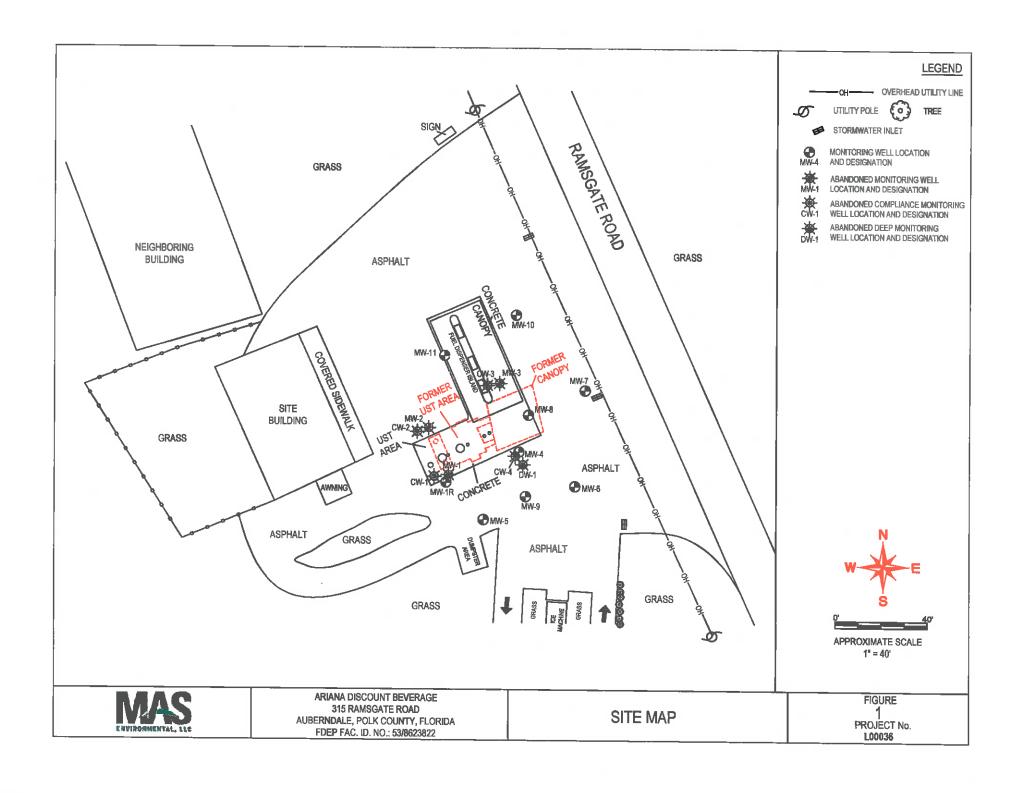
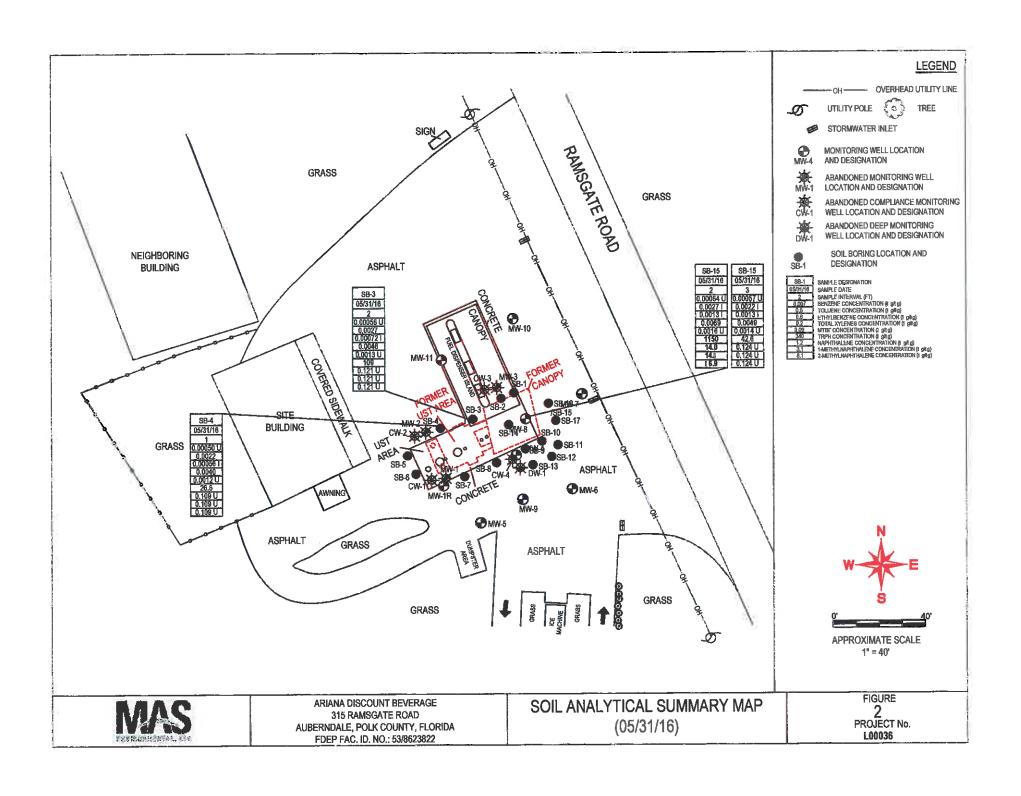
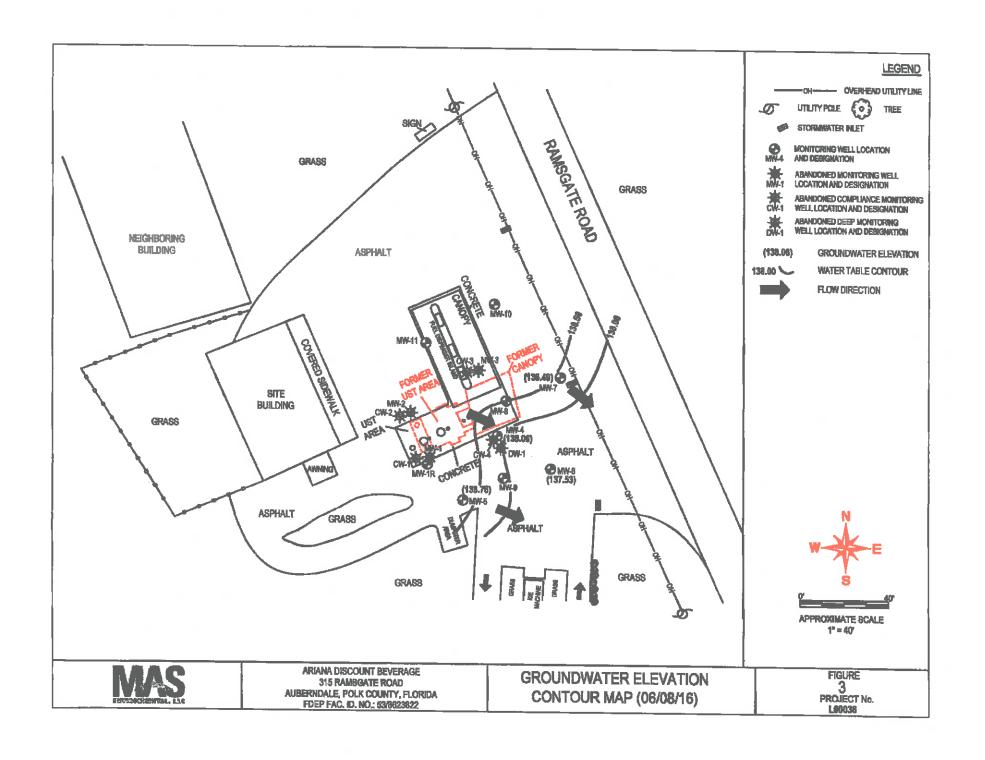
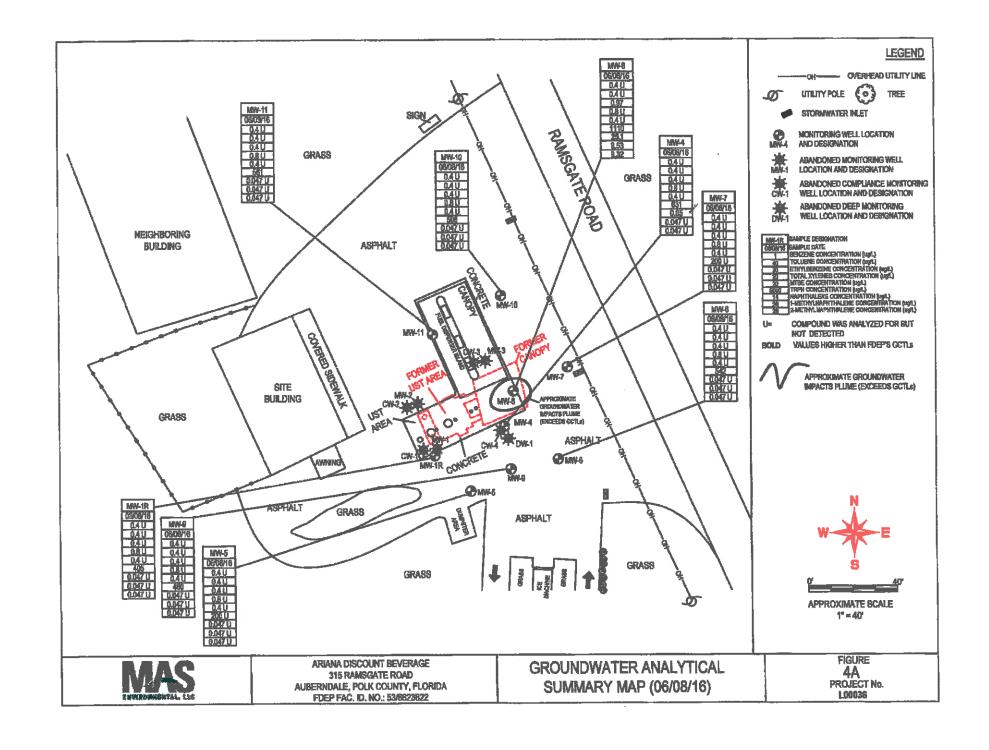


