug/L

Instrument ID: GC/MS Volatiles - O  
Lab File ID: oq1349.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
Methyl Ethyl Ketone	<10		10
Carbon disulfide	<1.0		1.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutanol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
methyl isobutyl ketone	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0

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

## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

**Method Blank - Batch: 680-28349**

**Method: 8260B  
Preparation: 5030B**

Lab Sample ID: MB 680-28349/4  
 Client Matrix: Water  
 Dilution: 1.0  
 Date Analyzed: 11/11/2005 1120  
 Date Prepared: 11/11/2005 1120

Analysis Batch: 680-28349  
 Prep Batch: N/A  
 Units: ug/L

Instrument ID: GC/MS Volatiles - O  
 Lab File ID: oq1349.d  
 Initial Weight/Volume: 5 mL  
 Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
1,1,1,2-Tetrachloroethane	<1.0		1.0
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	94	77 - 120
Dibromofluoromethane	102	75 - 123
Toluene-d8	102	79 - 122

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

## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

Laboratory Control Sample - Batch: 680-28349

Method: 8260B  
Preparation: 5030B

Lab Sample ID: LCS 680-28349/3  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/11/2005 0948  
Date Prepared: 11/11/2005 0948

Analysis Batch: 680-28349  
Prep Batch: N/A  
Units: ug/L

Instrument ID: GC/MS Volatiles - O  
Lab File ID: oq1343.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	100	83	83	20 - 183	
Benzene	50.0	48	97	74 - 122	
Dichlorobromomethane	50.0	45	90	74 - 128	
Bromoform	50.0	46	92	64 - 132	
Bromomethane	50.0	38	77	21 - 176	
Methyl Ethyl Ketone	100	96	96	51 - 142	
Carbon disulfide	50.0	50	101	60 - 130	
Carbon tetrachloride	50.0	43	86	64 - 137	
Chlorobenzene	50.0	50	100	75 - 123	
Chloroethane	50.0	33	65	40 - 171	
Chloroform	50.0	51	102	74 - 124	
Chloromethane	50.0	36	71	51 - 133	
Chlorodibromomethane	50.0	44	89	75 - 126	
1,2-Dibromo-3-Chloropropane	50.0	47	95	14 - 147	
Ethylene Dibromide	50.0	48	96	60 - 118	
Dibromomethane	50.0	45	90	70 - 130	
Dichlorodifluoromethane	50.0	30	<del>60</del>	70 - 130	
1,1-Dichloroethane	50.0	53	106	70 - 127	
1,2-Dichloroethane	50.0	46	91	68 - 130	
1,1-Dichloroethene	50.0	48	96	64 - 132	
trans-1,2-Dichloroethene	50.0	50	100	67 - 130	
1,2-Dichloropropane	50.0	53	107	74 - 123	
cis-1,3-Dichloropropene	50.0	50	99	76 - 126	
trans-1,3-Dichloropropene	50.0	48	95	75 - 126	
Ethylbenzene	50.0	49	97	77 - 123	
2-Hexanone	100	100	101	58 - 139	
Methylene Chloride	50.0	50	101	67 - 128	
methyl isobutyl ketone	100	99	99	62 - 130	
Styrene	50.0	47	94	75 - 125	
1,1,1,2-Tetrachloroethane	50.0	47	95	62 - 107	
1,1,2,2-Tetrachloroethane	50.0	51	102	71 - 127	
Tetrachloroethene	50.0	49	98	70 - 133	
Toluene	50.0	49	99	75 - 122	
1,1,1-Trichloroethane	50.0	45	91	70 - 132	
1,1,2-Trichloroethane	50.0	49	97	75 - 122	
Trichloroethene	50.0	49	97	75 - 122	
Trichlorofluoromethane	50.0	42	83	74 - 165	
1,2,3-Trichloropropane	50.0	51	101	60 - 147	
Vinyl acetate	100	74	74	47 - 150	
Vinyl chloride	50.0	31	62	59 - 136	
Xylenes, Total	150	140	96	77 - 121	

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

## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	95	77 - 120
Dibromofluoromethane	98	75 - 123
Toluene-d8	99	79 - 122

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



## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

**Method Blank - Batch: 680-28350**

**Method: 8260B**  
**Preparation: 5030B**

Lab Sample ID: MB 680-28350/5  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/11/2005 1135  
Date Prepared: 11/11/2005 1135

Analysis Batch: 680-28350  
Prep Batch: N/A  
Units: ug/L

Instrument ID: GC/MS Volatiles - O  
Lab File ID: oq1350.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
Methyl Ethyl Ketone	<10		10
Carbon disulfide	<1.0		1.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutanol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
methyl isobutyl ketone	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0

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



## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

Method Blank - Batch: 680-28350

Method: 8260B  
Preparation: 5030B

Lab Sample ID: MB 680-28350/5  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/11/2005 1135  
Date Prepared: 11/11/2005 1135

Analysis Batch: 680-28350  
Prep Batch: N/A  
Units: ug/L

Instrument ID: GC/MS Volatiles - O  
Lab File ID: oq1350.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
1,1,1,2-Tetrachloroethane	<1.0		1.0
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	96	77 - 120
Dibromofluoromethane	97	75 - 123
Toluene-d8	102	79 - 122

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

## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

Laboratory Control Sample - Batch: 680-28350

Method: 8260B  
Preparation: 5030B

Lab Sample ID: LCS 680-28350/4  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/11/2005 1003  
Date Prepared: 11/11/2005 1003

Analysis Batch: 680-28350  
Prep Batch: N/A  
Units: ug/L

Instrument ID: GC/MS Volatiles - O  
Lab File ID: oq1344.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	100	150	146	20 - 183	
Benzene	50.0	47	94	74 - 122	
Dichlorobromomethane	50.0	43	86	74 - 128	
Bromoform	50.0	45	91	64 - 132	
Bromomethane	50.0	40	81	21 - 176	
Methyl Ethyl Ketone	100	110	114	51 - 142	
Carbon disulfide	50.0	49	99	60 - 130	
Carbon tetrachloride	50.0	43	85	64 - 137	
Chlorobenzene	50.0	50	101	75 - 123	
Chloroethane	50.0	36	72	40 - 171	
Chloroform	50.0	53	107	74 - 124	
Chloromethane	50.0	38	76	51 - 133	
Chlorodibromomethane	50.0	46	91	75 - 126	
1,2-Dibromo-3-Chloropropane	50.0	48	97	14 - 147	
Ethylene Dibromide	50.0	48	97	60 - 118	
Dibromomethane	50.0	45	89	70 - 130	
Dichlorodifluoromethane	50.0	29	<u>59</u>	70 - 130	*
1,1-Dichloroethane	50.0	56	113	70 - 127	
1,2-Dichloroethane	50.0	42	84	68 - 130	
1,1-Dichloroethene	50.0	47	94	64 - 132	
trans-1,2-Dichloroethene	50.0	51	101	67 - 130	
1,2-Dichloropropane	50.0	50	100	74 - 123	
cis-1,3-Dichloropropene	50.0	49	97	76 - 126	
trans-1,3-Dichloropropene	50.0	46	93	75 - 126	
Ethylbenzene	50.0	50	99	77 - 123	
2-Hexanone	100	100	103	58 - 139	
Methylene Chloride	50.0	50	100	67 - 128	
methyl isobutyl ketone	100	98	98	62 - 130	
Styrene	50.0	48	96	75 - 125	
1,1,1,2-Tetrachloroethane	50.0	46	92	62 - 107	
1,1,2,2-Tetrachloroethane	50.0	51	101	71 - 127	
Tetrachloroethene	50.0	50	100	70 - 133	
Toluene	50.0	49	98	75 - 122	
1,1,1-Trichloroethane	50.0	45	89	70 - 132	
1,1,2-Trichloroethane	50.0	48	97	75 - 122	
Trichloroethene	50.0	48	97	75 - 122	
Trichlorofluoromethane	50.0	42	83	74 - 165	
1,2,3-Trichloropropane	50.0	49	98	60 - 147	
Vinyl acetate	100	75	75	47 - 150	
Vinyl chloride	50.0	40	80	59 - 136	
Xylenes, Total	150	150	97	77 - 121	

