FILE COPY

Quarterly Monitoring Report

Hercules Incorporated Hattiesburg, Mississippi

Prepared for: Hercules Incorporated

August 2006



Eco-Systems, Inc. Construction Log

ect Name:	H HER.	25080	es - cc - Ms	3.		Boring ID: Site Location:	Hat	MW10 Hesburg, M.S	ſ
Start Date: Sample Technician: Purge/Sample Method:	11-29-21 Chris The Pecies		Finish Date: <u>Travis Ze</u> Pump/low	11-29.	- - - -		h-to-Water (DTW) M Time		
Well Diameter (d): Total Depth (TD):		_ <u>Z"</u>	18.5		4 <u>0-95-11</u>	·····	11.70 11.83 11.84		
Approximate Depth of (h= TD - DTW [ft-btoc Calculated Well Volum]): e (V=6hd²)	<u> </u>	<u>8.5 - 11.45</u> 1.15g				1.89		
(V = vol in gal; d = wel	l diam. in π):		WELL DEVEL		URGING				· · · · · · · · · · · · · · · · · · ·
Date/Time	Cumulative Volume (gal)	рН	Specific Conductivity (mS/cm)	Temperature (°C)	1	Furbidity (NTU)	Dissolved Oxygen (mg/l)	Oxidation/Reduction Potential (mV)	Comments
11-29-2006 080		5.41	35.4	20.9	1	20			
0852	0.25 0.50	5.30	<u>34.1</u> 34.7	21.2		90			51
0859	0.75	5.31	34.7	21.2		95			
0902	1.00	5.30	34.6	21.2		95			
D107	1.25	5.32	34.5	21.2		95	12	15	
0911	1.50	5.30	34.5	21.2		95			
0916	1.75	5.33	35.1	21.2		15	20 		
0922	2.25	5.29	34.9	21.4	24	90			Volume Lased
0924	2.75	5.28	35.0	21.4		50			
0927	3.25	5.29	34,9	21.4	1	00			·····
013	4.00	5.28	35.0	21.5		00			
0935	4.75	5.28	35.3	21.5		00	5		2
0940	5,75	5.28	34.7	21.6	8	15			
Sample Identification:	HER-MI	J1D-11	7906			GPC		R SAMPLE CONT	AINERS
Sample Identification.	11010 100		LIUP		-	Date	Time	Sample Container	Preservative
Weather Conditions Du	ring Sampling:	Clev	dy 70	۰F	NWIO	11-29-2006	0945	3-40ML VOL	HCI
Comments:	a 			(ł	- -				\$1
Sample Technician:	CT/TB	Date:	11-29-2005	p	-		82		
	ft-btoc = feet bel gal = gallons. mS/cm = milliSi °C = degrees Ce	emens per	-						

Page_lof__.

NTU = Nephelometric Turbidity Units.

mg/L = milligrams per liter.

mV = millivolts.

	Eco-Systems,	Inc. 🤇		Ground	water	Sam	ple		I	Page <u>L</u> of <u>1</u> .
n	Environmental Enginee			Coll	ection	Log				
)(ct Name:	Her HERZ	cules	CC-MS		U	Boring ID: Site Location:		WIL Hesburg, M	5
ز	Start Date:	11-29-2	006	Finish Date:	11-29-	2006		Depth Date	-to-Water (DTW) M Time	Measurements DTW (ft-btoc)
]	Sample Technician: Purge/Sample Method: Well Diameter (d):	Peristelt	c Pump	1	low Str	es <u>s</u>		16-28-06 11-29-06	1230	8.49 8.60
7	Total Depth (TD): Approximate Depth of	Water Column (h	1) 1	17'				1.	1035	X. 67
J	(h= TD - DTW [ft-btoc Calculated Well Volum]):		8,5						
]	(V = vol in gal; d = wel				9 gal					
5				WELL DEVEL	OPMENT/PL	JRGING D	DATA	T =		······································
]	Date/Time	Cumulative Volume (gal)	pН	Specific Conductivity سر S (mg/cm)	Temperature (°C)		urbidity (NTU)	Dissolved Oxygen (mg/l)	Oxidation/Reduction Potential (mV)	Comments
	11-29-2006 1025	0,0	5.87	226	20,9		60			
]	1029	0.25	5.95	217	20.7		60			
	103	0.50	5.85	てに之	20.7		50	<u> </u>		
	1034	0.75	5.84	215	20,5		35	<u> </u>		
1	1042	1.00	5,86	215	20.5		24			
U.	1045	1.25	5.84	213	20.4	·	22			
n	1047	1.50	5.84	213	20.7		16			
1	1050	1.75	5.82	215	20.7		5.1			
						<u></u>				
3				ļ			3			
					. <u> </u>					
)					=					
}				··.		 				
		l	2			197				<u> </u>
}	Sample Identification:	467-111.) - / :	406			GR	OUNDWATI	ER SAMPLE CONT	TAINERS
J.	Sample Identification.	ICA MM	<u>/ 11 _ 11 c</u>			*	Date	Time	Sample Container	Preservative
	Weather Conditions D	uring Sampling:	Clan	ly 75°F	T.,	MWII	11-29-2006	1055	3-40-1 VOA	Hel
l		5 1 5		- <u>j</u>		RSI	11-29-2006	1030	3.40 ML VOK	HCI
1	Comments:				······	_				ļ
3						_		- De	 	
[:•·	,				<u> </u>	
ļ	Sample Technician:	CT/TB	_ Date:	11-29-200	6			1		<u> </u>
)	Notes:	ft-btoc = feet b	elow top o	f casing.				-		
]	10000	gal = gallons.								
		mS/cm = millis	Siemens pe	r centimeter.						
]		°C = degrees C								
)		NTU = Nephel								
(mg/L = milligr	-	er.						
1		mV = millivolt	S.							
J			3							
ñ										

	Eco-Syst				Ground	water	Sam	ple			Pageof
ì	Environmental	Enginee	rs and Scientists		Colle	ection	Log				
	ect Name:		H	ecul	PT	2		Boring ID:	, l	lW/2	
(ct Numbe	er: -	HER	25080	es D-CC-MS	<u>۲</u>		Site Location:	Hatt;	esburg.MS	
] -			(1.06 -			11 200 -	200/		D	-to-Water (DTW) N	(accuraments
	Start Date: ⁵⁵ Sample Techni		11-29-200		Finish Date:		000		Deptr Date	Time	DTW (ft-btoc)
	•	-	Chris T Peristalf		1 4		itrest		11-28-06	139	8.71
	Well Diameter			25					40-29-06	1220	9,4
	Total Depth (T				12'				4	1230	9.79
			Water Column (h	1)	3.2	9				1234	
	(h= TD - DTW Calculated We	-		<u></u>	0.2	·					
	(V = vol in gal				0.5	4 gal					
ſ	12				WELL DEVEL	OPMENT/PU	JRGING D	ATA			
			0		Specific	n.		urbidity	Dissolved	Oxidation/Reduction	_
	Date/Tir	me	Cumulative Volume (gal)	pН	Conductivity	Temperature (°C)		(NTU)	Oxygen	Potentiał (mV)	Comments
					JL) (mS/cm)	67 10			(mg/l)	(
	11-29-2006		0.0	5.30	71.3	22.4		3(1		
		1220	025	5.27	71.8	21.9		12			
		1224 1229	050	5.42	81.5	22.1		31			
	· · · · · · · · · · · · · · · · · · ·	1232	1.00	5.45	84.7	21.9	3				
		1237	1.25	5.42	84.9	21.8	2				
		1243		5.45	86.0	22.2		6			
		1248	1.75	5.47	87.8	22.	9	5			
				· ·					l		
				ļ			<u> </u>		_		
					19						
										····	
		1.)+								
										-	
				· · · · · ·	1		1				A = =
	Sample Identi	fication:	HER-N	NW Z	-112906		_	GR	OUNDWATE	ER SAMPLE CONT	
					10	ű.		Date	Time	Sample Container	Preservative
	Weather Cond	ditions Du	iring Sampling:	_Cloud	dy 75°F		_pw12	11-29-2006	1255	3. YONL VOR	
	Comments:			<u></u>		ē.	-		+		10 11
	Commonta.						_				
	·				(1	n.	_				
	Sample Techr	nician:	CT/TB	_ Date:	11-29-200	Ý				· · · · · · · · · · · · · · · · · · ·	
		Notes:	f ft-btoc = feet be	olow ton of	casing						
		INOUCS:	ft-btoc = feet bogal = gallons.	now mb or	vasnig.						
			mS/cm = milliS	Siemens per	r centimeter.						
			°C = degrees C								
			NTU = Nephel		-						
(mg/L = milligra mV = millivolt	-	и.						
(
)											