FIGURES & TABLES









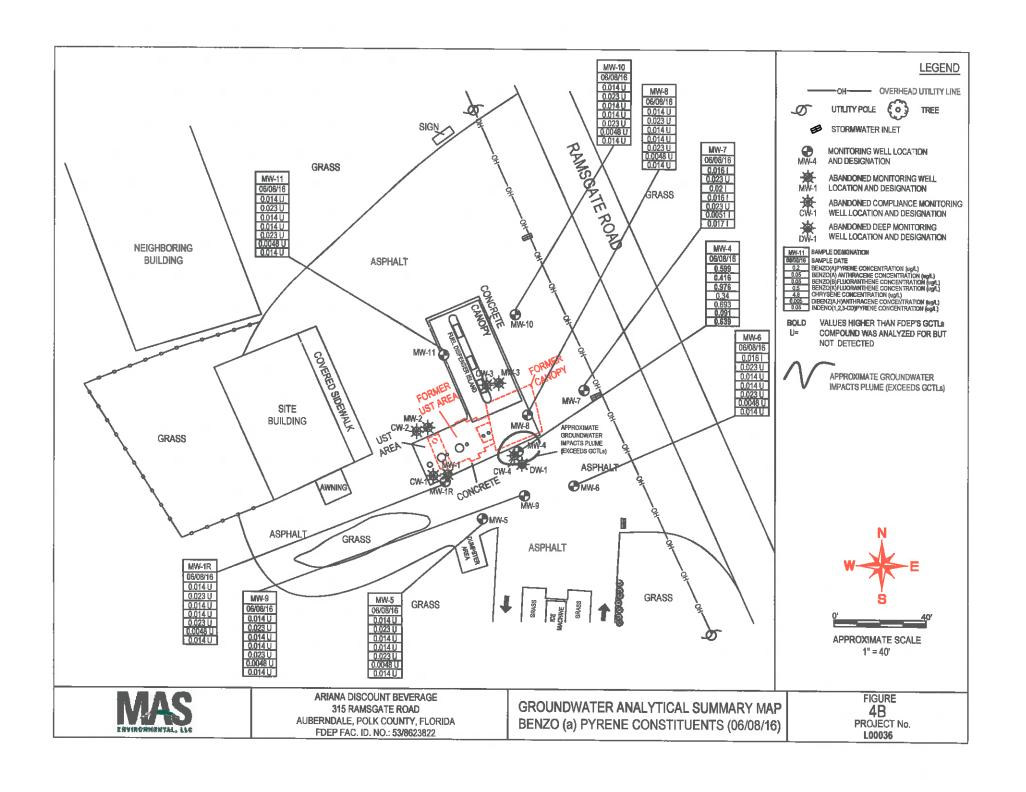


TABLE 1: SOIL SCREENING SUMMARY

	SAMPLE		OVA	SCREENING RE	SULTS	
Boring Number	Date Collected	Sample Depth (ft bis)	Total Reading (ppm)	Carbon Filtered (ppm)	Net Reading (ppm)	COMMENTS
		2	20	0	20	
SB-1	04/12/01	6	170	0 250	22 NQ	
		8	80	150	NQ	
		2	0	0	0	
		4	0	0	0	
SB-2	04/12/01	6	150	150	0	
		8	60	55	5	-
		2	0	0	0	
SB-3	04/12/01	4	0	0	0	
		6	225	70	155	
		8	275	235	40	
		2	0	0	0	
SB-4	04/12/01	6	0 0	0	0	
		8	40	40	0	
		2	0	0	0	
on -	0.000	4	0	0	0	
SB-5	04/12/01	6	0	0	0	
		8	45	17	28	
		2	0	0	0	
SB-6	04/12/01	4	0	0	0	
00-0	A-4 174 A I	6	0	0	0	
		- 8	15	0	15	
		0-2	0		0	
SB-7	09/12/01	2-4	3	-	3	
		4-8	0	-	0	
SB-8	09/12/01	0-2	0		0	
30.0	09/12/01	2 - 4	5		0	
-		0-2	0	-	5	
\$B-9	09/12/01	2-4	0	-	0	
	***************************************	4-8	0		0	
		0-2	0	-	0	
MVV-1	09/12/01	2-4	0	-	0	
		4-8	0	-	0	
		0-2	0		0	
MW-2	09/12/01	2-4	0		0	
		4-6	0	-	0	
		0-2	3	0	3	
MW-3	09/12/01	2 - 4	0	-	0	
m197-5	03/12/01	4-6	0	-	- 0 -	·
		6 - 8 8 - 12	NR	- NR	NR NR	
		0-2	2000	40 40	1960	
MW-4	09/12/01	2-4	18	18	0	
		4-6	50	25	25	
		0-2	0	NR	0	
MW-5	02/05/02	2-4	0	NR	0	
		4 - 6	0	NR	0	
	*****	0-2	0	NR	0	
MW-6	02/08/02	2-4	0	NR	0	
		4-6	0	NR	0	
		0-2	0	0	0	
HW-7	02/08/02	2 - 4 4 - 6	0	0	0	
		6-8	100	60	0 40	·
+		0-2	0	NR .	0	
		2-4	D	NR	0	
DW-1	02/07/02	4-6	70	100	NQ	* 4
		6-8	225	400	NQ NQ	
İ		1	NR		NR	
		2	NR		NR	
SB-1	05/31/16	3	NR		NR	
OD-1	water if 40	4	NR		NR	
-		5	NR		NR	
		6	NR		NR	

TABLE 1: SOIL SCREENING SUMMARY

	SAMPLE		OVA:	SCREENING RES	BULTS	
Boring Number	Date Collected	Sample Depth (ft biz)	Total Reading (ppm)	Carbon Filtered (ppm)	Net Reading (ppm)	COMMENTS
\$B-2	05/31/16	1	NR		NR	
		1	NR		NR	
		2	37		37	
SB-3	05/31/16	3	3		3	
		4	NR		NR	
		5	NR		NR	
_		6	NR		NR	
		1	66		66	
		3	7 NR		7	
SB-4	05/31/16	4	NR		NR NR	
		5	NR		NR	
		6	NR		NR	
		1	NR		NR	
		2	NR	•	NR	
\$B-5	05/31/16	3	NR		NR	
90-3	03/3/1/10	4	NR		NR	
		5	NR		NR	
		6	NR		NR	
		1	NR		NR	
		2	NR		NR	
SB-6	05/31/16	3	NR		NR	
		4	NR		NR	
		5	NR		NR	
		6	NR		NR	
		1	5		5	
		2	NR		NR	
SB-7	05/31/16	3	NR		NR	
		5	NR		NR	
		6	NR 4		NR 4	
-		1	NR		NR NR	
		2	NR NR		NR NR	.,
		3	NR	-	NR	
SB-8	05/31/16	4	NR		NR	
		5	NR		NR	
		6	2		2	
		1	3		3	
		2	NR		NR	
SB-9	05/31/16	3	NR		NR	
	***************************************	4	NR		NR	
		5	4		4	
		6	NR		NR	
		11	NR		NR	
		2	NR		NR	
SB-10	05/31/16	3	NR		NR NR	
		5	NR		NR	
		6	NR NR		NR	<u>. </u>
		1	NR NR		NR ND	
İ		2	NR		NR NR	
0D 41		3	NR		NR NR	
SB-11	05/31/16	3 4	NR		NR NR	
		5	NR		NR NR	
		6	2		2	
		1	NR		NR	- · · · · · · · · · · · · · · · · · · ·
		2	NR		NR	
SB-12	05/31/16	3	NR		NR	
	**************************************	4	NR		NR	
	ĺ	5	NR		NR	
		6	NR		NR	
		1	NR		NR	
		2	NR		NR	
SB-13	05/31/16	3	NR		NR	
		4	NR		NR	
	1	5	NR		NR	