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

## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	95	77 - 120
Dibromofluoromethane	104	75 - 123
Toluene-d8	98	79 - 122

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

## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 680-28350**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 680-10222-28  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/11/2005 1439  
Date Prepared: 11/11/2005 1439

Analysis Batch: 680-28350  
Prep Batch: N/A

Instrument ID: GC/MS Volatiles - O  
Lab File ID: o1828.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

MSD Lab Sample ID: 680-10222-28  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/11/2005 1510  
Date Prepared: 11/11/2005 1510

Analysis Batch: 680-28350  
Prep Batch: N/A

Instrument ID: GC/MS Volatiles - O  
Lab File ID: o1830.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Acetone	98	94	20 - 183	3	50		
Benzene	95	108	74 - 122	12	30		
Dichlorobromomethane	82	83	74 - 128	1	30		
Bromoform	78	82	64 - 132	5	30		
Bromomethane	61	76	21 - 176	22	50		
Methyl Ethyl Ketone	90	97	51 - 142	8	30		
Carbon disulfide	108	119	60 - 130	10	30		
Carbon tetrachloride	79	87	64 - 137	10	30		
Chlorobenzene	103	124	75 - 123	13	30		*
Chloroethane	80	90	40 - 171	11	50		
Chloroform	104	113	74 - 124	9	30		
Chloromethane	87	95	51 - 133	9	50		
Chlorodibromomethane	81	87	75 - 126	7	30		
1,2-Dibromo-3-Chloropropane	88	95	14 - 147	8	30		
Ethylene Dibromide	84	84	60 - 118	0	30		
Dibromomethane	82	85	70 - 130	4	30		
Dichlorodifluoromethane	88	96	70 - 130	9	30		
1,1-Dichloroethane	107	117	70 - 127	9	30		
1,2-Dichloroethane	80	85	68 - 130	7	30		
1,1-Dichloroethene	101	112	64 - 132	9	30		
trans-1,2-Dichloroethene	109	117	67 - 130	8	30		
1,2-Dichloropropane	96	99	74 - 123	3	30		
cis-1,3-Dichloropropene	85	86	76 - 126	1	30		
trans-1,3-Dichloropropene	80	80	75 - 126	1	30		
Ethylbenzene	96	101	77 - 123	5	30		
2-Hexanone	86	93	58 - 139	8	30		
Methylene Chloride	97	105	67 - 128	8	30		
methyl isobutyl ketone	87	91	62 - 130	4	30		
Styrene	95	98	75 - 125	4	30		
1,1,1,2-Tetrachloroethane	83	88	62 - 107	6	30		

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

## Quality Control Results

Client: Hercules Inc.

Job Number: 680-10222-1

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 680-28350**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 680-10222-28  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/11/2005 1439  
Date Prepared: 11/11/2005 1439

Analysis Batch: 680-28350  
Prep Batch: N/A

Instrument ID: GC/MS Volatiles - O  
Lab File ID: o1828.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

MSD Lab Sample ID: 680-10222-28  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/11/2005 1510  
Date Prepared: 11/11/2005 1510

Analysis Batch: 680-28350  
Prep Batch: N/A

Instrument ID: GC/MS Volatiles - O  
Lab File ID: o1830.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
1,1,2,2-Tetrachloroethane	91	97	71 - 127	6	30		
Tetrachloroethene	93	99	70 - 133	6	30		
Toluene	92	93	75 - 122	1	30		
1,1,1-Trichloroethane	84	91	70 - 132	7	30		
1,1,2-Trichloroethane	86	87	75 - 122	1	30		
Trichloroethene	90	92	75 - 122	2	30		
Trichlorofluoromethane	90	99	74 - 165	10	50		
1,2,3-Trichloropropane	89	94	60 - 147	6	30		
Vinyl acetate	108	115	47 - 150	6	30		
Vinyl chloride	80	88	59 - 136	9	50		
Xylenes, Total	94	100	77 - 121	6	30		
<b>Surrogate</b>	<b>MS % Rec</b>		<b>MSD % Rec</b>	<b>Acceptance Limits</b>			
4-Bromofluorobenzene	91		97	77 - 120			
Dibromofluoromethane	102		112	75 - 123			
Toluene-d8	93		96	79 - 122			

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



Serial Number 43521

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STL Savannah  
 5102 LaRoche Avenue  
 Savannah, GA 31404

Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_

Page 1

1 of 3

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD



PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)	MATRIX TYPE	REQUIRED ANALYSIS	PAGE
STL (LAB) PROJECT MANAGER LIDIA GULIZIA	P.O. NUMBER 1500911597	MS	NONAQUEOUS LIQUID (OIL, SOLVENT,...)		1
CLIENT (SITE) PM TIM HASSETT	CLIENT PHONE 302-995-3456	CONTRACT NO.	AIR		
CLIENT NAME HERCULES, INC.	CLIENT E-MAIL	CLIENT FAX	SOLID OR SEMISOLID	STANDARD REPORT DELIVERY	
CLIENT ADDRESS HERCULES RESEARCH CENTER 500 HERCULES RD., WILMINGTON, DE 19808			AQUEOUS (WATER)	DATE DUE	
COMPANY CONTRACTING THIS WORK (if applicable)			COMPOSITE (C) OR GRAB (G) INDICATE	EXPEDITED REPORT DELIVERY (SURCHARGE)	

DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX TYPE	NUMBER OF CONTAINERS SUBMITTED	REMARKS	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
						RELINQUISHED BY: (SIGNATURE)	DATE	TIME
11/2/05	0930	HER - CM05 - 1105	6x	3				
11/2/05	1030	HER - CM04 - 1105	6x	3				
11/2/05	1055	HER - CM03 - 1105 (MS/MSD)	6x	9				
11/2/05	1120	HER - RS1 - 1105	6x	3				
11/2/05	1125	HER - CM07 - 1105	6x	3				
11/2/05	1135	HER - CM01 - 1105	6x	3				
11/2/05	1235	HER - CM00 - 1105	6x	3				
11/2/05	1501	HER - MW13 - 1105 (MS/MSD)	6x	9				
11/2/05	1512	HER - MW08 - 1105	6x	3				
11/2/05	1610	HER - MW10 - 1105	6x	3				
11/2/05	-	HER - FDI - 1105	6x	3				
11/2/05	1618	HER - MW15 - 1105	6x	3				

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
				11-03-2005	19:00
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

RECEIVED FOR LABORATORY BY (SIGNATURE)	DATE	TIME	CUSTODY INTACT	STL SAVANNAH	LABORATORY REMARKS
	11/04/05	0850	YES <input type="radio"/> NO <input type="radio"/>		