	Eco-Systems,	Inc. 🤇)	Ground	water	Sample		l	Page_lof_l.
	Environmental Engineer			Colle	ection	Log			
	ct Name:	HER 2	5080	es - cc - M5		Boring ID: Site Location	: <u> </u>	NW13 Hesburg, MS	
	Start Date: Sample Technician:	11-30-20 Chris		/Traves	H-30-2 Beard		Date	-to-Water (DTW) M Time	DTW (ft-btoc)
9	Well Diameter (d):	Pertstal	tic Pu Z"	mp/10wf	low - how t	stress_	11-30-06	1405	10.22
{	Total Depth (TD): Approximate Depth of V (h= TD - DTW [ft-btoc])		.46	4		2	
}	Calculated Well Volume (V = vol in gal; d = well			1.	38gsl				
)				WELL DEVEL	OPMENT/PU	RGING DATA			
	Date/Time	Cumulative Volume (gal)	pН	Specific Conductivity K (mS/cm)	Temperature (°C)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Oxidation/Reduction Potential (mV)	Comments
_	11-30-2006 1110	0.0	5.43	190.2	24.7	60			
	114	0.25	5.36	193.3	24.9	7.0			
	1/16	0.50	5.34	193.4	24.9	6.[
]	1120	0.75	5.34 5.34	199.9	24.8	<u>ડ.ડ</u> ૬.५	n.		
]						-			
3									
				8					
ļ									
	Sample Identification:	HER-N	IW13	- 113006		15	GROUNDWAT	ER SAMPLE CON	
	-					Date	Time	Sample Container	
J	Weather Conditions D	uring Sampling:		ondy 75	° F		06 1130	3-40ml VOA	WCI
}	Comments:								
J	Sample Technician:	CT/TB	Date:	11-30-20	<u>2</u> 6				
}	Notes:	ft-btoc = feet b gal = gallons.	-						
		mS/cm = milli °C = degrees C NTU = Nephe mg/L = millign mV = millivol	Celsius. Iometric Tr ams per lit	urbidity Units.					
}									`

Eco-Systems,	Inc. 🤇	\mathbf{D}	Ground	water	Sample	•		I	Page_lof_l
Environmental Engineer	rs and Scientists		Coll	ection	Log				
ect Name:	4	rcul			Boring	1D:	٨	NW14	
ect Number:	HER	25081	-ce-MS		-	ocation:	Hatt	tesburg, MS	
	11 20 21		Disist Date	11-30-2	200(-		Denth	-to-Water (DTW) M	feasurements
Start Date: Sample Technician:	[1-30-2] Chriz	11	/Travis]				Date	Time	DTW (ft-btoc)
Purge/Sample Method:	Peristal	tic Put		low.low	stress		11-28-06	1417	15.21
Well Diameter (d):	50.	2"	24.3 4				11-30-06 V	1003	17.2
Total Depth (TD): Approximate Depth of	Water Column (h	 1)			- 1				
(h= TD - DTW [ft-btoc]		<u>Z4</u>	3-15.29	1 = 9.1	<u> </u>				
Calculated Well Volum			1.47.	and					
(V = vol in gal; d = wel	1 diam. in 11):	11							
			WELL DEVEL Specific	OPMENT/PU			Dissolved	Oxidation/Reduction	
Date/Time	Cumulative Volume (gal)	рН	Conductivity (pas/cm)	Temperature (°C)	Turbidit (NTU)	-	Oxygen (mg/l)	Potential (mV)	Comments
11-30-2006 1000	0.0	6.40	678	22.9	450	<u>. </u>	<u> </u>		
1003	0.25	6.42	668	23.0	<u> </u>		 		
400	0.50	6.42	669	23.0	30 24	. <u> </u>			
1016	1.00	6.42	663	23.0	31				
1075	1.25	6.40	657	23.2	38				
1026		641	655	23.2	38				
1032	1.75	6.43	652	23.2	38	<u> </u>		-	
1037	Z.00	6.47	649	23.3	38		<u> </u>		Volume beseel
1045	3.00	6.37	648 645	23.2	24 16				Volume Descer
1051	4.00	6.39	645	23.1	8.8		1		
1005					V				
				14					
Sample Identification:	UED-A	1114-	(13006			GR	OUNDWATI	ER SAMPLE CONT	AINERS
Sample Identification.						Date	Time	Sample Container	Preservative
Weather Conditions D	uring Sampling:	Clou	dy 70°1	:	11-3	0-2006	1100	3-40mL VDA	HCL
Comments:	Elloning	1058	observed,	chenica					
	een obser	rved							
Sample Technician:	CY/TB	_ Date:	11-30-2006	2		·····		⁵ .	
Notes:	/ ft-btoc = feet be	elow top of	casing						
NULES:	gal = gallons.						D.		
	mS/cm = milliS	-	r centimeter.			2	_		
	°C = degrees C NTU = Nephel		rhidity Unite						
	mg/L = milligram		-						
	mV = millivolt	-							

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	Eco-Systems,	Inc. C	D (Ground	water	Sam	ple		I	Page <u></u>]of <u></u> .
	Environmental Engineer				ection		-			
	ct Name:		5080 -	Hercules			Boring ID: Site Location:	Mu	UIS sburg, MS	
	Start Date: Sample Technician: Purge/Sample Method: Well Diameter (d): Total Depth (TD):		Pump	Finish Date: Trowts Bra /lowflow - 2.6.5	rd			Depth- Date 11-28-06 11-30-06	to-Water (DTW) M Time /4/4 09/8	feasurements DTW (ft-btoc) 20.48 21.00
П.	Approximate Depth of V (h= TD - DTW [ft-btoc] Calculated Well Volume (V = vol in gal; d = well): e (V=6hd²))	6.0 0.9	2 18 g2/		-			
				WELL DEVEL	OPMENT/PU	IRGING I	DATA	1		
	Date/Time	Cumulative Volume (gal)	рН	Specific Conductivity (mSicm)	Temperature (°C)		Turbidity (NTU)	Dissolved Oxygen (mg/l)	Oxidation/Reduction Potential (mV)	Comments
8	11-30-2006 0515 0918	0.0 D.25	6.39	804 780	22.9 23.2 23.3		13 6.3 7.1			
	0923 0929	0.50 0.75	6.39 6.37	766 763	23.3		9.2			
0										
8										
		*								
_				<u> </u>		<u> </u>	<u> </u>		3	
	Sample Identification:	HER-MI	J15-11	3006	MS/MS])	Gl	ROUNDWAT	ER SAMPLE CON	
_		,			/	-	Date	Time	Sample Container 9-40mL VOK	
	Weather Conditions D			1 1		-	<u> -30-2006</u>	- 0135	9-90ML VOR	
	Comments:	<u>Biffervesc</u> n <u>bserve</u>	<u>ensc</u>	bserved, (-				
	Sample Technician:	<u>CT/48</u>	_ Date:	11-30-200	6					
	Notes:	ft-btoc = feet b gal = gallons.	elow top o	f casing.		11 8 6				
		mS/cm = millit °C = degrees C NTU = Nephe mg/L = millign mV = millivol	Celsius. Iometric Tu rams per lit	urbidity Units.						

cco-Sys	stems,	Inc. 🤇	\mathbf{D}	Ground	water S	Sample			Page_of_
•		rs and Scientists		Coll	ection]	Log			
ect Name		HER-2	rcule 5080	-cc-Ms		Boring ID: Site Location:		AW16 esburg, M	.5
Start Date: Sample Tech Purge/Sampl Well Diamete	e Method:	11-30-200 Chots To Peristelti	errell,	Travis 8	11-30-2 card -lew str		Depth Date 11-28-06 11-30-06	to-Water (DTW) I Time 1412 0824	Measurements DTW (ft-bto 17.55 17.61
Total Depth	(TD):	Water Column (h	ı)	28.5				0832	17.61
(h= TD - DT Calculated W	W [ft-btoc] Vell Volum): e (V=6hd²)	243		75				
(V = vol in g	gal; d = well	diam. in ft):			78		<u>a</u>	N.	<u>·</u>
				WELL DEVEL	OPMENT/PUR	GING DATA	D ! 1.1		r
Date/1	ſime	Cumulative Volume (gal)	pН	Specific Conductivity M ^S (m8/cm)	Temperature (°C)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Oxidation/Reduction Potential (mV)	Comments
11-30-200	1 19(20	0.D	6:28	743	225	32			0
	0824	0.25	6.31	729	22.7				
	0827	0.50	6.28	706	22.7	9.8			2
	0831	0.75	6.30	694	22.7	9.1			
	0835	1.00	4.29	690	22.6	9.1			
			<u> </u>	<u>I</u>	.l				L
Sample Iden	ntification:	HER-MI	N16-1	13006				R SAMPLE CON	
		uine Compliant	<u> Ai</u>	dy 70°	E	Date 11 - 30 - 2006	Time 6840	Sample Container	HC1
Weather Co		iring Sampling:	Clou				0070	D. 10NC 4011	
Comments:	she	effectescer un observ		served, ch	emical		8		
Sample Tec	hnician:	CT/78	Date:	11-30-2001	<u>0</u>	1	-		
	Notes:	ft-btoc = feet be	elow top of	f casing.					
		gal = gallons. mS/cm = milliS °C = degrees C NTU = Nephel mg/L = milligra mV = millivolt	elsius. ometric Tu ams per lite	urbidity Units.				I	I