TABLE 1: SOIL SCREENING SUMMARY

	SAMPLE		OVA	BCREENING RE	SULTS	
Boring Number	Date Collected	Sample Depth (ft bie)	Total Reading (ppm)	Carbon Filtered (ppm)	Net Reading (ppm)	COMMENTS
SB-14	05/31/16	1		CONCRETE		
I		1	NR		NR	
		2	980		980	
SB-15	05/31/16	3	530		530	· · · · · · · · · · · · · · · · · · ·
02.10	00001110	4	129		129	
		5	48		48	
		6	28		28	
		1	NR		NR	
		2	26		26	
8B-16	05/31/16	3	7		7	
	00.0.7.0	4	6		6	
		5	NR		NR	
i		6	NR		NR	
		1	NR NR	T T	NR .	
		2	2		2	
\$B-17	05/31/16	3	NR		NR	
		4	NR		NR	
		5	NR		NR	
		6	NR		NR	-

TABLE 2A: SOIL ANALYTICAL SUMMARY - VOA, TRPH, Metals

Facility Name: Ariana Discount Beverage

FDEP Facility ID#: 53/8623822

	Samp	le		OVA	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl- benzene (mg/kg)	Total Xylenes	MTBE (mg/kg)	TRPHs (mg/kg)	Arsenic (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)
SCTL for Leachab	lity Based on Groundwater C	riteria			0.007	0.5	0.0					(((mg/ng/
SCTL for Direct Ex	cposure Residential						0.6	0.2	0.09	340	*	7.5	38	*
			_		1.2	7,500	1,500	130	4,400	460	2.1	82	210	400
Boring No. / Well ID No.	Date Collected	Depth to Water (ft bis)	Sample Interval (ft bls)	Net OVA Reading (ppm)										
581	4/12/2001				0.13 U	0.13 U	0.13 U	0.39 U	0,13 U	46	NS	NS		
SS2	4/12/2001				0,18 U	0.18 U	0.18 U						NS NS	NS NS
553	4/12/2001							0.54 U	0.18 U	11 U	NS	NS NS	NS	NS
SB-15, 2'					0.15 U	0.15 U	0.15 U	0.45 U	0.15 U	130	NS	NS	NS	NS
	5/31/2016	4	2	980	D.00064 U	0.0027 I	0.0013 (0.0069	0.0016 U	1150	NS	NS	NS	
SB-15, 3'	5/31/2016	4	3	530	0.00057 U	0.00221	0.00131	0.0049	0.0014 U					NS
SB-3, 2'	5/31/2016	4	2	37	0.00056 U	0.0027	+			42.6	NS	NS	N\$	NS
SB-4, 1'	5/31/2016	4					0.00072	0.0046	0.0013 U	109	NS NS	NS	NS	NS
	NA = Not Available	-	1	66	0.0005 U	0.0022	0.000561	0.004	0.0012 U	26.6	NS	. NS	NS	NS

NS = Not Sampled

* = Leachability value may be determined using TCLP.

Bold indicates analyte is detected above the SCTL.

TABLE 2B: SOIL ANALYTICAL SUMMARY - Non-Carcinogenic PAHs

Facility Name: Ariana Discount Beverage

FDEP Facility ID#: 53/8623822

	Samp			OVA	Naph- thalene (mg/kg)	1-Methyl- naph- thalene (mg/kg)	2-Methyl- naph- thalene (mg/kg)	Acenaph- thene (mg/kg)	Acenaph- thylene (mg/kg)	Anthra-cene	Benzo (g,h,i) perylene (mg/kg)	Fluoran- thene (mg/kg)	Fluorene (mg/kg)	Phenan- threne (mg/kg)	Pyrene
	ity Based on Groundwater (Criteria			1.2	3.1	8.5	2.1	27	2.500	32,000	1,200	160		(mg/kg)
SCTL for Direct Exp	posure Residential				55	200	210	2,400	1,800	21,000	2,500	3,200		250	880
Boring No. / Well ID No.	Date Collected	Depth to Water (ft bis)	Sample Interval (ft bis)	Net OVA Reading (ppm)						,,	2,000	3,200	2,600	2,200	2,400
551	4/12/2001				0.014	0.010 U	0.012	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.040.11	0.040	
SS2	4/12/2001				0.010 U	0.076	0.010 U	0.010 U	0.010 U	0.010 U			0.010 U	0.013	0.010 U
SS3	4/12/2001				0.010 U	0.010 U	0.010 U	0.010 U	0.012	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
SB-15, 2'	5/31/2016	4	2	980	14	14.2	26.9				0.010 U	0.15	0.010 U	0.15	0.11
SB-15, 3'	5/31/2016	4	9	530				0.1351	0.13	0.0981	0.043 I	1 80.0	0.25 1	0.236 I	0.074
SB-3, 2'	5/31/2016	4	3		0.124 U	0.124 U	0.124 U	0.062 U	0.062 U	0.062 ∪	0.037 U	0.062 U	0.062 U	0.062 U	0.062 U
SB-4, 1'	5/31/2016	4	4	37	0.121 U	0.121 U	0.121 U	0.061 U	0.061 U	0.061 U	0.036 U	0.061 U	0.061 U	0.061 U	0.061 U
	NA = Not Available	4	1	66	0.109 U	0.109 U	0.109 U	0.055 U	0.055 U	0.055 U	0.0631	0.07 I	0.055 U	0.055 U	0.0621

I = The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit. Bold indicates analyte is detected above the SCTL.

TABLE 2C: SOIL ANALYTICAL SUMMARY - Carcinogenic PAHs

Facility Name: Arlana Discount Beverage

FDEP Facility ID#: 53/8623822

	Sam		-	OVA	Benzo (a) pyrene (mg/kg)	Benzo (a) anthracene (mg/kg)	Benzo(b) fluoranthene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenz(a,h) anthracene (mg/kg)	Indeno (1,2,3- cd) pyrene (mg/kg)	Benzo (a) pyrene equivalent (mg/kg)
	ity Based on Groundwater	Criteria			8	0.8	2.4	24	77	0.7	6.6	
SCTL for Direct Exp					0.1	1.3	1.3	13	130	0.1	1.3	8
SCTL for Direct Exp	osure Commercia				0.7	6.6	6.5	66	640	0.7		0.1
Boring No. / Well ID No.	Date Collected	Depth to Water (ft bis)	Sample Interval (ft bis)	Net OVA Reading (ppm)						0.7	6.6	0.7
SS1	4/12/2001				0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	
SS2	4/12/2001	<u> </u>			0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	
SS3	4/12/2001				0.022	0.025	0.034	0.010 U	0.049	0.010 U	0.018	
SB-15, 2'	5/31/2016	4	2	980	0.026 U	0.052	0.041 I	0.042 U	0.042 U	0.026 I	0.042 U	0.05
SB-15, 3'	5/31/2016	4	3	530	0.023 U	0.037 U	0.032 U	0.037 U	0.037 U	0.0089 U	0.042 U	0.05
SB-3, 2'	5/31/2016	4	2	37	0.022 U	0.036 U	0.034	0.036 U	0.036 U	0.0087 U	0.037 U	
SB-4, 1'	5/31/2016	4	1	66	0.065	0.033 U	0.072	0.038 I	0.057	0.023 [0.055	0.02

NOTES:

NA = Not Available

NS = Not Sampled

I = The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

Bold Indicates analyte is detected above the SCTL.

TABLE 2D: SOIL ANALYTICAL SUMMARY - SPLP RESULTS

Facility Name:

Ariana Discount Beverage

FDEP Facility ID#: 53/8623822

S	ample	Naphthalene	1-Methyl- naphthalene	2-Methyl- naphthalene	Acenaphtene	Acenaph- thylene	Anthracene	Benzo (g,h,i) perylene	Flouranthene	Flourene	Phenan- threne	Pyrene
		(μg/L)	(μg/L)	(μg/L)	(µg/L)	(µg/L)	(µg/L)	(μg/L)	(µg/L)	(µg/L)	(μg/L)	(µg/L)
	GCTLs		28	28	20	210	2100	210	280	280	210	210
1	NADCs	140	280	280	200	2100	21000	2100	2800	2800	2100	2100
Location	Date											
SB-15 @ 2' SPLP	5/31/2016	166	66.3	107	0.351	0.113	0.046 1	0.015 U	0.025 U	0.388	0.158	0.025 U
30-13@Z 3rLF												

Notes:

NS = Not Sampled.