Serial Number 43520

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

STL Savannah  
 5102 LaRoche Avenue  
 Savannah, GA 31404

Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD



PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)	MATRIX TYPE	REQUIRED ANALYSIS	PAGE	OF	
STL (LAB) PROJECT MANAGER LIDIA GULLIZIA	P.O. NUMBER 4500911597	MS	COMPOSITE (C) OR GRAB (G) INDICATE		2	3	
CLIENT (SITE) PM TIM HASSETT	CLIENT PHONE 302-955-3456	CLIENT FAX	AQUEOUS (WATER)		STANDARD REPORT DELIVERY	3	
CLIENT NAME HERCULES, INC.	CLIENT E-MAIL		SOLID OR SEMISOLID		DATE DUE		
CLIENT ADDRESS HERCULES RESEARCH CENTER			NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		EXPEDITED REPORT DELIVERY (SURCHARGE)		
500 HERCULES RD, WILMINGTON, DE 19808			AIR		DATE DUE		
COMPANY CONTRACTING THIS WORK (if applicable)					NUMBER OF COOLERS SUBMITTED PER SHIPMENT:		
SAMPLE DATE	TIME	SAMPLE IDENTIFICATION	REMARKS	NUMBER OF CONTAINERS SUBMITTED	REMARKS	DATE	TIME
11/3/05	0947	HER-MW04-1105	6X	3			
11/3/05	1000	HER-MW11-1105	6X	3			
11/3/05	1041	HER-MW10-1105	6X	3			
11/3/05	1108	HER-MW02-1105	6X	3			
11/3/05	1115	HER-RS02-1105	6X	3			
11/3/05	1119	HER-MW03-1105	6X	3			
11/3/05	1200	HER-MW05-1105	6X	3			
11/3/05	1214	HER-MW14-1105	6X	3			
11/3/05	1305	HER-MW13-1105	6X	3			
11/3/05	1308	HER-MW06-1105	6X	3			
11/3/05	1400	HER-MW17-1105	6X	3			
11/3/05	-	HER-F13-1105	6X	3			
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE
			<i>[Signature]</i>	11-03-05	19:00		
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE

LABORATORY USE ONLY

STL SAVANNAH LOG NO. 680-1022

CUSTODY SEAL NO. 110405

CUSTODY INTACT YES  NO

LABORATORY REMARKS

Field Analytical



Serial Number 43522

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

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

STL Savannah  
 5102 LaRoche Avenue  
 Savannah, GA 31404



Alternate Laboratory Name/Location

Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)	MATRIX TYPE	REQUIRED ANALYSIS	PAGE 3 OF 3
STL (LAB) PROJECT MANAGER LIDIA GULLIZIA	P.O. NUMBER 4500511597	CONTRACT NO. MS	NONAQUEOUS LIQUID (OIL, SOLVENT...)	STANDARD REPORT DELIVERY	DATE DUE
CLIENT (SITE) PM Tom HASEBET	CLIENT PHONE 302-995-3456	CLIENT FAX	SOLID OR SEMISOLID	EXPEDITED REPORT DELIVERY (SURCHARGE)	DATE DUE
CLIENT NAME HERCULES INC.	CLIENT E-MAIL		AQUEOUS (WATER)	NUMBER OF COOLERS SUBMITTED PER SHIPMENT:	
CLIENT ADDRESS 500 HERCULES RD. WILMINGTON, DE 19808			COMPOSITE (C) OR GRAB (G) INDICATE		
COMPANY CONTRACTING THIS WORK (if applicable)					
SAMPLE		SAMPLE IDENTIFICATION		REMARKS	
DATE	TIME				
11/3/05	1403	HER-MW09-1105	3		
11/3/05	-	HER-FD2-1105	3		FIELD DUPLICATE
11/3/05	1505	HER-MW07-1105	3		
11/3/05	1505	HER-MW18-1105 (MS/MSD)	9		
11/3/05	1551	HER-MN19-1105	3		
RELINQUISHED BY: (SIGNATURE) _____ DATE _____ TIME _____ RELINQUISHED BY: (SIGNATURE) _____ DATE _____ TIME _____					
RECEIVED BY: (SIGNATURE) _____ DATE _____ TIME _____ RECEIVED BY: (SIGNATURE) _____ DATE _____ TIME _____					

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: *[Signature]* DATE: 11/05/05 TIME: 0850

CUSTODY SEAL NO. \_\_\_\_\_ CUSTODY INTACT YES  NO

STL SAVANNAH LOG NO. 680-1022

LABORATORY REMARKS



# BONNER ANALYTICAL TESTING COMPANY



2703 OAK GROVE ROAD, HATTIESBURG, MS 39402  
PHONE: (601) 264-2854 FAX: (601) 268-7084

## CASE NARRATIVE: Hercules

### Dioxathion analysis by HPLC

Samples were collected by the client and received at BATCO on 11/03/05 from Hercules. Seventeen water samples were collected and given ID#s BT29256-BT29272.

The samples were extracted and then analyzed on a High Performance Liquid Chromatograph (HPLC) equipped with diode array and fluorescence detectors.

A method blank, lab control, and matrix spike were extracted and analyzed under the same conditions as the samples.

Two sample tested positive for dioxenethion. HER-MW17-1105 had a concentraion of 2802 ppb. HER-FD3-1105 had a concentration of 2377 ppb.

Samples HER-MW17-1105 and HER-FD3-1105 both contained an interference that had the same retention time as the surrogate naphthalene. All samples were non-detect for cis and trans dioxathion.

Authorized by: \_\_\_\_\_  
Michael S. Bonner, PhD.

# BONNER ANALYTICAL TESTING COMPANY



2703 OAK GROVE ROAD, HATTIESBURG, MS 39402  
PHONE: (601) 264-2854 FAX: (601) 268-7084

## CASE NARRATIVE: Hercules

### Dioxathion analysis by HPLC

Samples were collected by the client and received at BATCO on 11/03/05 from Hercules. Twelve water samples were collected and given ID#s BT29225-BT29236.

The samples were extracted and then analyzed on a High Performance Liquid Chromatograph (HPLC) equipped with diode array and fluorescence detectors.

A method blank, lab control, and matrix spike were extracted and analyzed under the same conditions as the samples.

One sample tested positive for dioxenethion. HER-MW08-1105 had a concentraion of 2492 ppb.

Sample HER-MW08-1105 contained an interference that had the same retention time as the surrogate naphthalene. All samples were non-detect for cis and trans dioxathion.

Authorized by: \_\_\_\_\_  
Michael S. Bonner, PhD.