-	Eco-Systems,	Inc. C		Ground	water	Sample		- F	Page_Lof
7	Environmental Engineer	rs and Scientists		Colle	ection	Log			
١,		11	Pares.			Boring ID:	N	1117	
	ct Name:	HER 7	<u>Crcu</u>	les -cc-ms		Site Location:	Hatth	sburg, MJ	
	fect Number:		5000	-u nur			8		
5	Start Date:	11-30-2	006	Finish Date:	11-30-	2006	T	-to-Water (DTW) N	
	Sample Technician:	Chris	Terre	1/Travi mp/low t	5 Beard		Date	Time	DTW (ft-btoc)
	Purge/Sample Method: _	Peristal	Hic Py	mp/low t	low-low	Stress	11-28-06	1422	18.56
	Well Diameter (d):		_7_"_	22 -	1		11-30-06	1248	18.63
	Total Depth (TD):	Vatar Caluma (h		22.7					
	Approximate Depth of V (h= TD - DTW [ft-btoc]		IJ	4.	14				
	Calculated Well Volume								
3	(V = vol in gal; d = well			0.	67g21				
5				WELL DEVEL	OPMENT/PU	IRGING DATA			
m		Cumulative		Specific	Temperature	Turbidity	Dissolved Oxygen	Oxidation/Reduction Potential	Comments
	Date/Time	Volume (gal)	pН	Conductivity (mS/cm)	(°C)	(NTU)	(mg/l)	(mV)	
	10.20		6.15	619	23,5	45			
	11-30-2006 1235 1240	0.0	6.13	617	23,9	9.9	<u> </u>		4 1
3	1244	0.50	6.15	595	23.9	10			<u>8</u>
	1248	0.75	6.14	583	23.9	8.5			
	1252	1.00	6.22	567	23.8	8.9			
	1256	1.25	6.18		23.8	7.0			
_	1300	1.50	6.20	547	23.9	5.5	2		
1				U					
ل						21			
							·	<u>.</u>	
		5					<u> </u>		
					<u></u>		<u> </u>		
			Ti -		<u> </u>		<u> </u>		
5									
						ļ	<u></u>		<u> </u>
	Sample Identification:	N/S N	117-1	13006		GR		ER SAMPLE CON	FAINERS
	Sample Identification:	HEN-M	WIT-I	13004		- Date	Time	Sample Container	
-	Weather Conditions Du	uring Sampling:	Rai	<u></u>	70.F	11-30-2004	1305	3-40 ml NOA	Hel
		·							
	Comments:							<u>11</u>	<u> </u>
			·	*			+		<u></u>
		~4/48	Data	11-30-200					
	Sample Technician:	UT IS	_ Date.	11 30 200	<u>,</u>				
	Notes:	ft-btoc = feet b	elow top o	f casing.					
		gal = gallons.	-					<u></u>	<u> </u>
-		mS/cm = milli		er centimeter.					
		$^{\circ}C = degrees C$				(1 1			
٦.	\frown	NTU = Nephe mg/L = milligr						ST.	
_(mV = millivolities		~.		6			
1									
-									

Eco-Syster				Ground		-	ple			Page <u>l</u> of <u>l</u> .
nvironmental En	igineer 			Colle les - cc - MS	ection	E	Boring ID:	MW	18 tesburg, N	
ect Number:	-	HER 2	5080	- CC - MS		S	ite Location:	Hat A	tisburg, N	<u>لک</u>
tart Date:		11-29-20	06	Finish Date:	11-29-	2006		Depth	-to-Water (DTW) N	leasurements
ample Technicia	_	Chris 7	errell	/Travis &	Scard			Date	Time	DTW (ft-bto
urge/Sample Me		Peristelt	C SUM	110w flow	- low st	255		11-28-06	1334	6.33
/ell Diameter (d)		ě	21 1	- / -				11-28-0b	1337	6.46
otal Depth (TD)		Vieter Onlyma (b								
pproximate Dep = TD - DTW [f			1)							
alculated Well V										
V = vol in gal; d				12						
			·	WELL DEVEL	OPMENT/PU	RGING DA	АТА			
		Cumulation	·	Specific	14	· · · · · · · · · · · · · · · · · · ·	rbidity	Dissolved	Oxidation/Reduction	0
Date/Time		Cumulative Volume (gal)	pН	Conductivity	Temperature (°C)		NTU)	Oxygen (mg/l)	Potential (mV)	Comments
			A 1 A	μ) (m8/cm)	260		0	(ing/i)		
	1335	0.0	6.18	787	25.0 25.0	<u> </u>	0			
	1337	0.25	6.23	779	25.0 25.0	<u>1</u>	8			
	339	0.50 0.75	6.23	779	24.9					
	1341 [344	1.00	6.22	785	24.8		12			
			6,00	10						
							······································			
	2									
			_		<u> </u>		<u></u>			
										· · · · · · · · · · · · · · · · · · ·
			5.8				·· ···· ······························	+		
		<u></u>								
······			· · ·							-
Sample Identification	ation:	HER-M	W18-1	12906		.		1	ER SAMPLE CON	
		·		udy 75°	٢		Date 11-21-2006	Time	Sample Container	-
Weather Conditi	ons Du	iring Sampling:		udy 75°	P		11- 21 2004	0.00	- JOME UNI	
Comments:										
<u></u>						. [<u> </u>	ļ	
		CC 100		11-76-700						
Sample Technici	ian:	CT/TB	_ Date:	11-29-200	2					8
No	otes:	ft-btoc = feet b	elow top o	f casing.					Ţ <u></u>	
		gal = gallons.		_						<u> </u>
		mS/cm = millis	-	er centimeter.						
		$^{\circ}C = degrees C$ NTU = Nephel		urbidity I Inite						
		mg/L = milligram								
		mV = millivolt								

Eco-Syste	ems, J	Inc. C		Ground	water	Sample			Pageof
•		s and Scientists		Colle	ection	Log			
ect Name: Ject Number:	-	HER 2	5080	es - cc - ms		Boring ID: Site Location:		Wlg Hesburg, MS	5
tart Date:		11-29-20	206	Finish Date:	11-26-	2.00/_	Depth	-to-Water (DTW)	
ample Technici	ian:			Traves Bea			Date	Time	DTW (ft-bto
urge/Sample M	ethod:	Pecistelt	te Pumi	/low flaw -	low stre	155	11-28-06	1340	11.42
Vell Diameter (7.	4	1			11-29-06	1414	11.55
otal Depth (TD									
		Vater Column (h	ı)						
h= TD - DTW	-								<u></u>
Calculated Well									
V = vol in gal;	d = well	diam. in ft):					L		
					OPMENT/PU	JRGING DATA	Discoluted		<u> </u>
		Cumulative		Specific	Temperature	Turbidity	Dissolved Oxygen	Oxidation/Reduction Potential	Comment
Date/Tim	e	Volume (gal)	pН	Conductivity $M^{(mS/cm)}$	(°C)	(NTU)	(mg/l)	(mV)	
	2011 				25.9	13	(* 8 /		
1-29-2006	1405	0.0	6.30	450		7.0			
	1410	0.25	6.32		25.7				25
	1414	0.50	6.33	449	25.7	5.9	+		
	1417	_0.75	6.33	453	25.6	4.8			<u> </u>
	1420	1.00	6.34	450	25.7	4.4			····-
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			100 11	2001				ER SAMPLE CON	TAINERS
Sample Identifi	ication:	HER-MI	w17-11	1909		- Date	Time	Sample Containe	
			<u></u>	M 75°	<u> </u>		1425	3-40-1 VOA	Ad
Weather Condi	itions D	uring Sampling:	<u>Cloud</u>	y 15 '	P	- <u>11-29-2006</u>			
Comments:				05	·····	-			
Comments:			· · · ·			-			
Sample Techni	ician:	CT/YR	Date:	11-29-2006	<u> </u>			_	
1			_	_		5 <u></u>			
1	Notes:	ft-btoc = feet b	elow top o	f casing.		1			
		gal = gallons.							
		mS/cm = millis		er centimeter.					
		°C = degrees C							
		NTU = Nephel							
		mg/L = milligr	-	er.					
		mV = millivolt	te.						