MDL = Method Detection Limit
PQL = Practical Quantitation Limit

U = Not Detected

I = Result > MDL but < PQL

D = Analyte reported from Dilution Analysis

GCTLs = Groundwater Cleanup Target Levels specified in Table I of Chapter 62-777, F.A.C.

NADCs = Natural Attenuation Default Source Concentrations specified in Table V of Chapter 62-777, F.A.C.

TABLE 2E: SOIL ANALYTICAL SUMMARY - TRPH Speciation

Facility Name: Arlana Discount Beverage

FDEP Facility ID#: 53/8623822

				· -	5-7 C Aromatics	7-8 C Aromatics	8-10 C Aromatics	10-12 C Aromatics	12-15 C Aromatics	16-21 C Aromatics	21-35 C Armatics
					(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(rng/kg)	(mg/kg)
SCTL for Leachab			terla		34	59	340	520	1,000	3200	25000
SCTL for Direct Ex					340	490	460	900	1,500	1,300	2,300
Soll Cleanup Targ	et Level for Direct	Exposure Co	mmercial (m	g/kg)	1,800	3,700	2,700	5,900	12,000	11,000	40,000
Boring No.	Date Collected	Net OVA Reading (ppm)					,,,,,	,			
SB-15 @ 2'	5/31/2016	980	29.9 U	29.9 U	29.9 U	420	956	57.8	50.3		

					5-6 C Allphatics	8-8 C Allphatics	8-10 C Allphatics	10-12 C Aliphatics	12-16 C Aliphatics	16-35 C Aliphatics	Total
					(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
SCTL for Leachabi			teria		470	1300	7,000	51,000	*	*	, , , ,
SCTL for Direct Ex					6,200	8,700	850	1,700	2,900	42,000	340
Soli Cleanup Targe	t Level for Direct	g/kg)	33,000	46,000	4,800	10,000	21,000	280,000	460		
Boring No.	Date Collected	Depth to Water (ft)	Sample Interval (fbis)	Net OVA Reading (ppm)							
SB-15 @ 2"	5/31/2016	980	37.6 U	37.6 U	78.6 I	482	569	282	2900		

TABLE 3: GROUNDWATER ELEVATION TABLE (No FP)

Facility Name: Arlana Discount Ber Address: 315 Ramsgate Rd

FDEP Facility ID#: 53/8623822

All Measurements = Feet No Data = Blank Not Gauged = NG Not installed = NI

City/State:

Aubumdale, FL

WELL NO.	MW-1	MW_2	MW-3	MW-4	MW-5	MW-6	MW-7
DIAMETER (Inches	2	2	2	2	2	2	2
WELL DEPTH	12.00	12.00	12.00	12.00	12.00	12.00	12.00
SCREEN INTERVAL	2 - 12	2 - 12	2-12	2 - 12	2 - 12	2 - 12	2 - 12
TOC ELEVATION	140.00	139.80	139.74	139,46	139.91	139.63	139.29

							_										ID-773-67	D.166	E1 E1	DTW	Pares.
DATE	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	DIff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	שוע	Diff.
9/13/2001	135.19	4.81	-	135.21	4.59	- 1	136.72	3.02	-	135.29	4.17		-	-		-			-	-	-:-
2/15/2002	133.82	6.18	-1.37	133.79	6.01	-1.42	135.09	4.65	-1.63	133.84	5.62	-1.45	133.81	6.10		133.75	5.88		134.76	4.53	
6/8/2016	DE	STROY	ED	DE	STROY	ED _	DE	STROY	ED	138.06	1.40	4.22	138.76	1.15	4.95	137.53	2.10	3.78	138.48	0.80	3.73
		-																			
							l														
							l														

WELL NO.	DW-1	MW-8	MW-9	MW-10	MW-11	MW-1R	
DIAMETER (inches)	2	1	1	1	. 1	11	
WELL DEPTH	25	12	12	12	12.00	12	
SCREEN INTERVAL	20 - 25	2-12	2-12	2-12	2 - 12	2 -12	
TOC ELEVATION	139.59	139.67	139.81	139.67	139.91	139.70	

DATE	ELEV	DTW	DIff.	ELEV	DTW	Diff.	ELEV	DTW	DIff.	ELEV	DTW	Diff.	ELEV	DTW	DIff.	ELEV	DTW	DHf.	ELEV	DTW	Diff.
2/15/2002	133.74	5.85	-		-	-			-	-	-	-	-	-	-	-	-	-			
6/8/2016		ESTROY	ED	137.58	2.09		138.29	1,52		137.92	1.75		138.13	1.78		137.55	2.15				
	 																				
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	L		ļ				ļ		L				ļi						<u> </u>		
		1											L			L					<u> </u>

Notes:

^{*} Denotes well previously installed at the site

TABLE 4A: GROUNDWATER ANALYTICAL SUMMARY

Facility Name: Ariana Discount Beverage FDEP Facility ID No. 53/8623822

s	ample	Benzene	Toluene	Ethyl- berizene	Total Xylenes	MTBE	Total Arsenic	Total Cadmlum	Total Chromium	Total Lead	TRPH
	3CTLs	(µg/L)	(μg/L) 40**	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
	IADCs			30**	20**	20	10**	5**	100**	15**	5000
Location	Date	100	400	300	200	200	100	50	1000	150	50000
Location	9/13/2001	1.0 U	4.011	4.011		4.0.11					
MW-1	9/13/2001	1.00	1.0 U	1.0 U	3.0 U	1.0 U	NS	NS	NS	NS	520
MW-1R	6/8/2016	0.4 U	0.4 U	0.4 U	0.8 U	0.4 U	NS	NS	NS	NS	405
MW-2	9/13/2001	1.0 U	1.0 U	1.0 U	3.0 U	5.8	NS	NS	NS	NS	530 U
MW-3	9/13/2001	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	NS	NS	NS	NS	500 U
	9/13/2001	50	12	290	660	1.0 U	NS	NS	NS	NS	520
MW-4	6/8/2015	0.4 U	0.4 U	0.4 U	0.8 U	0.4 U	NS	NS	NS	NS	631
	2/15/2002	1.0 U	1.0 U	1.0 U	3.0 U	3.0 U	NS	NS	NS	NS	400 U
MW-5	6/8/2016	0.4 U	0.4 U	0.4 U	U 8.0	0.4 U	NS	NS	NS	NS	200 U
	2/15/2002	1.0 U	1.0 U	1.0 U	3.0 U	3.0 U	NS	NS	NS	NS	1172
MW-6	6/8/2016	0.4 U	0.4 U	0.4 U	0.8 U	0.4 U	NS	NS	NS	NS	542
	2/15/2002	1.0 U	1.0 U	1.0 U	3.0 U	3.0 U	NS	NS	NS	NS	3.0 U
MW-7	6/8/2016	0.4 U	0.4 U	0.4 U	0.8 U	0.4 U	NS	NS	NS	NS	200 U
MW-8	6/8/2016	0.4 U	0.4 U	0.971	0.8 U	0.4 U	NS_	NS	NS	NS	1110
MW-9	6/8/2016	0.4 U	0.4 U	0.4 U	0.8 U	0.4 U	NS	NS	NS	NS	480
MW-10 -	6/8/2016	0.4 U	0.4 U	0.4 U	0.8 U	0.4 U	NS	NS	NS	NS	508
MVV-11	6/8/2016	0.4 U	0.4 U	0.4 U	0.8 U	0.4 U	NS	NS	NS	NS	561
DW-1	2/15/2002	1.0 U	1.0 U	1.0 U	3.0 U	3.0 U	NS	NS	NS	NS	400 U

Notes: NS = Not Sampled.

MDL = Method Detection Limit

PQL = Practical Quantitation Limit
U = Not Detected

I = Result > MDL but < PQL

D = Analyte reported from Dilution Analysis

GCTLs = Groundwater Cleanup Target Levels specified in Table I of Chapter 62-777, F.A.C.

NADCs = Natural Attenuation Default Source Concentrations specified in Table V of Chapter 62-777, F.A.C.