**BONNER ANALYTICAL TESTING COMPANY**  
 QUANTITATIVE RESULTS AND QUALITY ASSURANCE DATA  
 DIOXATHION/ DIOXENETHION HPLC ANALYSIS DATA

COMPOUNDS	PQL ug/L (ppb)	SAMPLE			METHOD BLANK			LAB CONTROL			MATRIX SPIKE		
		Detected Amount ug/L (ppb)	Spike		Detected Amount ug/L (ppb)	Spike		Detected Amount ug/L (ppb)	Spike		Detected Amount ug/L (ppb)	Spike	
			Amount ug/L	% Recovery		Amount ug/L	% Recovery		Amount ug/L	% Recovery		Amount ug/L	% Recovery
Dioxenethion	0.400	ND		ND		3.59		5.00	71.8	5.04		5.00	101
Dioxathion (cis)	0.400	ND		ND		4.44		5.00	88.8	4.02		5.00	80.4
Dioxathion (trans)	0.400	ND		ND		3.56		5.00	71.2	4.10		5.00	82.0
<b>SURROGATE COMPOUNDS</b>		Detected Amount	% Recovery	Detected Amount	% Recovery	Detected Amount	% Recovery	Spiked Amount	% Recovery	Detected Amount	% Recovery	Spiked Amount	% Recovery
Naphthalene		3.84	76.8	2.94	58.8	3.35	67.0	5.00	67.0	4.23	84.6	5.00	84.6

Client: **HERCULES**  
 Sample ID: HER-RS1-1105  
 File #: BT29228

Collected: 11/02/05 11:20 CLEINT  
 Extracted: 11/04/05 12:00 BJLDGA,DJL  
 Analyzed: 11/09/05 17:35 BJL  
 Date Analyst

Sample Type: Water  
 Extraction Method: SWB46 3510C  
 Analysis Method: Modified SWB46

Certified by: Michael S. Bonner, Ph.D  
**BONNER ANALYTICAL TESTING COMPANY**

**BONNER ANALYTICAL TESTING COMPANY**  
 QUANTITATIVE RESULTS AND QUALITY ASSURANCE DATA  
 DIOXATHION/ DIOXENETHION HPLC ANALYSIS DATA

Client: **HERCULES**  
 Sample ID: **HER-FD1-1105**  
 File #: **BT29235**

Collected: **11/02/05** **NA**  
 Extracted: **11/04/05** **12:00**  
 Analyzed: **11/08/05** **21:27**  
 Date

**CLEINT**  
**BJL,DGA,DJL**  
**BJL**  
 Analyst

Sample Type: **Water**  
 Extraction Method: **SWB46 3510C**  
 Analysis Method: **Modified SWB46**

COMPOUNDS	PQL ug/L (ppb)	SAMPLE			METHOD BLANK			LAB CONTROL			MATRIX SPIKE		
		Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery
Dioxenethion	0.400	ND			ND			3.59	5.00	71.8	5.04	5.00	101
Dioxathion (cis)	0.400	ND			ND			4.44	5.00	88.8	4.02	5.00	80.4
Dioxathion (trans)	0.400	ND			ND			3.56	5.00	71.2	4.10	5.00	82.0
<b>SURROGATE COMPOUNDS</b>													
Naphthalene		2.59	Spiked Amount 5.00	51.8	2.94	Spiked Amount 5.00	58.8	3.35	Spiked Amount 5.00	67.0	4.23	Spiked Amount 5.00	84.6

Certified by: Michael S. Bonner, Ph.D  
**BONNER ANALYTICAL TESTING COMPANY**

**BONNER ANALYTICAL TESTING COMPANY**  
 QUANTITATIVE RESULTS AND QUALITY ASSURANCE DATA  
 DIOXATHION/ DIOXENETHION HPLC ANALYSIS DATA

Client: **HERCULES**  
 Sample ID: HER-RSZ-1105  
 File #: BT29270

Collected: 11/03/05 11:15  
 Extracted: 11/07/05 11:00  
 Analyzed: 11/09/05 22:07  
 Date

CLEINT  
 B.J.L.DGA,D.J.L  
 B.J.L  
 Analyst

Sample Type: Water  
 Extraction Method: SWB48 3510C  
 Analysis Method: Modified SWB46

COMPOUNDS	PQL ug/L (ppb)	SAMPLE			METHOD BLANK			LAB CONTROL			MATRIX SPIKE		
		Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery
Dioxenethion	0.400	ND			ND			3.75	5.00	75.0	4.88	5.00	97.6
Dioxathion (cis)	0.400	ND			ND			4.00	5.00	80.0	3.97	5.00	79.4
Dioxathion (trans)	0.400	ND			ND			3.08	5.00	61.6	3.72	5.00	74.4
<b>SURROGATE COMPOUNDS</b>													
Naphthalene		4.05	Spiked Amount 5.00	81.0	2.82	Spiked Amount 5.00	56.4	2.85	5.00	57.0	4.25	Spiked Amount 5.00	85.0

Certified by: Michael S. Bonner, Ph.D  
**BONNER ANALYTICAL TESTING COMPANY**

**BONNER ANALYTICAL TESTING COMPANY**  
 QUANTITATIVE RESULTS AND QUALITY ASSURANCE DATA  
 DIOXATHION/DIOXENETHION HPLC ANALYSIS DATA

Client: **HERCULES**  
 Sample ID: **HER-FD2-1105**  
 File #: **BT29271**

Collected: **11/03/05** NA  
 Extracted: **11/07/05** 11:00  
 Analyzed: **11/09/05** 22:33  
 Date

CLEINT  
 B.J.L. DGA, D.J.L.  
 B.J.L.  
 Analyst

Sample Type: **Water**  
 Extraction Method: **SW846 3510C**  
 Analysis Method: **Modified SW846**

COMPOUNDS	PQL ug/L (ppb)	SAMPLE		METHOD BLANK		LAB CONTROL		MATRIX SPIKE		
		Detected Amount ug/L (ppb)	Spike Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Spike Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Spike Amount ug/L	% Recovery
Dioxenethion	0.400	ND			ND	5.00	75.0	4.88	5.00	97.6
Dioxathion (cis)	0.400	ND			ND	5.00	80.0	3.97	5.00	79.4
Dioxathion (trans)	0.400	ND			ND	5.00	61.6	3.72	5.00	74.4
<b>SURROGATE COMPOUNDS</b>										
Naphthalene		3.10	5.00	62.0	2.82	5.00	56.4	2.85	5.00	57.0
										85.0

Certified by: Michael S. Bonner, Ph.D  
**BONNER ANALYTICAL TESTING COMPANY**

**BONNER ANALYTICAL TESTING COMPANY**  
 QUANTITATIVE RESULTS AND QUALITY ASSURANCE DATA  
 DIOXATHION/ DIOXENETHION HPLC ANALYSIS DATA

Client: <b>HERCULES</b>	Sample ID: <b>HER-FD3-1105</b>	File #: <b>BT29272</b>	Collected: <b>11/03/05</b>	NA	CLEINT	Sample Type: <b>Water</b>	Extraction Method: <b>SWB46 3510C</b>	Analysis Method: <b>Modified SWB46</b>	METHOD BLANK			LAB CONTROL			MATRIX SPIKE			
									Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	
			Extracted: <b>11/07/05</b>	<b>11:00</b>	<b>BJL,DGA,DJL</b>													
			Analyzed: <b>11/10/05</b>	<b>9:49</b>	<b>BJL</b>													
			Date		Analyst													
COMPOUNDS	PQL ug/L (ppb)	Detected Amount ug/L (ppb)	SAMPLE Spike			METHOD BLANK			LAB CONTROL			MATRIX SPIKE						
			Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery					
Dioxenethion	0.400	2377			ND			3.75	5.00	75.0	4.88	5.00	97.6					
Dioxathion (cis)	0.400	ND			ND			4.00	5.00	80.0	3.97	5.00	79.4					
Dioxathion (trans)	0.400	ND			ND			3.08	5.00	61.6	3.72	5.00	74.4					
SURROGATE COMPOUNDS		Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery					
Naphthalene		63.9	5.00	1278	2.82	5.00	56.4	2.85	5.00	57.0	4.25	5.00	85.0					