APPENDIX B LABORATORY ANALYTICAL RESULTS



January 25, 2007

Mr. Charles V. Coney Senior Scientist/Operations Manager Eco-Systems, Inc. 6360 I-55 North, Suite 330 Jackson, Ms 39232

Re: Hercules-Hattiesburg Result Discrepancy STL Savannah

Dear Mr. Coney:

This letter provides a summary of STL Savannah's investigation in response to samples analyzed in support of the Hercules-Hattiesburg Project.

STL Savannah was contracted by Eco-Systems to perform analyses in support of their Hercules-Hattiesburg Project. Analyses requested included volatile analyses by EPA Method 8260B. The samples for the November Sampling Event arrived at the laboratory on December 1, 2006. Analysis proceeded as normal, and the laboratory results were submitted to the client. The values reported for the following samples were questioned by Eco-Systems as they were not consistent with historical values reported for this site: HER-MW03-112906, HER-MW04-112906, HER-CM04-112806, and HER-FD1-112906.

The Volatiles Department Manager verified the raw data and double-checked the calculations to rule out a calculation or transcription error. Based on the data review, no error was determined. The four samples in question were re-analyzed for confirmation of the results originally reported. The re-analysis results of these four samples did not concur with what was originally reported for these samples. Additionally, the re-analysis results were consistent with what had been historically reported for this site. Although the second analysis of the samples in question was not performed within analytical holding time, the discrepancy in results between the original and confirmation runs, coupled with the historical data, tend to indicate a laboratory error occurred during the first analysis.

This issue has been addressed with the Project Manager to ensure a thorough review of results reported versus historical values. Additionally, this issue has been discussed with the Volatiles Department Manager to reiterate the need to exercise care when loading and scheduling instruments.

If you have any questions regarding this matter or if you require further information, please feel free to contact me at (912) 354-7858 ext. 3055 or via email at ateal@stl-inc.com.

Sincerely,

Indre Sal

Andrea Teal Quality Assurance Manager STL Savannah

Page 1 of 1



ANALYTICAL REPORT

Job Number: 680-22380-1

Job Description: Hercules - Hattiesburg 4Q06

For: Eco-Systems Inc 6360 I55 North Suite 330 Jackson, MS 39211

Attention: Mr. Charles Coney

Lidya Meia

Lidya Gulizia Project Manager I Igulizia@stl-inc.com 12/15/2006

Project Manager: Lidya Gulizia

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 STL Project Manager who signed this test report.

Severn Trent Laboratories, Inc. STL Savannah 5102 LaRoche Avenue, Savannah, GA 31404 Tel (912) 354-7858 Fax (912) 351-3673 www.stl-inc.com



Client: Hercules Inc. Date: 12/15/2006

VM Prep Group - 5035

Volatile organic sample received with headspace

All of the sample vials for sample identification (HER-MW05-112906) have headspace in them. On sample identification (HER-MW15-113006) two of the vials have headspace in them, two of the MS vials for this identification have headspace and all three of the MSD vials have headspace in them.

Affected Items 680-22380

Volatile GC/MS Department

Sample surrogate recovery out of control, matrix interference is evident.

8260: Surrogate recovery for dibromofluoromethane in sample 680-22380-6 MS failed control limits high. All other calibration and QC criteria were met.

Affected Items

680-22380-A-6 MS

Batch: 680-62157 Method: 680-8260B

Volatile GC/MS Department

Sample surrogate recovery out of control, matrix interference is evident.

8260-Surrogate recovery for dibromofluoromethane fell outside control limits 75-123%. The primary analysis had the initial surrogate recovery in limits. There was insufficient volume for re-analysis. However, both sets of data concur with one another pertaining to the targets of interest.

Affected items 680-22380-B-19

Batch: 680-62212 Method: 680-8260B

METHOD SUMMARY

Client: Eco-Systems Inc

Job Number: 680-22380-1

Description	Lab Location	Method	Preparation Method		
Matrix: Water					
Volatile Organic Compounds by GC/MS	STL SAV	SW846 8260B	}		
Purge-and-Trap	STL SAV		SW846 5030B		

LAB REFERENCES:

STL SAV = STL Savannah

METHOD REFERENCES:

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

METHOD / ANALYST SUMMARY

Client: Eco-Systems Inc

ſ

Job Number: 680-22380-1

Method	Analyst	Analyst ID
SW846 8260B	Agresta, Maria	MA
SW846 8260B	Bearden, Robert	RB
SW846 8260B	Young, Myron	MY

STL Savannah

SAMPLE SUMMARY

Client: Eco-Systems Inc

9

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-22380-1	HER-CM00-112806	Water	11/28/2006 1605	12/01/2006 1144
680-22380-2	HER-CM01-112806	Water	11/28/2006 1545	12/01/2006 1144
680-22380-3	HER-CM02-112806	Water	11/28/2006 1530	12/01/2006 1144
680-22380-4	HER-CM03-112806	Water	11/28/2006 1515	12/01/2006 1144
680-22380-5	HER-CM04-112806	Water	11/28/2006 1505	12/01/2006 1144
680-22380-6	HER-CM05-112806	Water	11/28/2006 1445	12/01/2006 1144
680-22380-6MS	HER-CM05-112806	Water	11/28/2006 1445	12/01/2006 1144
680-22380-6MSD	HER-CM05-112806	Water	11/28/2006 1445	12/01/2006 1144
680-22380-7	HER-MW02-112906	Water	11/29/2006 0830	12/01/2006 1144
680-22380-7MS	HER-MW02-112906	Water	11/29/2006 0830	12/01/2006 1144
680-22380-7MSD	HER-MW02-112906	Water	11/29/2006 0830	12/01/2006 1144
680-22380-8	HER-MW03-112906	Water	11/29/2006 0750	12/01/2006 1144
680-22380-9	HER-MW04-112906	Water	11/29/2006 1015	12/01/2006 1144
680-22380-10	HER-MW05-112906	Water	11/29/2006 1200	12/01/2006 1144
680-22380-11	HER-MW06-112906	Water	11/29/2006 1315	12/01/2006 1144
680-22380-12	HER-MW07-113006	Water	11/30/2006 0800	12/01/2006 1144
680-22380-13	HER-MW08-113006	Water	11/30/2006 1420	12/01/2006 1144
680-22380-14	HER-MW09-113006	Water	11/30/2006 1215	12/01/2006 1144
680-22380-15	HER-MW10-112906	Water	11/29/2006 0945	12/01/2006 1144
680-22380-16	HER-MW11-112906	Water	11/29/2006 1055	12/01/2006 1144
680-22380-17	HER-MW12-112906	Water	11/29/2006 1255	12/01/2006 1144
680-22380-18	HER-MW13-113006	Water	11/30/2006 1130	12/01/2006 1144
680-22380-19	HER-MW14-113006	Water	11/30/2006 1100	12/01/2006 1144
680-22380-20	HER-MW15-113006	Water	11/30/2006 0935	12/01/2006 1144
680-22380-20MS	HER-MW15-113006	Water	11/30/2006 0935	12/01/2006 1144
680-22380-20MSD	HER-MW15-113006	Water	11/30/2006 0935	12/01/2006 1144
680-22380-21	HER-MW16-113006	Water	11/30/2006 0840	12/01/2006 1144
680-22380-22	HER-MW17-113006	Water	11/30/2006 1305	12/01/2006 1144
680-22380-23	HER-MW18-112906	Water	11/29/2006 1350	12/01/2006 1144
680-22380-24	HER-MW19-112906	Water	11/29/2006 1425	12/01/2006 1144
680-22380-25	HER-FD1-112906	Water	11/29/2006 0000	12/01/2006 1144
680-22380-26	HER-FD2-113006	Water	11/30/2006 0000	12/01/2006 1144
680-22380-27	HER-RS1-112806	Water	11/28/2006 1440	12/01/2006 1144
680-22380-28	HER-RS2-112906	Water	11/29/2006 1030	12/01/2006 1144
680-22380-29	HER-RS3-113006	Water	11/30/2006 1450	12/01/2006 1144
680-22380-30TB	Trip Blank	Water	11/28/2006 0000	12/01/2006 1144





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TABLE 2	SUMMARY OF VOC ANALYTICAL RESULTS
TABLE 3	SUMMARY OF QA/QC SAMPLE ANALYTICAL RESULTS

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FIGURE 1	SITE LOCATION MAP
FIGURE 2	SITE PLAN

APPENDICES

APPENDIX A	GROUNDWATER COLLECTION LOGS
APPENDIX B	LABORATORY ANALYTICAL RESULTS



1.0 INTRODUCTION

Hercules Incorporated (Hercules) commissioned Eco-Systems, Inc. (Eco-Systems) to conduct quarterly groundwater and surface water monitoring at the Hattiesburg, Mississippi facility. The site location is shown in Figure 1. The work is being conducted in accordance with the <u>Corrective Action Plan Revision 01</u> (CAP) prepared by Groundwater & Environmental Services, Inc. (GES) dated January 20, 2005, which was approved by the Mississippi Department of Environmental Quality (MDEQ) in a letter dated January 25,2005.