TABLE 4B: GROUNDWATER ANALYTICAL SUMMARY

Facility Name: Arlana Discount Beverage

FDEP Facility ID No. 53/8623822

Sa	mple	Naphthalene	1-Methyl- naphthalene	2-Methyl- naphthalene	Acenaphtene	Acenaph- thylene	Anthracene	Benzo (g,h,l) perylene	Flouranthene	Flourene	Phenan- threne	Pyrene
		(µg/L)	(µg/L)	(µg/L)	(μg/L)	(µg/L)	(μg/L)	(μg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
GC	CTLs	14	28	28	20	210	2100	210	280	280	210	210
N/	ADÇ8	140	280	280	200	2100	21000	2100	2800	2800	2100	2100
Location	Date											
MW-1	9/13/2001	0.21 U	0.21 U	0.21 U	0.22 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
MW-1R	6/8/2016	0.047 U	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.014 U	0.023 U	0.023 U	0.023 U	0.023 U
MW-2	9/13/2001	0.21 U	0.21 U	0.21 U	0.22 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
MW-3	9/13/2001	0.20 U	0.20 U	0.20 U	0.21 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
	9/13/2001	0.20 U	2	3	0.21 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-4	6/8/2016	0.051	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.654	0.869	0.023 U	0.142	0.688
	2/5/2002	20 U	20 U	20 U	20 U	20 U	5.0 U	1.0 U	2.0 U	20 U	5.0 U	2.0 U
MW-5	6/8/2016	0.047 U	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.014 U	0.023 U	0.023 U	0.023 U	0.023 U
	2/5/2002	20 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	20 U	5.0 U	2.0 U
MW-6	6/8/2016	0.047 U	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.014 U	0.023 U	0.023 U	0.023 U	0.023 U
	2/5/2002	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
MW-7	6/8/2016	0.047 U	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.019	0.023 U	0.023 U	0.023 U	0.023 U
MW-8	6/8/2016	25.1	8.53	9.32	0.07	0.023 U	0.023 U	0.014 U	0.023 U	0.048	0.023 U	0.023 U
MW-9	6/8/2016	0.047 U	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.014 U	0.023 U	0.023 U	0.023 U	0.023 U
MW-10	6/8/2016	0.047 U	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.014 U	0.023 U	0.023 U	0.023 U	0.023 U
	6/8/2016	0.047 U	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.014 U	0.023 U	0.023 U	0.023 U	0.023 U
MW-11	0/0/20 TO	0.047 0	0.047 0	0.047 0	0.023 0	0.023 0	0.023 0	0.014 0	0.023 0	0.023 U	0.023 0	0.023 0
DW-1	2/5/2002	20 U	20 U	20 U	20 U	20 U	5.0 U	1.0 U	2.0 U	20 U	5.0 U	2.0 U

Notes:

NS = Not Sampled.

MDL = Method Detection Limit

PQL = Practical Quantitation Limit

U = Not Detected

I = Result > MDL but < PQL

D = Analyte reported from Dilution Analysis

GCTLs = Groundwater Cleanup Target Levels specified in Table I of Chapter 62-777, F.A.C.

NADCs = Natural Attenuation Default Source Concentrations specified in Table V of Chapter 62-777, F.A.C.

TABLE 4C: GROUNDWATER ANALYTICAL SUMMARY

Facility Name: Arlana Discount Beverage FDEP Facility ID No. 53/8623822

	Sample	Benzo (a) pyrene	Benzo (a) anthracene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Indeno (1,2,3-cd) pyrene
		(µg/L)	(µg/L)	(µg/L)	(μg/L)	(pg/L)	(μg/L)	(µg/L)
	GCTLs	0.2	0.05	0.05	0.5	4.8	0.005	0.05
	NADCs	20	5	5	50	480	0.5	5
Location	Date			· · · · · · · · · · · · · · · · · · ·				
	9/13/2001	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U
MW-1								
	6/8/2016	0,014 U	0.023 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.014 Ü
MW-1R								
	9/13/2001	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U
MW-2	371372001	- 0.0210	0.02.1					
	9/13/2001	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 Ú
MW-3	8/13/2001	0.020 0	0.020	0.020 0			 	
	9/13/2001	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
		0.599	0.416	0.976	0.34	0.693	0.091	0.639
MW-4	6/8/2016	0.388	0.410	0.070	0.04	0.000		
	2/5/2002	0.2 U	0.2 U	0.2 U	0.5 U	1.0 U	0.2 U	0.2·U
MW-5	6/8/2016	0.014 U	0.023 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.014 U
MAA-D	0/0/2010	0.014 0	0.020 0	0.014 0	4,6.1.5			
·	2/5/2002	0.2 U	0.2 U	0.2 U	0.5 U	1.0 U	0.2 U	0.2 U
MW-6	6/8/2016	0.014 U	0.023 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.014 U
	2/5/2002	0.2 U	0.2 U	0.2 U	0.5 U	1.0 U	0.2 U	0:5 U
MW-7	8/8/2016	0.0161	0,023 U	0.02	0.0161	0.023 U	0.0051 (0.017 (
44199-7				1				
	6/8/2016	0.014 U	0.023 Ú	0.014 U	0.014 U	0.023 U	0.0048 U	0.Q14 U
MW-8								
	6/8/2016	0.014 U	0.023 U	0.014 U	0.014 U	0.023 U	0:0048 U	0.014 U
MW-9	3002010							
	6/8/2016	0.014 U	0.023 U	j 0.014 U	0.014 U	0.023 U	0.0048 U	0.014 U-
MW-10	3,442.10							
	6/8/2016	0.014 U	0.023 U	0.014 U	0.014 U	0.023 U	0:0048 U	0.014 U
MW-11								
	2/5/2002	0.2 U	0.2 U	0.2 U	0.5 U	1.0 U	0.2 ⊍	0.2 U
DW-1		1			T			

Notes: NS = Not Sampled.

MDL = Method Detection Limit
PQL = Practical Quantitation Limit

U = Not Detected

I = Result > MDL but < PQL

D = Analyte reported from Dilution Analysis

GCTLs = Groundwater Cleanup Target Levels specified in Table I of Chapter 62-777, F.A.C.

NADCs = Natural Attenuation Default Source Concentrations specified in Table V of Chapter 62-777, F.A.C.



September 30, 2017

Ms. Michelle Allard, P.G. Senior Geologist Northstar Contracting Group, Inc. Petroleum Restoration Program, Section 5 508-A Capital Circle, S.E., Tallahassee, FL 32301

RE: LSSI Site Assessment Report Addendum

Ariana Discount Beverage

315 Ramsgate Rd Auburndale, FL

Facility ID#: 53/8623822 MAS Project #: L00036

Dear Ms. Allard,

MAS Environmental, LLC (MAS) is pleased to provide this Low-Score Site Initiative (LSSI) Site Assessment Report (SAR) Addendum for the above mentioned site. A site plan is presented as Figure 1. This work was completed under FDEP LSSI Work Order #2017-95-W0338B. Herein are a summary of the field activities and an evaluation of the field and laboratory analytical results. The goal of these activities was to sample the groundwater at the site and delineate the soil impacts located around boring SB-14 that were initially identified in the LSSI Site Assessment Report (SAR), dated September 5, 2016 and the further delineated in the LSSI SAR Addendum dated March 23, 2017, prepared by MAS. The groundwater sampling and further soil assessment is the subject of this report.

SUMMARY OF FIELD ACTIVITIES

Quality Assurance

Field activities were conducted in general accordance with FDEP standard operating procedures and industry accepted practices. Soil assessment tasks were conducted in general accordance with the DEP-SOP, Guidance Memos, and Chapter 62-160 Florida Administrative Code (FAC). The groundwater sampling was performed in general accordance with FDEP standard operating procedure 01/001 FS -2200.

Groundwater Sampling Activities

On May 30, 2017, groundwater samples were collected from all onsite monitoring wells (MW-1R, and MW-4 through MW-11). Prior to sampling, the depth to water was measured in each well. Following sample collection, the groundwater samples were placed in dedicated containers on ice, and delivered to Jupiter Environmental Laboratories (JEL). The collected samples were analyzed for the presence of BTEX/MTBE using EPA Method 8260, PAHs using EPA Method 8270, and



TRPHs using State Method FL-PRO. The completed groundwater sampling logs are included in **Appendix A.**

Soil Boring and Soil Sampling Activities

On June 12, 2017, MAS personnel advanced of one (1) delineation soil boring (SB-20) to a depth of two (2) ft below land surface (bls) using a core drill and a hand auger. The boring was located approximately ten (10) feet southwest of soil boring SB-14 at the location shown on **Figures 1**. No additional delineation borings could be placed further to the southwest of SB-20 due to the present of an existing UST. A soil sample was collected from the boring at a depth of 1 to 2 ft bls and screened using an Organic Vapor Analyzer (OVA). Following the soil screening activities, the following soil sample was collected:

Boring No.	Date Collected	Sample Depth (ft bls)	Net OVA Reading (ppm)
SB-20	6/12/2017	1 - 2	317

The soil sample was analyzed for the presence of polycyclic aromatic hydrocarbons (PAHs) using EPA Method 8310. A copy of the boring log is provided in **Appendix B**.