Certified by: Michael S. Bonner, Ph.D  
**BONNER ANALYTICAL TESTING COMPANY**

**BONNER ANALYTICAL TESTING COMPANY**  
 QUANTITATIVE RESULTS AND QUALITY ASSURANCE DATA  
 DIOXATHION/ DIOXENETHION HPLC ANALYSIS DATA

Client: **HERCULES**  
 Sample ID: HER-CM05-1105  
 File #: BT29225

Collected: 11/02/05 9:30  
 Extracted: 11/04/05 12:00  
 Analyzed: 11/08/05 15:01  
 Date

CLEINT  
 BJJ, DGA, DJL  
 BJJ  
 Analyst

Sample Type: Water  
 Extraction Method: SW846 3510C  
 Analysis Method: Modified SW846

COMPOUNDS	PQL ug/L (ppb)	SAMPLE			METHOD BLANK			LAB CONTROL			MATRIX SPIKE		
		Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery
Dioxenethion	0.400	ND			ND			3.59	5.00	71.8	5.04	5.00	101
Dioxathion (cis)	0.400	ND			ND			4.44	5.00	88.8	4.02	5.00	80.4
Dioxathion (trans)	0.400	ND			ND			3.56	5.00	71.2	4.10	5.00	82.0
<b>SURROGATE COMPOUNDS</b>													
Naphthalene		4.82	Spiked Amount 5.00	% Recovery 96.4	Detected Amount 2.94	Spiked Amount 5.00	% Recovery 58.8	Detected Amount 3.35	Spiked Amount 5.00	% Recovery 67.0	Detected Amount 4.23	Spiked Amount 5.00	% Recovery 84.6

Certified by: Michael S. Bonner, Ph.D  
**BONNER ANALYTICAL TESTING COMPANY**



**BONNER ANALYTICAL TESTING COMPANY**  
 QUANTITATIVE RESULTS AND QUALITY ASSURANCE DATA  
 DIOXATHION/ DIOXENETHION HPLC ANALYSIS DATA

Client: **HERCULES**  
 Sample ID: HER-CM04-1105  
 File #: BT29226

Collected: 11/02/05 10:30  
 Extracted: 11/04/05 12:00  
 Analyzed: 11/08/05 15:26  
 Date

CLEINT  
BJL/DGA/DJL  
BJL  
 Analyst

Sample Type: Water  
 Extraction Method: SW846 3510C  
 Analysis Method: Modified SW846

COMPOUNDS	PQL ug/L (ppb)	SAMPLE		METHOD BLANK		LAB CONTROL		MATRIX SPIKE		
		Detected Amount ug/L (ppb)	Spike Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Spike Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Spike Amount ug/L	% Recovery
Dioxenethion	0.400	ND			ND	5.00	71.8	5.04	5.00	101
Dioxathion (cis)	0.400	ND			ND	5.00	88.8	4.02	5.00	80.4
Dioxathion (trans)	0.400	ND			ND	5.00	71.2	4.10	5.00	82.0
<b>SURROGATE COMPOUNDS</b>		Detected Amount	Spike Amount	% Recovery	Detected Amount	Spike Amount	% Recovery	Detected Amount	Spike Amount	% Recovery
Naphthalene		4.65	5.00	93.0	2.94	5.00	58.8	4.23	5.00	84.6

Certified by: Michael S. Bonner, Ph.D  
**BONNER ANALYTICAL TESTING COMPANY**

**BONNER ANALYTICAL TESTING COMPANY**  
 QUANTITATIVE RESULTS AND QUALITY ASSURANCE DATA  
 DIOXATHION/ DIOXENETHION HPLC ANALYSIS DATA

Client: **HERCULES**  
 Sample ID: HER-CM03-1105  
 File #: BT29227

Collected: 11/02/05 10:55  
 Extracted: 11/04/05 12:00  
 Analyzed: 11/08/05 15:52  
 Date

CLEINT  
 B.J.L.DGA DJL  
 B.J.L  
 Analyst

Sample Type: Water  
 Extraction Method: SWB46 3510C  
 Analysis Method: Modified SWB46

COMPOUNDS	PQL ug/L (ppb)	SAMPLE			METHOD BLANK			LAB CONTROL			MATRIX SPIKE		
		Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery
Dioxenethion	0.400	ND			ND			3.59	5.00	71.8	5.04	5.00	101
Dioxathion (cis)	0.400	ND			ND			4.44	5.00	88.8	4.02	5.00	80.4
Dioxathion (trans)	0.400	ND			ND			3.56	5.00	71.2	4.10	5.00	82.0
<b>SURROGATE COMPOUNDS</b>		Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery
Naphthalene		4.36	5.00	87.2	2.94	5.00	58.8	3.35	5.00	67.0	4.23	5.00	84.6

Certified by: Michael S. Bonner, Ph.D  
**BONNER ANALYTICAL TESTING COMPANY**

**BONNER ANALYTICAL TESTING COMPANY**  
 QUANTITATIVE RESULTS AND QUALITY ASSURANCE DATA  
 DIOXATHION/ DIOXENETHION HPLC ANALYSIS DATA

Client: **HERCULES**  
 Sample ID: HER-CM02-1105  
 File #: BT29229

Collected: 11/02/05 11:25  
 Extracted: 11/04/05 12:00  
 Analyzed: 11/08/05 18:01  
 Date

CLEINT  
 BJJ,DGA,DJL  
 BJJ  
 Analyst

Sample Type: Water  
 Extraction Method: SW846 3510C  
 Analysis Method: Modified SW846

COMPOUNDS	PQL ug/L (ppb)	SAMPLE			METHOD BLANK			LAB CONTROL			MATRIX SPIKE		
		Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery
Dioxenethion	0.400	ND			ND			3.59	5.00	71.8	5.04	5.00	101
Dioxathion (cis)	0.400	ND			ND			4.44	5.00	88.8	4.02	5.00	80.4
Dioxathion (trans)	0.400	ND			ND			3.56	5.00	71.2	4.10	5.00	82.0
<b>SURROGATE COMPOUNDS</b>		Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery
Naphthalene		3.25	5.00	65.0	2.94	5.00	58.8	3.35	5.00	87.0	4.23	5.00	84.6

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Client: **HERCULES**  
 Sample ID: **HER-CM01-1105**  
 File #: **BT29230**

Collected: 11/02/05 11:35  
 Extracted: 11/04/05 12:00  
 Analyzed: 11/08/05 18:27  
 Date

Sample Type: Water  
 Extraction Method: SWB46 3510C  
 Analysis Method: Modified SWB48

CLEINT  
BJL,DGA,DJL  
BJL  
 Analyst

COMPOUNDS	PQL ug/L (ppb)	SAMPLE			METHOD BLANK			LAB CONTROL			MATRIX SPIKE		
		Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery
Dioxenethion	0.400	ND			ND			3.59	5.00	71.8	5.04	5.00	101
Dioxathion (cis)	0.400	ND			ND			4.44	5.00	88.8	4.02	5.00	80.4
Dioxathion (trans)	0.400	ND			ND			3.56	5.00	71.2	4.10	5.00	82.0
<b>SURROGATE COMPOUNDS</b>		Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery
Naphthalene		4.25	5.00	85.0	2.94	5.00	58.8	3.35	5.00	67.0	4.23	5.00	84.6