As discussed in the CAP, groundwater monitoring wells MW-2 through MW-19 and the sampling locations established in Green's Creek are being monitored quarterly to provide groundwater and surface water information

This report describes sampling activities and analytical results for the first quarterly monitoring event of the second year of monitoring being conducted under the CAP. During this event, water levels were measured at 18 wells and 15 piezometers, surface water samples were collected from six locations, and groundwater samples were collected from 18 monitoring wells.

Samples collected during this monitoring event were analyzed for Volatile Organic Constituents (VOCs). Samples collected during previous quarterly monitoring events have also been analyzed for dioxathion and dioxenethion. However, the MDEQ approved Hercules request to discontinue dioxathion and dioxenethion analyses in a letter to Hercules dated August 18, 2006. Per the conditions in the August 18, 2006 letter, future analyses for dioxathion and dioxenethion will be conducted during the annual monitoring event scheduled for May 2007 and confined to samples collected from seven monitoring wells designated by the MDEQ. Discussion of detections of dioxathion and dioxenethion will be presented in the annual monitoring report.



2.0 FIELD ACTIVITIES

Field activities conducted during this quarterly sampling event include sample collection from 18 monitoring wells and 6 surface water monitoring locations. Groundwater and surface water samples were analyzed for Appendix IX VOC's.

2.1 GROUNDWATER SAMPLE COLLECTION

On August 29, 2006, Eco-Systems personnel collected groundwater levels from the 18 monitoring wells to be sampled during the quarterly monitoring event and from the 15 piezometers at the site. Piezometer TP-1 was damaged by recent site activities and the groundwater level could not be measured at this location. A summary of the water level measurements obtained on August 29, 2006 is included as Table 1.

Groundwater sample collection was conducted on August 29-30, 2006. Prior to collecting a groundwater sample, the monitoring wells were purged using either *low-flow/low-stress* technique. The *low flow/low stress* technique consisted of slowly lowering dedicated tubing connected to a peristaltic pump into a region of adequate permeability within the water-bearing zone. If possible, the suction end of the tubing was placed at the midpoint of the well screen for sampling. Purging was established with withdrawal of water at a rate that created an equilibrium with recharge (e.g., stabilized water table). Equilibrium is dependent upon the stabilization of at least temperature, pH, specific conductance, and turbidity. The water quality field parameters were measured with calibrated instruments and recorded in the field book along with the cumulative amount of water evacuated and time of batch parameter testing. Groundwater collection logs are attached as Appendix A.

Once field parameters stabilized, groundwater collected for analysis was sampled simply by collecting water directly into new sample containers supplied by the analytical laboratories. During the collection of field replicates that were collected for QA/QC concerns, alternating aliquots were placed in each replicate bottle until each bottle is filled.

In general, the order of sampling was from least impacted to most impacted based on historical data. Tubing used during purging and sampling was either dedicated to each well or disposed of after use. Subsequent to sampling, sample containers were labeled, placed and sealed on ice and shipped to the designated offsite laboratory for analysis. Chain-of-custody documentation accompanied the sample cooler. Personnel involved in sampling used clean, disposable gloves, which were changed between each sample collection. All non-disposable sampling equipment was decontaminated as outlined in Section 2.4



During this investigation, groundwater samples were collected from permanent monitoring wells MW-2 through MW-19. Filled sample vials were immediately placed in a cooler containing sufficient ice to lower the temperature of the filled sample vials below 4°C. Groundwater samples were shipped via overnight courier to Severn Trent Laboratories in Savannah, Georgia for VOC analysis.

2.2 SURFACE WATER SAMPLE COLLECTION

On August 29, 2006, six surface water samples were collected from the previously established sampling points along Green's Creek, CM-0 to CM-5. Samples were collected beginning with the most downstream location and proceeding upstream to each successive sampling location. Surface water samples were collected directly into new glass sample containers that were supplied by the analytical laboratory. The filled sample containers were labeled, packed and shipped/delivered in the same manner as groundwater samples discussed in Section 2.2.

2.3 QUALITY ASSURANCE/QUALITY CONTROL

For quality assurance/quality control (QA/QC) purposes, three duplicate groundwater samples, three rinsate samples, two trip blank samples, and three matrix spike and matrix spike duplicate (MS/MSD) were collected during field sampling activities. The duplicate groundwater samples were collected in alternating aliquots that were placed in each replicate bottle until each bottle was filled. The rinsate samples were prepared by pouring deionized water over groundwater sampling tubing and collecting the rinsate into new disposable sample containers supplied by the analytical laboratory. QA/QC samples were labeled, stored and shipped in the same manner as groundwater and surface water samples. QA/QC samples were analyzed for the same constituents as groundwater and surface water and surface water samples.

2.4 DECONTAMINATION

In general, groundwater sampling equipment that would contact the groundwater sample was single-use, disposable equipment. For any re-usable groundwater sampling equipment decontamination was accomplished by the following procedure:

- 1) Phosphate-free detergent wash.
- 2) Potable water rinse.
- 3) Deionized water rinse.
- 4) Isopropanol rinse.
- 5) Organic-free water rinse or air dry.

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If it was necessary to store or transport decontaminated equipment, the decontaminated equipment was placed in either a new, disposable plastic bag or wrapped in aluminum foil.

2.5 OTHER PROCEDURES

Procedures for sample collection, sample containerization and packing, sample shipment, cross-contamination control, drummed material disposal, field documentation, chain-of-custody, data review, and other work items not specifically covered in this document were conducted in accordance with the <u>Environmental Investigations Standard Operating</u> <u>Procedures and Quality Assurance Manual</u> (EPA Region IV, May, 2001), (EISOPQAM)



3.0 LABORATORY ANALYTICAL RESULTS

Groundwater and surface water samples collected from the Hercules site were analyzed for Appendix IX VOC's according to U.S. EPA Method 8260B. Laboratory analytical reports for the samples collected during this investigation are included in Appendix B and summarized in Table 2 and Table 3.

3.1 GROUNDWATER

VOC's were not detected at concentration above TRGs in groundwater samples collected from wells MW-02, MW-03, MW-04, MW-05, MW-06, MW-07, MW-10, MW-11, MW-12, MW-14, MW-15, MW-16, and MW-18.

Analysis of the groundwater sample collected from monitoring well MW-08 detected acetone, benzene, chlorobenzene, carbon tetrachloride, chloroform, tetrachloroethene, toluene, vinyl chloride, chloroethane, and methylene chloride at concentrations above their TRG's.

Analysis of the groundwater sample collected from monitoring well MW-09 detected benzene at a concentration greater than the TRG.

Analysis of the groundwater sample collected from the monitoring well MW-13 detected benzene, carbon tetrachloride, chloroform, and vinyl chloride at concentrations greater than their respective TRG's.

Analysis of the groundwater sample collected from monitoring well MW-17 detected benzene, chlorobenzene, carbon tetrachloride, chloroform, tetrachloroethene, and methylene chloride at concentrations above their respective TRG's.

Analysis of the groundwater sample collected from monitoring well MW-19 detected benzene at a concentration above the TRG.

3.2 SURFACE WATER

VOC's were not detected in surface water samples collected from locations CM-00, CM-01, CM-02, CM-03, CM-04, and CM-05.

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3.3 QA/QC

Analytical reports for the QA/QC samples are included in Appendix B and summarized in Table 3.