SUMMARY OF RESULTS

Groundwater Elevation

On May 30, 2017, the depth to groundwater ranged from 4.00 (MW-7) to 5.54 (MW-1R) feet below top of casing (ft btc). A summary of the groundwater elevation data is presented in **Table 1.** The direction of groundwater flow beneath the site on May 30, 2017 was observed to be towards the south as shown on **Figure 2.**

Groundwater Analytical Results

The results of the groundwater analyses did not identified any target constituents in excess of their respective Groundwater Cleanup Target Levels (GCTLs) per Chapter 62-777, Florida Administrative Code (FAC) in the any of the groundwater samples collected, with the exception of benzo(b)fluoranthene, which was detected at a concentration of $0.065~\mu g/L$, slightly above the GCTL of $0.05~\mu g/L$ in the sample from MW-4.

A summary of the groundwater analytical results is provided in **Tables 2A- 2C** and illustrated on **Figures 3A and 3B**. The laboratory analytical report is included as **Appendix C**.

Soil Results

The OVA result for the soil sample from SB-20 at 1 to 2 ft bls was 317 parts per million (ppm). A summary of OVA data is included in **Table 3** and presented on **Figure 4A**.



The results of the soil analyses identified the presence of naphthalene, 1- and 2-methylnaphthanes in excess of the Leachability Soil Cleanup Target Levels (SCTLs) per Chapter 62-777, Florida Administrative Code (FAC) in the soil sample from SB-20 at 1 to 2 ft bls.

A summary of the analytical results is provided in **Tables 4A-4C** and presented on **Figure 4B**. The complete laboratory analytical report is included as **Appendix C**.

CONCLUSIONS AND RECOMMENDATIONS

- The results of the groundwater analyses did not identified any target constituents in excess of their respective GCTLs per Chapter 62-777, FAC in the any of the groundwater samples collected, with the exception of benzo(b)fluoranthene, which was detected at a concentration of **0.065** µg/L, slightly above the GCTL of **0.05** µg/L in the sample from MW-4.
- The OVA result for the soil sample from SB-20 at 1 to 2 ft bls was 317 ppm.
- The results of the soil analyses identified the presence of naphthalene, 1- and 2-methylnaphthalenes in excess of the Leachability SCTLs per Chapter 62-777, FAC in the soil sample from SB-20 at 1 to 2 ft bls.

Based on the findings presented herein, no groundwater impacts were identified during this groundwater sampling event with the exception of slight benzo(b)fluoranthene impacts in MW-4. Additionally, the naphthalene impacts previously identified in monitoring well MW-8 appear to have naturally attenuated to below its GCTL and two consecutive quarters with no groundwater impacts have been confirmed for all of the other monitoring wells. Therefore, MAS recommends the continued monitoring of MW-4 and MW-8 for PAHs to achieve two (2) consecutive quarters with no impacts and to determine if the site could qualify for closure, once the soil impacts have been remediated.

The soil impacts have been delineated. However, due to the presence of the existing UST, refining the delineation of the soil plume to the southwest of SB-20 is not possible at this time. Furthermore, conducting an excavation to remediate the soil impacts to their known limits including the removal of the existing UST would likely exceed the allowable LSSI Remedial Action (RA) funding cap. Therefore, MAS recommends that the site be parked until additional funding is available unless it is determined that the cost of excavating the soil and the removal of the UST could be completed within the LSSI RA funding constraints.

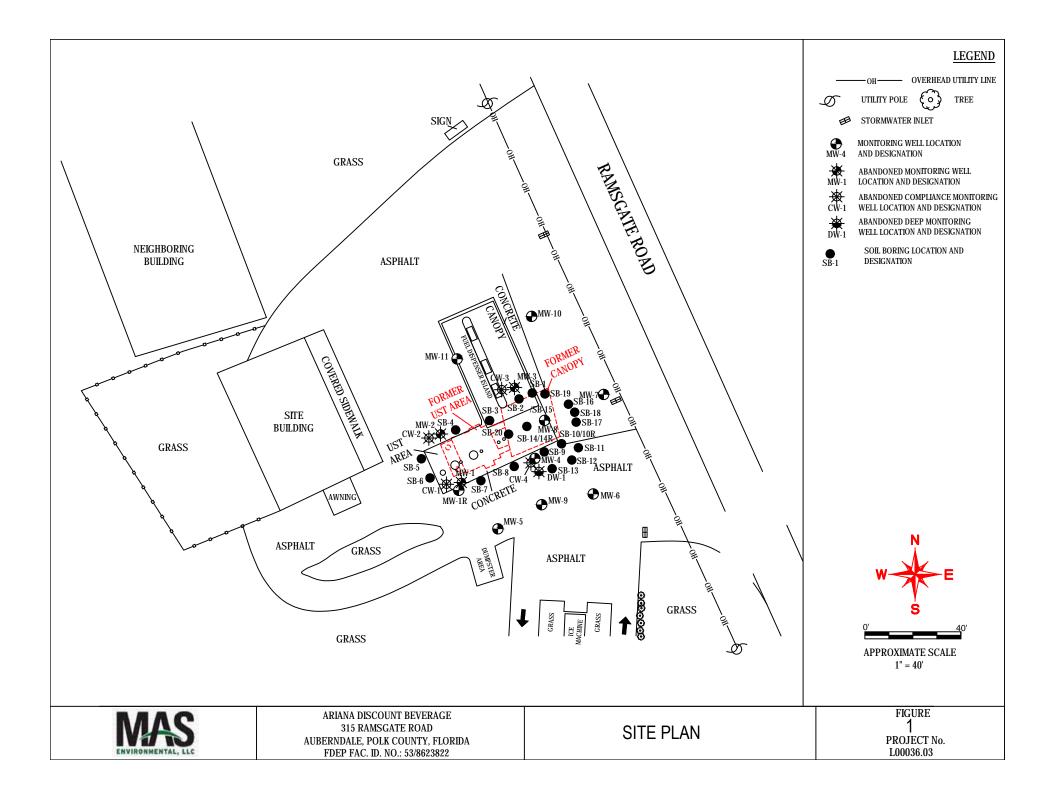
Please contact us directly should you have any questions at (813) 658-8823, or by email at mminard@mas-env.com or meichenholtz@mas-env.com.