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COMPOUNDS	PQL ug/L (ppb)	SAMPLE			METHOD BLANK			LAB CONTROL			MATRIX SPIKE		
		Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery
Dioxenethion	0.400	ND			ND			3.59	5.00	71.8	5.04	5.00	101
Dioxathion (cis)	0.400	ND			ND			4.44	5.00	88.8	4.02	5.00	80.4
Dioxathion (trans)	0.400	ND			ND			3.56	5.00	71.2	4.10	5.00	82.0
<b>SURROGATE COMPOUNDS</b>													
Naphthalene		4.81	Spiked Amount 5.00	96.2	2.94	Spiked Amount 5.00	58.8	3.35	5.00	67.0	4.23	Spiked Amount 5.00	84.8

Client: **HERCULES**  
 Sample ID: HER-CM00-1105  
 File #: BT29231

Collected: 11/02/05 12:35  
 Extracted: 11/04/05 12:00  
 Analyzed: 11/08/05 19:18  
 Date

CLEINT  
 BJL,DGA,DJL  
 BJL  
 Analyst

Sample Type: Water  
 Extraction Method: SWB46 3510C  
 Analysis Method: Modified SWB46

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COMPOUNDS	PQL ug/L (ppb)	SAMPLE			METHOD BLANK			LAB CONTROL			MATRIX SPIKE		
		Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery
Dioxenethion	0.400	ND			ND			3.59	5.00	71.8	5.04	5.00	101
Dioxathion (cis)	0.400	ND			ND			4.44	5.00	88.8	4.02	5.00	80.4
Dioxathion (trans)	0.400	ND			ND			3.56	5.00	71.2	4.10	5.00	82.0
<b>SURROGATE COMPOUNDS</b>													
Naphthalene		3.98	Spiked Amount 5.00	% Recovery 79.6	Detected Amount 2.94	Spiked Amount 5.00	% Recovery 58.8	Detected Amount 3.35	Spiked Amount 5.00	% Recovery 67.0	Detected Amount 4.23	Spiked Amount 5.00	% Recovery 84.6

Client: **HERCULES**  
 Sample ID: HER-MW13-1105  
 File #: BT29232

Collected: 11/02/05 15:01  
 Extracted: 11/04/05 12:00  
 Analyzed: 11/08/05 19:44  
 Date

CLEINT  
 BJJ,DGA,DJL  
 BJJ  
 Analyst

Sample Type: Water  
 Extraction Method: SWB48 3510C  
 Analysis Method: Modified SWB46

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 DIOXATHION/ DIOXENETHION HPLC ANALYSIS DATA

Client: **HERCULES**  
 Sample ID: HER-MW08-1105  
 File #: BT29233

Collected: 11/02/05 15:12 CLEINT  
 Extracted: 11/04/05 12:00 BJL,DGA,DJL  
 Analyzed: 11/09/05 10:16 BJL  
 Date: \_\_\_\_\_ Analyst: \_\_\_\_\_

Sample Type: Water  
 Extraction Method: SWB48\_3510C  
 Analysis Method: Modified SWB48

COMPOUNDS	PQL ug/L (ppb)	SAMPLE			METHOD BLANK			LAB CONTROL			MATRIX SPIKE		
		Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery
Dioxenethion	0.400	2492			ND			3.59	5.00	71.8	5.04	5.00	101
Dioxathion (cis)	0.400	ND			ND			4.44	5.00	88.8	4.02	5.00	80.4
Dioxathion (trans)	0.400	ND			ND			3.56	5.00	71.2	4.10	5.00	82.0
<b>SURROGATE COMPOUNDS</b>													
Naphthalene		90.3		1808	2.94	5.00	58.8	3.35	5.00	67.0	4.23	5.00	84.8

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Client: **HERCULES**  
 Sample ID: HER-MW16-1105  
 File #: BT29234

Collected: 11/02/05 16:16  
 Extracted: 11/04/05 12:00  
 Analyzed: 11/08/05 21:02  
 Date

CLEINT  
 BJL,DGA,DJL  
 BJL  
 Analyst

Sample Type: Water  
 Extraction Method: SWB46\_3510C  
 Analysis Method: Modified SWB46

COMPOUNDS	PQL ug/L (ppb)	SAMPLE Spike		METHOD BLANK Spike		LAB CONTROL Spike		MATRIX SPIKE Spike	
		Detected Amount ug/L (ppb)	% Recovery	Detected Amount ug/L (ppb)	% Recovery	Detected Amount ug/L (ppb)	% Recovery	Detected Amount ug/L (ppb)	% Recovery
Dioxenethion	0.400	ND		ND		3.59	71.8	5.00	101
Dioxathion (cis)	0.400	ND		ND		4.44	88.8	5.00	80.4
Dioxathion (trans)	0.400	ND		ND		3.56	71.2	5.00	82.0
<b>SURROGATE COMPOUNDS</b>		Detected Amount	% Recovery	Detected Amount	% Recovery	Detected Amount	% Recovery	Spiked Amount	% Recovery
Naphthalene		3.50	70.0	2.94	58.8	3.35	87.0	5.00	84.6

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Client: **HERCULES**      Collected: 11/02/05 16:18      CLEINT      Sample Type: Water  
 Sample ID: HER-MW15-1105      Extracted: 11/04/05 12:00      BJL,DGA,DJL      Extraction Method: SWB46 3510C  
 File #: BT29236      Analyzed: 11/08/05 21:53      BJL      Analysis Method: Modified SWB46  
 Date: \_\_\_\_\_      Analyst: \_\_\_\_\_

COMPOUNDS	PQL ug/L (ppb)	SAMPLE			METHOD BLANK			LAB CONTROL			MATRIX SPIKE		
		Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery
Dioxenethion	0.400	ND			ND			3.59	5.00	71.8	5.04	5.00	101
Dioxathion (cis)	0.400	ND			ND			4.44	5.00	88.8	4.02	5.00	80.4
Dioxathion (trans)	0.400	ND			ND			3.58	5.00	71.2	4.10	5.00	82.0
<b>SURROGATE COMPOUNDS</b>		Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery
Naphthalene		4.03	5.00	80.8	2.94	5.00	58.8	3.35	5.00	87.0	4.23	5.00	84.8

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Client: **HERCULES**  
 Sample ID: **HER-MW02-1105**  
 File #: **BT29256**

Collected: 11/03/05 11:08  
 Extracted: 11/07/05 11:00  
 Analyzed: 11/09/05 11:33  
 Date

CLEINT  
 BJJLDGA,DJL  
 BJJ  
 Analyst

Sample Type: Water  
 Extraction Method: SW846-3510C  
 Analysis Method: Modified SW846

COMPOUNDS	PQL ug/L (ppb)	SAMPLE			METHOD BLANK			LAB CONTROL			MATRIX SPIKE		
		Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery
Dioxenethion	0.400	ND			ND			3.75	5.00	75.0	4.88	5.00	97.6
Dioxathion (cis)	0.400	ND			ND			4.00	5.00	80.0	3.97	5.00	79.4
Dioxathion (trans)	0.400	ND			ND			3.08	5.00	61.6	3.72	5.00	74.4
SURROGATE COMPOUNDS		Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery
Naphthalene		3.48	5.00	69.6	2.82	5.00	56.4	2.85	5.00	57.0	4.25	5.00	85.0

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Client: **HERCULES**  
 Sample ID: HER-MW03-1105  
 File #: BT29257

Collected: 11/03/05 11:19  
 Extracted: 11/07/05 11:00  
 Analyzed: 11/09/05 11:59  
 Date