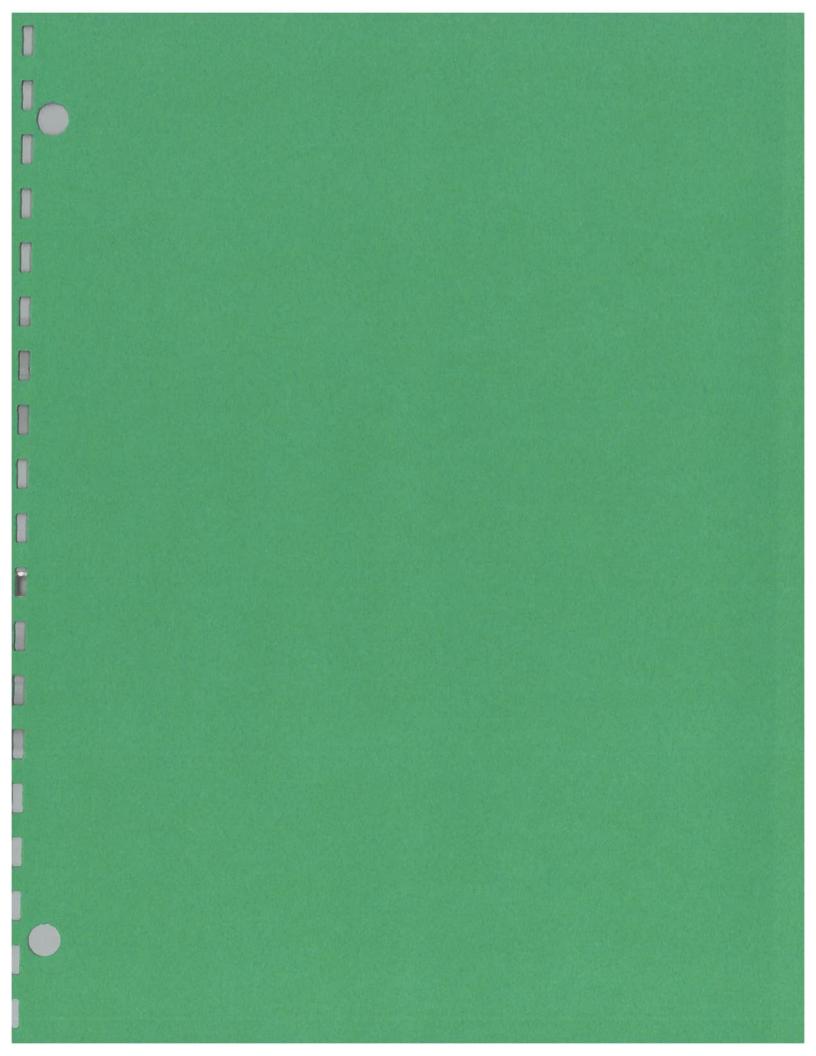
Duplicate groundwater samples were collected from CM-02, MW-09, and MW-13. Variation in the analytical results for the duplicate samples ranged from 0% to 14% compared to the regular samples.

Analysis of the rinsate samples collected during this sampling event detected concentrations of chloroform. However, chloroform was not detected in the groundwater samples associated with the rinsed equipment except from locations where chloroform has been primarily detected in groundwater. Therefore, the chloroform detected in the rinsate samples may have been present in the deionized water used for decontamination procedures and rinsate samples.

VOC's were not detected in the trip blank that accompanied the samples collected during this sampling event.

Review of the analytical reports for VOC's that were submitted by STL indicates that spike sample recoveries for the spiked volatile organic constituents in the MS and MSD samples were within the acceptable recovery ranges reported by the laboratory for each of the spiked constituents.

As reported by STL, all method blanks were non-detect for VOC's. The laboratory QC spike sample recoveries for VOC's detected in site samples were within the limits reported by the laboratory. Analyses were conducted within the 14 day holding time. Based on the information received and reviewed, the VOC analyses were conducted under controlled conditions and the data package is acceptable for use as reported, without qualification.





TABLES

TABLE 1SUMMARY OF GROUNDWATER ELEVATION DATA

August 28, 2006 Hercules, Incorporated Hattiesburg, Mississippi

WELL NO.	TOC ELEVATION	WATER DEPTH	GROUNDWATER
WELL NO.	(ft.) ¹	<u>(ft)</u> ²	ELEVATION (ft.)
	PERMANENT	MONITOR WELLS	
MW-1	174.12	NA ³	NA
MW-2	160.07	6.93	153.14
MW-3	160.03	8.45	151.58
MW-4	159.75	11.74	148.01
MW-5	160.99	11.40	149.59
MW-6	174.05	10.40	163.65
MW-7	NA	14.65	NA
MW-8	179.99	NA	NA
MW-9	NA	13.20	NA
MW-10	159.88	11.87	148.01
MW-11	157.18	8.91	148.27
MW-12	162.17	9.43	152.74
MW-13	175.23	10.55	164.68
MW-14	169.23	15.30	153.93
MW-15	172.21	17.30	154.91
MW-16	175.62	17.38	158.24
MW-17	186.13	18.57	167.91
MW-18	165.31	6.56	158.75
MW-19	172.25	11.34	160,91
	STAF	'F GAUGES	
SG-1	NA	NA	NA
SG-2	NA	NA	NA
SG-3	NA	NA	NA
SG-4	NA	NA	NA
	PIEZ	OMETERS	
TP-1	172.18	NA	NA
TP-2	171.72	12.42	159.30
TP-3	169.74	10.97	158.77
TP-4	163.64	11.04	152.60
TP-5	160.54	10.48	150.06
TP-6	158.63	9.70	148.93
TP-7	167.17	9.82	157.35
TP-8	183.79	14.80	168.99
TP-9	163.44	6.78	156.66
TP-10	179.69	15.55	164.14
TP-11	162.26	12.00	150.26
TP-12	159.95	12.20	147.75
TP-13	156.99	8.84	148,15
TP-14	162.59	6.30	156.29
TP-16	179.72	14.30	165.42
TP-17	182.71	17.56	165.15

NOTES:

1- Elevations are in feet relative to mean sea level.

2 - Depth to water is in feet below top of casing. Staff gauge readings are in feet above the base of the staff.

3 - Data not available.

		1940	12.6.00		i e	R. Therein	1.5	1	e	A STORE	B Post	
Location	Date	Acetone	Benzene	Chlorobenzene	Carbon Tetrachloride Bromodichloromethane	Bromomethane	Chloroethane	Chloromethane	Dibromochloromethane	cis-1,2-dichloroethene	sopropylbenzene	methylene chloride
CM-00	Sep-03	NA	< 1.0	< 1.0	< 1.0 1.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0
	Aug-05	< 25	< 1.0	< 1.0	<1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Nov-05	< 25	< 1.0	< 1,0	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Feb-06	< 25	< 1.0	< 1.0	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	May-06	< 25	≤ 1.0	< 1.0	< 1.0 = 1.0	< 1,0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0
	Aug-06	< 25	< 1.0	< 1.0	<1.0 NA	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0
CM-01	Feb-03	NA	2.8	< 10.0	3.03 10.0	< 10.0	20.5	< 10.0	< 10.0	< 10.0	< 10.0	< 13.0
	Sep-03	NA	< 1.0	6.6	< 1.0 1.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0
	Aug-05	< 25	< 1.0	< 1.0	<1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Nov-05 Feb-06	< 25	< 1.0	< 1.0	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5,0
	May-06	< 25	< 1.0 < 1.0	< 1.0 < 1.0	< 1.0 NA < 1.0 1.0	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Aug-06	< 25	< 1.0	< 1.0	<1.0 1.0 <1.0 NA	< 1.0	< 1.0 < 1.0	< 1.0 < 1.0	NA NA	< 1.0 < 1.0	NA	< 5.0
CM-02	Feb-03	NA	1.17	< 10.0	1.5 10.0	< 10.0	15.6	< 10.0	< 10.0	< 10.0	NA < 10.0	< 5.0 < 13.0
	Aug-05	< 25	< 1.0	< 1.0	<1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Nov-05	< 25	< 1.0	< 1.0	<1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Feb-06	< 25	< 1.0	< 1.0	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	May-06	< 25	< 1.0	< 1.0	< 1.0 = 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0
	Aug-06	< 25	< 1.0	< 1.0	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0
СМ-03	Feb-03	NA	3.7	< 10.0	< 10.0 10.0	< 10.0	8.42	< 10.0	< 10.0	< 10.0	< 10.0	< 13.0
	Aug-05	< 25	1.1	< 1.0	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5_0
	Nov-05 Feb-06	< 25	1.4	< 1.0	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	May-06	< 25	1.1	< 1.0 < 1.0	< 1.0 NA < 1.0 1.0	< 1.0 < 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Aug-06	< 25	< 1	< 1.0	< 1.0 NA	< 1.0	< 1.0 < 1.0	< 1.0 < 1.0	NA NA	< 1.0 < 1.0	NA	< 5.0
CM-04	Feb-03	NA	2.25	< 10.0	< 10.0 10.0	< 10.0	3.43	< 10.0	< 10.0	< 10.0	NA < 10.0	< 5.0 < 13.0
	Aug-05	< 25	< 1.0	< 1.0	<1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Nov-05	< 25	< 1.0	< 1.0	<1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Feb-06	< 25	< 1.0	< 1.0	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
1	May-06	< 25	< 1.0	< 1.0	< 1.0 : 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0
СМ-05	Aug-06	< 25	< 1.0	< 1.0	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0
	Feb-03 Aug-05	NA < 25	4.04	< 10,0 < 1.0	< 10.0 10.0 < 1.0 NA	< 10.0	< 12.0	< 10.0	< 10.0	< 10.0	< 10.0	< 13.0
1	Nov-05	< 25	< 1.0	< 1.0	<1.0 NA <1.0 NA	< 1.0 < 1.0	< 1.0 < 1.0	< 1.0 < 1.0	NA	NA	NA	< 5.0
	Feb-06	< 25	< 1.0	< 1.0	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA NA	NA NA	NA NA	< 5.0
	May-06	< 25	< 1.0	< 1.0	< 1.0 1.0	< 1.0		< 1.0	NA	< 1.0	NA	< 5.0 < 5.0
	Aug-06	< 25	< 1.0	< 1.0	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0
MW-02	Aug-05	< 25	< 1.0	< 1.0	<1.0 NA	< 1,0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Nov-05	32	< 1.0		< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Feb-06	< 25	< 1.0		< 1.0 NA	< 1.0		< 1.0	NA	NA	NA	< 5.0
	May-06	< 25	< 1.0		< 1.0 1.0	< 1.0		< 1,0	NA	< 1.0	NA	< 5.0
AW-03	Aug-06 Aug-05	< 25	< 1.0 < 1.0	< 1.0 < 1.0	< 1.0 NA	< 1.0		< 1.0	NA	< 1.0	NA	< 5.0
111-05	Nov-05	< 25	< 1.0		<1.0 NA <1.0 NA	< 1,0 < 1,0		< 1.0	NA	NA	NA	< 5.0
	Feb-06	< 25	< 1.0		<1.0 NA	197		< 1.0 < 1.0	NA NA	NA NA	NA NA	< 5.0
	Feb-06	< 25	< 1.0		<1.0 NA	r 1		< 1.0	NA	NA	NA NA	< 5.0 < 5.0
	May-06	< 25	< 1.0		< 1.0 1.0			< 1.0	NA	< 1.0		< 5.0
	Aug-06	< 25	< 1.0	< 1.0	< 1.0 NA			< 1.0	NA	< 1.0	NA	< 5.0
1W-04	Dec-02	ND'	14.0	1.81	10.0 ND	ND	63.0	1.72	ND	ND	1.26	ND
	Feb-03	NA	< 10.0		< 10.0 10.0	12.0	1.5.2.9	< 10,0	< 10.0			< 13.0
	Aug-03	NA	< 1.0		< 1.0 1.0					< 1.0		< 5.0
	Aug-05	< 25	< 1.0		<1.0 NA			< 1.0	NA	NA		< 5.0
	Nov-05 Feb-06	< 25 < 25	< 1.0	< 1.0	1.0 NA			< 1.0	NA	NA		< 5.0
	May-06	< 25	< 1.0 < 1.0		< 1.0 NA < 1.0 1.0	- 16 - 16 I		< 1.0 < 1.0	NA NA	NA < 1.0		< 5.0 < 5.0
											NA	