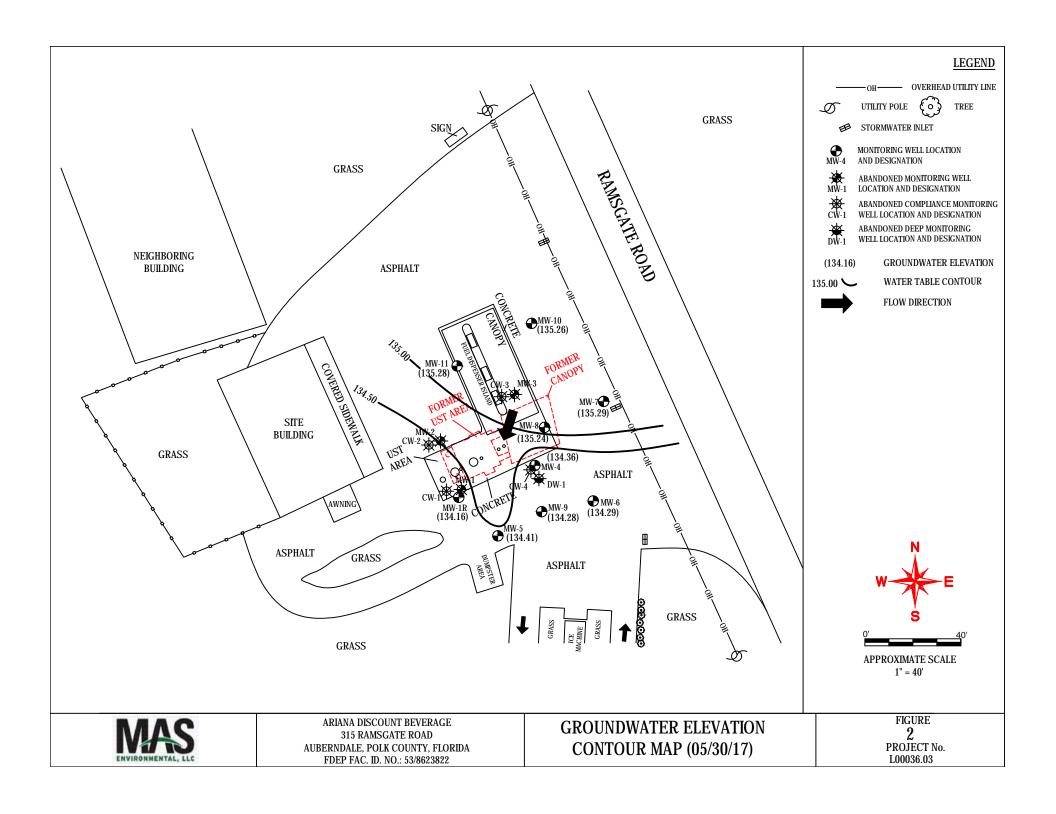
Sincerely,

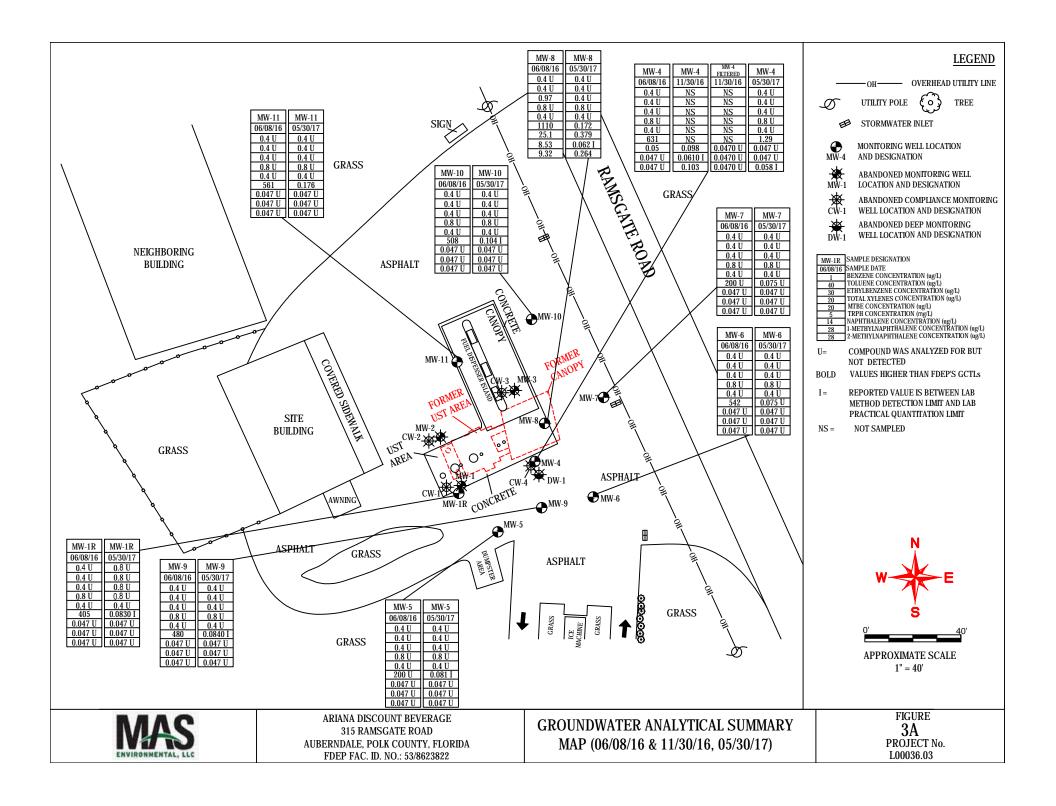
MAS Environmental, LLC

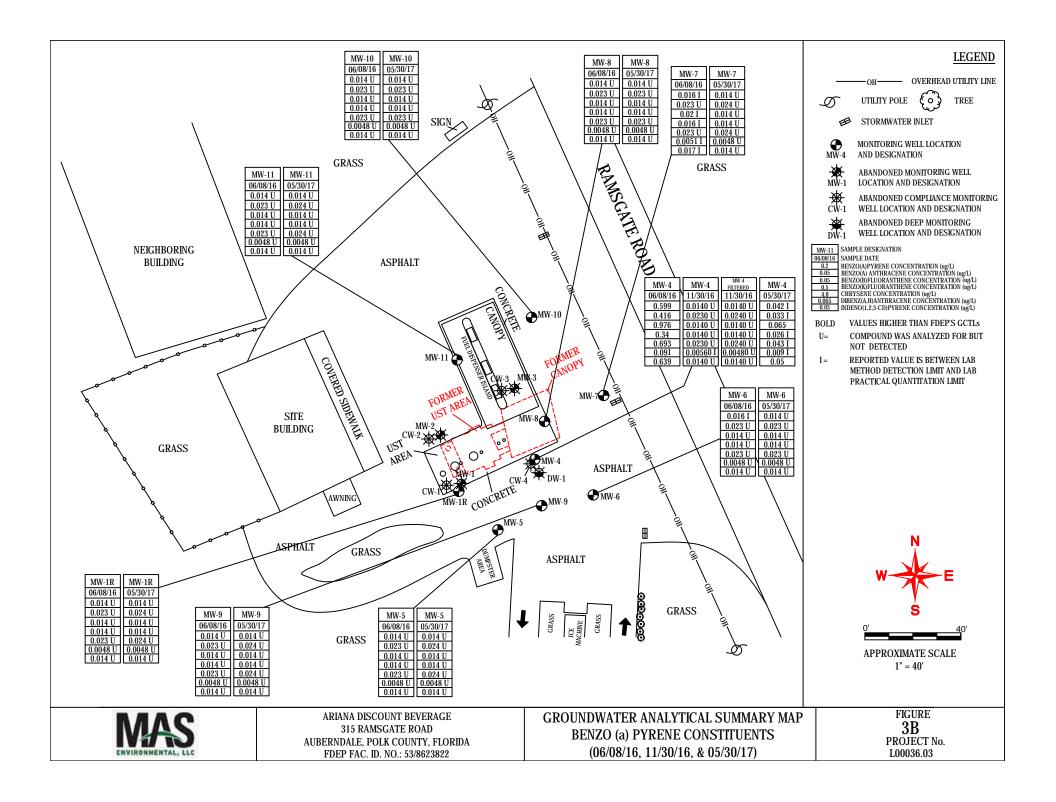
Michael S. Minard, PG, FL#2863

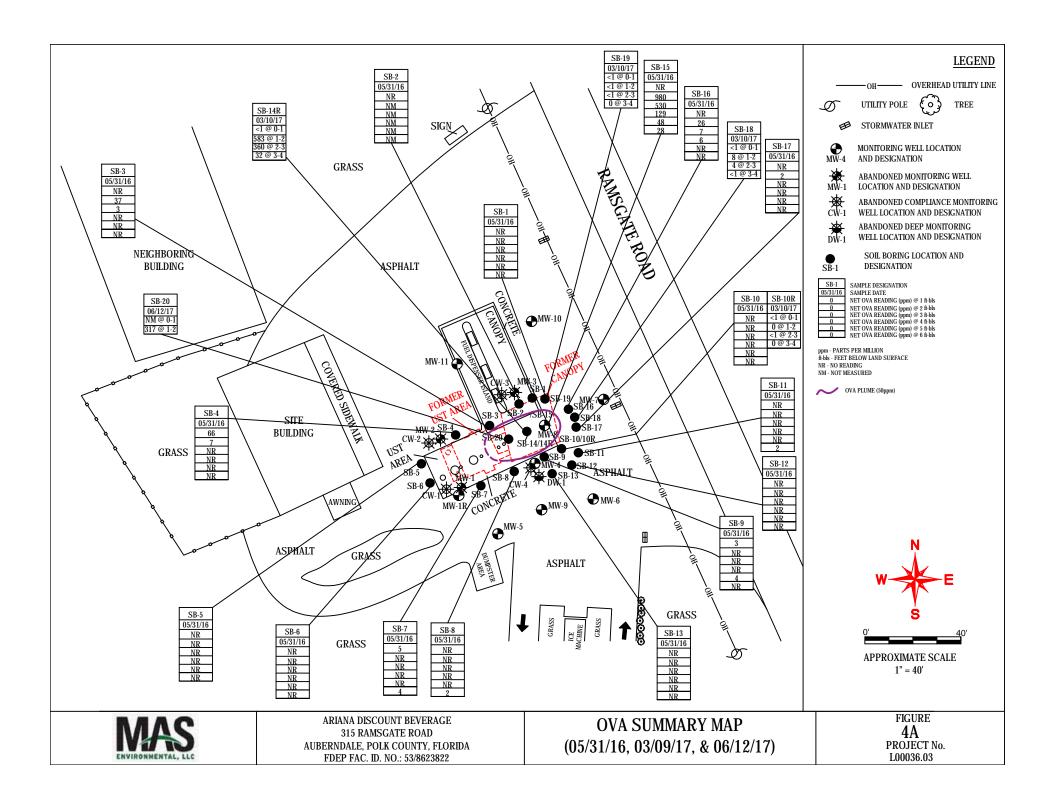
Senior Geologist











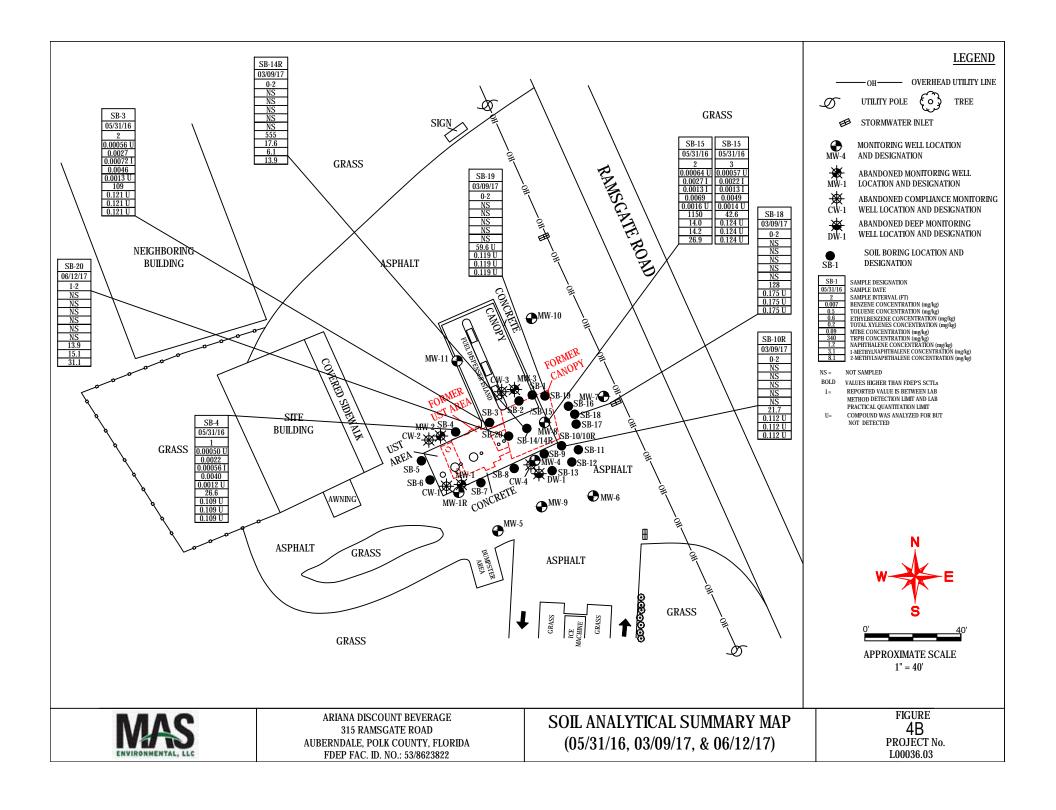


TABLE 1: GROUNDWATER ELEVATION TABLE (No FP)

Facility Name: Ariana Discount Be

FDEP Facility ID#: 53/8623822

Address: 315 Ramsgate Rd
City/State: Auburndale, FL

All Measurements = Feet

No Data = Blank

Not Gauged = NG

Not Installed = NI

	_			_			_			_			_						_		
WELL NO.		MW-1			MW_2			MW-3			MW-4			MW-5			MW-6			MW-7	
DIAMETER (inches)		2			2			2			2			2			2			2	
WELL DEPTH		12.00			12.00			12.00			12.00			12.00			12.00			12.00	
SCREEN INTERVAL		2 - 12			2 - 12			2 - 12			2 - 12			2 - 12			2 - 12			2 - 12	
TOC ELEVATION		140.00			139.80			139.74			139.46			139.91			139.63			139.29	
DATE	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.
9/13/2001	135.19	4.81	-	135.21	4.59	-	136.72	3.02	-	135.29	4.17	-	-	-	-	-	-	-	-	-	-
2/15/2002	133.82	6.18	-1.37	133.79	6.01	-1.42	135.09	4.65	-1.63	133.84	5.62	-1.45	133.81	6.10		133.75	5.88		134.76	4.53	-
6/8/2016	DE	STROY	ED	DE	STROY	ED	DE	STROY	ED	138.06	1.40	4.22	138.76	1.15	4.95	137.53	2.10	3.78	138.49	0.80	3.73
11/30/2016										135.86	3.60		136.21	3.70		136.31	3.32			NM	
5/30/2017										134.36	5.10		134.41	5.50		134.29	5.34		135.29	4.00	
WELL NO.		DW-1			MW-8			MW-9			MW-10			MW-11			MW-1R				
DIAMETER (inches)		2			1			1			1			1			1				
WELL DEPTH		25			12.00			12.00			12.00			12.00			12.00				
SCREEN INTERVAL		20 - 25			2-12			2-12			2-12			2 - 12			2-12				
TOC ELEVATION		139.59			139.67			139.81			139.67			139.91			139.70				
DATE	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.
2/15/2002	133.74	5.85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
6/8/2016	DE	STROY	ED	137.58	2.09		138.29	1.52		137.92	1.75		138.13	1.78		137.55	2.15				
11/30/2016		NM		136.41	3.26		136.04	3.77		136.72	2.95		136.69	3.22		135.96	3.74				