CLEINT  
 B.J.L.DGA,DJL  
 B.J.L  
 Analyst

Sample Type: Water  
 Extraction Method: SWB46\_3510C  
 Analysis Method: Modified SWB46

COMPOUNDS	PQL ug/L (ppb)	SAMPLE			METHOD BLANK			LAB CONTROL			MATRIX SPIKE		
		Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery
Dioxenethion	0.400	ND			ND			3.75	5.00	75.0	4.88	5.00	97.6
Dioxathion (cis)	0.400	ND			ND			4.00	5.00	80.0	3.97	5.00	79.4
Dioxathion (trans)	0.400	ND			ND			3.08	5.00	61.6	3.72	5.00	74.4
<b>SURROGATE COMPOUNDS</b>		Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery
Naphthalene		3.60	5.00	72.0	2.82	5.00	58.4	2.85	5.00	57.0	4.25	5.00	85.0

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Client: HERCULES  
 Sample ID: HER-MW04-1105  
 File #: BT29258

Collected: 11/03/05 9:47  
 Extracted: 11/07/05 11:00  
 Analyzed: 11/09/05 12:50  
 Date

CLEINT  
BJL,DGA,DJL  
BJL  
 Analyst

Sample Type: Water  
 Extraction Method: SWB48 3510C  
 Analysis Method: Modified SWB48

COMPOUNDS	PQL ug/L (ppb)	SAMPLE			METHOD BLANK			LAB CONTROL			MATRIX SPIKE		
		Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery
Dioxenethion	0.400	ND			ND			3.75	5.00	75.0	4.88	5.00	97.6
Dioxathion (cis)	0.400	ND			ND			4.00	5.00	80.0	3.97	5.00	79.4
Dioxathion (trans)	0.400	ND			ND			3.08	5.00	61.6	3.72	5.00	74.4
<b>SURROGATE COMPOUNDS</b>													
Naphthalene		2.56	Spiked Amount 5.00	51.2	2.82	Spiked Amount 5.00	56.4	2.85	5.00	57.0	4.25	Spiked Amount 5.00	85.0

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 DIOXATHION/ DIOXENETHION HPLC ANALYSIS DATA

Client: **HERCULES**  
 Sample ID: HER-MW05-1105  
 File #: BT29259

Collected: 11/03/05 12:00  
 Extracted: 11/07/05 11:00  
 Analyzed: 11/09/05 13:16  
 Date

CLEINT  
 B.J.L. DGA DJL  
 B.J.L.  
 Analyst

Sample Type: Water  
 Extraction Method: SWB46 3510C  
 Analysis Method: Modified SWB46

COMPOUNDS	PQL ug/L (ppb)	SAMPLE Spike			METHOD BLANK Spike			LAB CONTROL Spike			MATRIX SPIKE		
		Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery
Dioxenethion	0.400	ND			ND			3.75	5.00	75.0	4.88	5.00	97.6
Dioxathion (cis)	0.400	ND			ND			4.00	5.00	80.0	3.97	5.00	79.4
Dioxathion (trans)	0.400	ND			ND			3.08	5.00	61.6	3.72	5.00	74.4
<b>SURROGATE COMPOUNDS</b>		Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery
Naphthalene		4.74	5.00	94.8	2.82	5.00	56.4	2.85	5.00	57.0	4.25	5.00	85.0

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 DIOXATHION/ DIOXENETHION HPLC ANALYSIS DATA

Client: **HERCULES**  
 Sample ID: HER-MW06-1105  
 File #: BT29260

Collected: 11/03/05 13:08  
 Extracted: 11/07/05 11:00  
 Analyzed: 11/09/05 13:42

CLEINT  
 BJJ,DGA,DJJ  
 BJJ  
 Analyst

Sample Type: Water  
 Extraction Method: SWB46\_3510C  
 Analysis Method: Modified SWB46

COMPOUNDS	PQL ug/L (ppb)	SAMPLE			METHOD BLANK			LAB CONTROL			MATRIX SPIKE		
		Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery
Dioxenethion	0.400	ND			ND			3.75	5.00	75.0	4.88	5.00	97.6
Dioxathion (cis)	0.400	ND			ND			4.00	5.00	80.0	3.97	5.00	79.4
Dioxathion (trans)	0.400	ND			ND			3.08	5.00	61.6	3.72	5.00	74.4
<b>SURROGATE COMPOUNDS</b>		Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery
Naphthalene		3.45	5.00	69.0	2.82	5.00	56.4	2.85	5.00	57.0	4.25	5.00	85.0

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COMPOUNDS	PQL ug/L (ppb)	SAMPLE			METHOD BLANK			LAB CONTROL			MATRIX SPIKE		
		Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery
Dioxenethion	0.400	ND			ND			3.75	5.00	75.0	4.88	5.00	97.6
Dioxathion (cis)	0.400	ND			ND			4.00	5.00	80.0	3.97	5.00	79.4
Dioxathion (trans)	0.400	ND			ND			3.08	5.00	61.6	3.72	5.00	74.4
<b>SURROGATE COMPOUNDS</b>		Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery
Naphthalene		3.47	5.00	69.4	2.82	5.00	56.4	2.85	5.00	57.0	4.25	5.00	85.0

Client: **HERCULES**  
 Sample ID: HER-MWD7-1105  
 File #: BT28261

Collected: 11/03/05 15:05  
 Extracted: 11/07/05 11:00  
 Analyzed: 11/09/05 14:33

CLEINT  
 BJJ,DGA,DJJ  
 BJJ  
 Analyst

Sample Type: Water  
 Extraction Method: SWB46\_3510C  
 Analysis Method: Modified SWB46

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 DIOXATHION/ DIOXENETHION HPLC ANALYSIS DATA

Client: **HERCULES**  
 Sample ID: HER-MW09-1105  
 File #: BT29262

Collected: 11/03/05 14:03  
 Extracted: 11/07/05 11:00  
 Analyzed: 11/09/05 14:59  
 Date

CLEINT  
 B.J.L. DGA, DJL  
 B.J.L.  
 Analyst

Sample Type: Water  
 Extraction Method: SWB46\_3510C  
 Analysis Method: Modified SWB46

COMPOUNDS	PQL ug/L (ppb)	SAMPLE			METHOD BLANK			LAB CONTROL			MATRIX SPIKE		
		Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery
Dioxenethion	0.400	ND			ND			3.75	5.00	75.0	4.88	5.00	97.6
Dioxathion (cis)	0.400	ND			ND			4.00	5.00	80.0	3.97	5.00	79.4
Dioxathion (trans)	0.400	ND			ND			3.08	5.00	61.6	3.72	5.00	74.4
<b>SURROGATE COMPOUNDS</b>		Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery
Naphthalene		2.58	5.00	51.2	2.82	5.00	56.4	2.85	5.00	57.0	4.25	5.00	85.0

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 DIOXATHION/ DIOXENETHION HPLC ANALYSIS DATA

Client: HERCULES  
 Sample ID: HER-MW10-1105  
 File #: BT29263

Collected: 11/03/05 10:41  
 Extracted: 11/07/05 11:00  
 Analyzed: 11/09/05 15:25  
 Date

CLEINT  
 BJL,DGA,DJL  
 BJL  
 Analyst

Sample Type: Water  
 Extraction Method: SWB46 3510C  
 Analysis Method: Modified SWB46