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Location	Date	one	cene	Chlorobenzene	Carbon Tetrachloride Bromodichioromethane	Bromomethane	Chloroethane	Chloromethane	Dibromochloromethane	cis-1,2-dichloroethene	sopropylbenzene	methylene chloride
100 7 5		Acetone	Benzene	Chie	Carl	Broi	Chlo	Chic	Dibr	cis-1	isop	meth
MW-05	Aug-05	< 25	< 1.0	1.3	< 1.0 NA	< 1.0	< 1,0	< 1.0	NA	NA	NA	< 5.0
	Nov-05	< 25	< 1.0	< 1.0	<1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Feb-06	< 25 < 25	< 1.0 < 1.0	1.0	< 1.0 NA < 1.0 < 1.0	< 1.0 < 1.0	< 1.0 < 1.0	< 1.0 < 1.0	NA NA	NA < 1.0	NA NA	< 5.0 < 5.0
	May-06 Aug-06	< 25	< 1.0	1.0	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0
MW-06	Aug-00	< 25	< 1.0	< 1.0	<1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Nov-05	< 25	< 1.0	< 1.0	<1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Feb-06	< 25	< 1.0	< 1.0	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	May-06	< 25	< 1.0	< 1.0	< 1.0 < 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5,0
1111 07	Aug-06	< 25	< 1.0	< 1.0	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0
MW-07	Aug-05	< 25 < 25	< 1.0	< 1.0 < 1.0	<1.0 NA <1.0 NA	< 1.0 < 1.0	< 1.0 < 1.0	< 1.0 < 1.0	NA NA	NA NA	NA	< 5.0
	Nov-05 Feb-06	< 25	< 1.0 < 1.0	< 1.0	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA NA	< 5.0 < 5.0
	May-06	< 25	< 1.0	< 1.0	< 1.0 < 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0
	Aug-06	< 25	< 1.0	< 1.0	<1.0 NA	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0
MW-08	Dec-02	ND	6,900	29 0	16,0 6.84	4.07	66.0	39.2	4.45	19	4.6	26.1
	Feb-03	NA	< 500.0	230	12,0 4.72	< 10.0	85.5	3.34	< 10.0	17.5	4.35	< 13,0
	Aug-05	< 6300	18,0 00	< 250	3,50 NA	< 250	< 250	< 250	NA	NA	NA	< 1,30
	Nov-05	< 2,500	17,000	160	1,00 NA	< 100	< 100	< 100	NA	NA	NA	< 500
	Feb-06	< 2,500	11,000	160	480 NA	< 100 < 25	< 100	< 100 < 25	NA	NA 20	NA	< 500
1	May-06 Aug-06	< 630 7 50	11,000 15,000	170 220	2,20 25 640 NA	< 1.0	< 25 3.8	< 1.0	NA NA	29 34	NA NA	380 510
MW-09	Dec-02	ND	9.15	ND	ND ND	ND	ND	ND	ND	ND	ND	2.48
	Feb-03	NA	64.3	J 5.85	20.7< 10,0	< 10.0	19.7	< 10.0	< 10.0	< 10.0	J 1.92	< 13.0
	Aug-05	< 25	12	1.0	<1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Nov-05	< 25	1 6 .0	< 1.0	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Feb-06	< 25	18.0	< 1.0	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	May-06	< 25	8.1	< 1.0	< 1.0 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0
MW-10	Aug-06 Aug-03	< 25 NA	10	< 1.0 < 1.0	< 1.0 NA < 1.0 < 1.0	< 1.0	< 1.0 < 5.0	< 1.0	NA < 1.0	< 1.0	NA < 1.0	< 5.0
141 44 - 10	Aug-05	< 25	< 1.0	< 1.0	<1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Nov-05	< 25	< 1.0	< 1.0	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Feb-06	< 25	< 1.0	< 1.0	< 1,0 NA	< 1.0	< 1.0	≤ 1.0	NA	NA	NA	< 5.0
	May-06	< 25	< 1.0	< 1.0	< 1.0 < 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0
	Aug-06	< 25	< 1.0	< 1.0	< 1.0 NA	< 1.0	< 1.0	< 1,0	NA	< 1.0	NA	< 5.0
MW-11	Dec-02	ND	114	ND	ND ND	ND	ND	ND	ND	ND	ND	ND
	Feb-03 Aug-03	NA NA	J 6.39	< 10.0 < 1.0	< 10.0° 10.0 < 1.0 < 1.0	< 10.0 < 5.0	< 12.0 < 5.0	< 10.0 < 1.0	< 10.0 < 1.0	< 10.0 < 1.0	< 10.0 < 1.0	< 13.0 < 5.0
	Aug-05 Aug-05	< 25	< 1.0	< 1.0	<1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Nov-05	< 25	< 1.0	< 1.0	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Feb-06	< 25	< 1.0	< 1.0	<1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	May-06	< 25	< 1.0	< 1.0	< 1.0 < 1.0	< 1.0	< 1.0	< 1,0	NA	< 1.0	NA	< 5.0
	Aug-06	< 25	< 1.0	< 1.0	<1.0 NA	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0
MW-12	Aug-05	< 25	< 1.0	< 1.0	<1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Nov-05	< 25	< 1.0	< 1.0	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Feb-06 May-06	< 25 < 25	< 1.0 < 1.0	< 1.0 < 1.0	< 1.0 NA < 1.0 < 1.0	< 1.0 < 1.0	< 1.0 < 1.0	< 1.0 < 1.0	NA NA	NA < 1.0	NA NA	< 5.0 < 5.0
	Aug-06	< 25	< 1.0	< 1.0	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0
MW-13	Aug-05	< 25	120	10	260 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Nov-05	29	78	9.3	53 NA	< 1.0	< 1.0	< 1,0	NA	NA	NA	< 5.0
	Feb-06	< 25	110	22	77 NA	1.6	< 1.0	< 1.0	NA	NA	NA	< 5.0
	May-06	< 25	48	5.4	110 = 1.0	< 1.0		< 1.0	NA	1	NA	< 5.0
	Aug-06	< 25	72	17	45 NA	< 1.0	< 1.0	< 1.0	NA	3.1	NA	< 5.0
MW-14	Aug-05	34	< 1.0	< 1.0	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Nov-05	35	< 1.0	< 1.0	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Feb-06	180 < 25	< 1.0 < 1.0	< 1.0 < 1.0	< 1.0 NA < 1.0 = 1.0	< 1.0 < 1.0	< 1.0 < 1.0	< 1.0 < 1.0	NA NA	NA < 1.0	NA NA	< 5.0
	May-06 Aug-06	< 25	< 1.0	< 1.0	< 1.0 1.0 < 1.0 NA	< 1.0	< 1.0	< 1.0 < 1.0	NA NA	< 1.0 < 1.0	NA NA	< 5.0 < 5.0