COMPOUNDS	PQL ug/L (ppb)	SAMPLE			METHOD BLANK			LAB CONTROL			MATRIX SPIKE		
		Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery
Dioxenethion	0.400	ND			ND			3.75	5.00	75.0	4.88	5.00	97.6
Dioxathion (cis)	0.400	ND			ND			4.00	5.00	80.0	3.97	5.00	79.4
Dioxathion (trans)	0.400	ND			ND			3.08	5.00	61.6	3.72	5.00	74.4
<b>SURROGATE COMPOUNDS</b>													
Naphthalene		4.24	Spiked Amount 5.00	% Recovery 84.8	2.82	Spiked Amount 5.00	% Recovery 56.4	2.85	5.00	57.0	4.25	Spiked Amount 5.00	% Recovery 85.0

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 QUANTITATIVE RESULTS AND QUALITY ASSURANCE DATA  
 DIOXATHION/ DIOXENETHION HPLC ANALYSIS DATA

Client: **HERCULES**  
 Sample ID: HER-MW11-1105  
 File #: BT29264

Collected: 11/03/05 10:00  
 Extracted: 11/07/05 11:00  
 Analyzed: 11/09/05 15:51  
 Date

CLEINT  
 B.J.L. DGA, DJL  
 B.J.L.  
 Analyst

Sample Type: Water  
 Extraction Method: SWB46 3510C  
 Analysis Method: Modified SWB46

COMPOUNDS	PQL ug/L (ppb)	SAMPLE			METHOD BLANK			LAB CONTROL			MATRIX SPIKE		
		Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery
Dioxenethion	0.400	ND			ND			3.75	5.00	75.0	4.88	5.00	97.6
Dioxathion (cis)	0.400	ND			ND			4.00	5.00	80.0	3.97	5.00	79.4
Dioxathion (trans)	0.400	ND			ND			3.08	5.00	61.6	3.72	5.00	74.4
<b>SURROGATE COMPOUNDS</b>		Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery
Naphthalene		3.78	5.00	75.6	2.82	5.00	56.4	2.85	5.00	57.0	4.25	5.00	85.0

Certified by: Michael S. Bonner, Ph.D  
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 DIOXATHION/ DIOXENETHION HPLC ANALYSIS DATA

COMPOUNDS	PQL ug/L (ppb)	SAMPLE			METHOD BLANK			LAB CONTROL			MATRIX SPIKE		
		Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery
Dioxenethion	0.400	ND			ND			3.75	5.00	75.0	4.88	5.00	97.6
Dioxathion (cis)	0.400	ND			ND			4.00	5.00	80.0	3.97	5.00	79.4
Dioxathion (trans)	0.400	ND			ND			3.08	5.00	61.6	3.72	5.00	74.4
<b>SURROGATE COMPOUNDS</b>		Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery	Detected Amount	Spiked Amount	% Recovery
Naphthalene		3.50	5.00	70.0	2.82	5.00	56.4	2.85	5.00	57.0	4.25	5.00	85.0

Client: **HERCULES**  
 Sample ID: HER-MW12-1105  
 File #: BT29265

Collected: 11/03/05 13:05  
 Extracted: 11/07/05 11:00  
 Analyzed: 11/09/05 18:15

CLEINT  
 BJJ,DGA,DJL  
 BJJ  
 Analyst

Sample Type: Water  
 Extraction Method: SWB46 3510C  
 Analysis Method: Modified SWB46

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 QUANTITATIVE RESULTS AND QUALITY ASSURANCE DATA  
 DIOXATHION/ DIOXENETHION HPLC ANALYSIS DATA

Client: **HERCULES**      Collected: 11/03/05 12:14      C/LEINT      Sample Type: Water  
 Sample ID: HER-MW14-1105      Extracted: 11/07/05 11:00      BJL,DGA,DJL      Extraction Method: SW846 3510C  
 File #: BT29266      Analyzed: 11/09/05 18:41      BJL      Analysis Method: Modified SW846

COMPOUNDS	PQL ug/L (ppb)	SAMPLE		METHOD BLANK		LAB CONTROL		MATRIX SPIKE			
		Detected Amount ug/L (ppb)	Spiked Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Spiked Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Spiked Amount ug/L	% Recovery	
Dioxenethion	0.400	ND			ND	3.75	5.00	75.0	4.88	5.00	97.6
Dioxathion (cis)	0.400	ND			ND	4.00	5.00	80.0	3.97	5.00	79.4
Dioxathion (trans)	0.400	ND			ND	3.08	5.00	61.6	3.72	5.00	74.4
<b>SURROGATE COMPOUNDS</b>											
Naphthalene		2.88	5.00	57.6	2.82	2.85	5.00	56.4	4.25	5.00	85.0

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 DIOXATHION/ DIOXENETHION HPLC ANALYSIS DATA

Client: HERCULES      Collected: 11/03/05 14:00      CLEINT      Sample Type: Water  
 Sample ID: HER-MW17-1105      Extracted: 11/07/05 11:00      BJL,DGA,DJL      Extraction Method: SW846 3510C  
 File #: BT29287      Analyzed: 11/10/05 9:23      BJL      Analysis Method: Modified SW846

COMPOUNDS	PQL ug/L (ppb)	SAMPLE			METHOD BLANK			LAB CONTROL			MATRIX SPIKE		
		Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery	Detected Amount ug/L (ppb)	Amount ug/L	% Recovery
Dioxenethion	0.400	2802			ND			3.75	5.00	75.0	4.88	5.00	97.6
Dioxathion (cis)	0.400	ND			ND			4.00	5.00	80.0	3.97	5.00	79.4
Dioxathion (trans)	0.400	ND			ND			3.08	5.00	61.6	3.72	5.00	74.4
<b>SURROGATE COMPOUNDS</b>													
Naphthalene		69.4	5.00	1388	2.82	5.00	56.4	2.85	5.00	57.0	4.25	5.00	85.0

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 DIOXATHION/ DIOXENETHION HPLC ANALYSIS DATA

Client: **HERCULES**  
 Sample ID: HER-MW18-1105  
 File #: BT29268

Collected: 11/03/05 15:05  
 Extracted: 11/07/05 11:00  
 Analyzed: 11/09/05 19:58  
 Date

CLEINT  
 B.J.L. DGA, DUL  
 B.J.L.  
 Analyst

Sample Type: Water  
 Extraction Method: SWB46 3510C  
 Analysis Method: Modified SWB46

COMPOUNDS	PQL ug/L (ppb)	SAMPLE		METHOD BLANK		LAB CONTROL		MATRIX SPIKE		
		Detected Amount ug/L (ppb)	Spike Amount ug/L % Recovery	Detected Amount ug/L (ppb)	Spike Amount ug/L % Recovery	Detected Amount ug/L (ppb)	Spike Amount ug/L % Recovery	Detected Amount ug/L (ppb)	Spike Amount ug/L % Recovery	
Dioxenethion	0.400	ND		ND		3.75	5.00	4.88	5.00	97.6
Dioxathion (cis)	0.400	ND		ND		4.00	5.00	3.97	5.00	79.4
Dioxathion (trans)	0.400	ND		ND		3.08	5.00	3.72	5.00	74.4
<b>SURROGATE COMPOUNDS</b>		Detected Amount	% Recovery	Detected Amount	% Recovery	Detected Amount	Spiked Amount	Detected Amount	Spiked Amount	% Recovery
Naphthalene		2.69	53.8	2.82	56.4	2.85	5.00	4.25	5.00	85.0

Certified by: Michael S. Bonner, Ph.D  
**BONNER ANALYTICAL TESTING COMPANY**