1 H 19. 10		and the second	1. 24 TAV	ATE SAL	1.10	121.25		1000	1	NROS (M	-	1.5.5.5.1.T
Location	Date	Acetone	Benzene	Chlorobenzene	Carbon Tetrachloride Bromodichloromethane	Bromomethane	Chloroethane	Chloromethane	Dibromochloromethane	cis-1,2-dichloroethene	lsopropylbenzene	methylene chloride
MW-15	Aug-05	84	1.7	< 1.0	<1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Nov-05	< 25	< 1.0	< 1.0	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Feb-06	< 25	< 1.0	< 1.0	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	May-06	50	< 1.0	< 1.0	< 1.0 < 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0
	Aug-06	< 25	< 1.0	< 1.0	< 1.0NA	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0
MW-16	Aug-05	< 25	2.3	< 1.0	<1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Nov-05	< 25	1.2	< 1.0	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Feb-06	< 25	< 1.0	< 1.0	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	May-06	< 25	< 1.0	< 1.0	< 1.0 < 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0
	Aug-06	< 25	< 1.0	< 1.0	< 1.0 <u>NA</u>	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0
MW-17	Aug-05	< 6300	6,200	340	1,500 NA	< 250	< 250	< 250	NA	NA	NA	< 1,300
	Nov-05	< 13,000	1,500	< 500	17,00 NA	< 500	< 500	< 500	NA	NA	NA	< 2,500
	Feb-06	< 13,000	1,300	600	37,00 NA	< 500	< 500	< 500	NA	NA	NA	< 2,500
	May-06	< 6,300	4,200	530	30,00 < 250	< 250	< 250	< 250	NA	< 250	NA	< 1,300
	Aug-06	570	1,000	610	33,00 NA	< 1.0	3.0	< 1.0	NA	26	NA	10
MW-18	Aug-05	< 25	10	45	<1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Nov-05	< 25	3.9	26	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Feb-06	< 25	4.2	31	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	May-06	< 25	6.5	35	< 1.0 < 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0
	Aug-06	< 25	4.8	34	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0
MW-19	Aug-05	< 25	20	7.5	<1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Nov-05	< 25	19	6.4	< 1.0 NA	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	Feb-06	< 25	22	9.8	< 1.0 NA < 1.0 < 1.0	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0
	May-06 Aug-06	28 < 25	21 18	7.2	< 1.0 < 1.0 < 1.0 NA	< 1.0 < 1.0	< 1.0 < 1.0	< 1.0 < 1.0	NA NA	< 1.0	NA	< 5.0
	Aug-00			100	5.0 0.168	8.52	3.64			< 1.0	NA	< 5.0
		608	5.0	100	5.0 0.108	0.32	5.64	1.43	0.126	70	679	5

1 - NA indicates that the analyte was not analyzed.

2 - "<" indicates that the concentration of the analyte is less than the cor

3 - ND = Non Detect / No detection limit available.
4 - Target Remediation Goals are taken from the Tier 1 Target Remedia

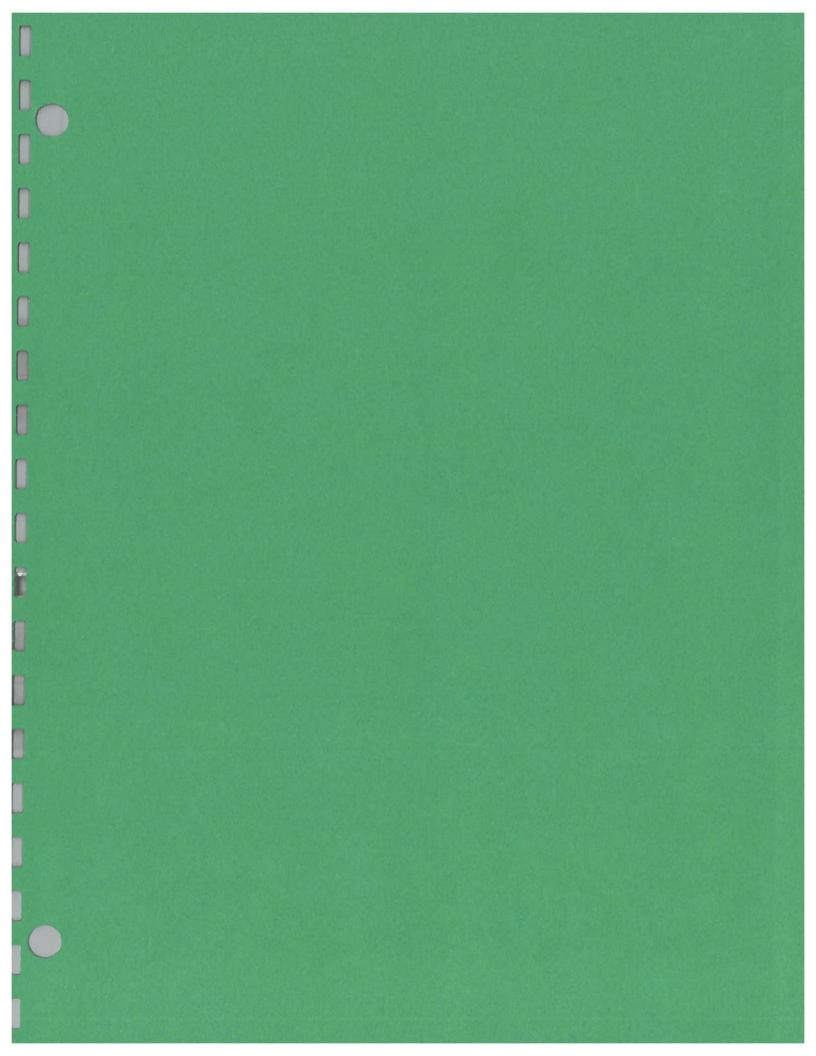
5 - TRG not yet established for this analyte.

TABLE 3 SUMMARY OF QA/QC SAMPLE ANALYTICAL RESULTS Hercules Incorporated Hattiesburg, Mississippi August 2006

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							Con	Concentrations in Ue/L	in ue/L								Γ
Location	9not93A	Benzene	Вгототейнале	Сягьов Теtтясыloride	Спюторепzепе	Сһіогоform	I,I-Dichloroethene	Еғруірепzепе	Methylene Chloride	ənəuloT	Tetrachloroethene	Сріоготейнале	1,2-Dichloropropane		ənədtəoroldəiD-2, I-ziə	Vinyl Chloride	
CM-02	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	0 < 1.0	V 0		< 1.0	
CM-02 DUP	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	0 < 1.0	v 0	1.0	< 1.0	
% variation	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0 %	, 0	%0	%0	<u>, a</u>
MW-09	< 25	10	< 1.0	< 1.0	< 1.0	< 1.0	6.0	1.0	< 5.0	< 1.0	1.0	< 1.0	0 < 1.0		< 1.0	< 1.0	
AUG 60-WM	< 25	10	< 1.0	< 1.0	< 1.0	< 1.0	5.9	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	0 < 1.0		< 1.0	< 1.0	
% variation	%0	%0	%0	%0	%0	%0	2%	%0	%0	%0	1%	%0	%0	` 0	%0	%0	
MW-13	< 25	72	< 1.0	45	17	35	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	0 < 1.0		3.1	2.1	T
MW-13 DUP	< 25	11	< 1.0	47	16	35	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	0 < 1.0	6	3.0	1.8	
% variation	%0	1%	%0	4%	6%	%0	%0	%0	%0	%0	%0	%0	%0 %	, 0	3%	14%	%
RS-01	< 25	< 1.0	< 1.0	< 1.0	< 1.0	1.3	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	0 < 1.0	V	1.0	< 1.0	
RS-02	< 25	< 1.0	< 1.0	< 1.0	< 1.0	1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	0 < 1.0	v Q	1.0	< 1.0	
TB-01	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	0 < 1.0	V	1.0	< 1.0	Τ
1 - "<" indicates that the concentration of the analyte is less than the concentration	that the con	centration of	the analyte is	s less than the	concentration	is shown.											٦

2 - Trip blanks were not analyzed for dioxathion constituents.





FIGURES