5/30/2017				135.24	4.43		134.28	5.53		135.26	4.41		135.28	4.63		134.16	5.54				
							150			110			22.20								

Notes:

^{*} Denotes well previously installed at the site

TABLE 2A: GROUNDWATER ANALYTICAL SUMMARY

Facility Name: Ariana Discount Beverage FDEP Facility ID No. 53/8623822

	Sample	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	Total Arsenic	Total Cadmium	Total Chromium	Total Lead	TRPH
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
	GCTLs	1**	40**	30**	20**	20	10**	5**	100**	15**	5000
	NADCs	100	400	300	200	200	100	50	1000	150	50000
Location	Date					•					
	9/13/2001	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	NS	NS	NS	NS	520
MW-1											
	6/8/2016	0.4 U	0.4 U	0.4 U	0.8 U	0.4 U	NS	NS	NS	NS	405
MW-1R	5/30/2017	0.800 U	0.800 U	0.800 U	1.60 U	0.800 U	NS	NS	NS	NS	83 I
	3,70,2011										
	9/13/2001	1.0 U	1.0 U	1.0 U	3.0 U	5.8	NS	NS	NS	NS	530 U
MW-2	3/13/2001	1.00	1.00	1.00	3.0 0	5.0	140	140	140	140	330 0
	9/13/2001	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	NS	NS	NS	NS	500 U
MW-3	9/13/2001	1.00	1.00	1.00	3.00	1.00	INS	INS	INS	ING	300 0
	9/13/2001	50	12	290	660	1.0 U	NS	NS	NS	NS	520
	6/8/2016	0.4 U	0.4 U	0.4 U	0.8 U	0.4 U	NS	NS	NS	NS NS	631
MW-4								NS		NS NS	
	5/30/2017	0.400 U	0.400 U	0.400 U	0.800 U	0.400 U	NS	N5	NS	INS	1290
	2/15/2002	1.0 U	1.0 U	1.0 U	3.0 U	3.0 U	NS	NS	NS	NS	400 U
		0.4 U	0.4 U	0.4 U	0.8 U	0.4 U	NS	NS	NS	NS NS	200 U
MW-5	6/8/2016						NS NS	NS NS	NS NS	NS NS	
	5/30/2017	0.400 U	0.400 U	0.400 U	0.800 U	0.400 U	INS	N5	N5	INS	81 I
	2/15/2002	1.0 U	1.0 U	1.0 U	3.0 U	3.0 U	NS	NS	NS	NS	1172
MW-6	6/8/2016	0.4 U	0.4 U	0.4 U	0.8 U	0.4 U	NS	NS	NS	NS	542
	5/30/2017	0.400 U	0.400 U	0.400 U	0.800 U	0.400 U	NS	NS	NS	NS	75 U
	2/15/2002	1.0 U	1.0 U	1.0 U	3.0 U	3.0 U	NS	NS	NS	NS	3.0 U
	6/8/2016	0.4 U	0.4 U	0.4 U	0.8 U	0.4 U	NS	NS	NS	NS	200 U
MW-7	5/30/2017	0.400 U	0.400 U	0.400 U	0.800 U	0.400 U	NS	NS	NS	NS	75 U
	3/30/2017	0.400 0	0.400 0	0.400 0	0.000 0	0.400 0	140	140	140	140	730
	6/8/2016	0.4 U	0.4 U	0.97 I	0.8 U	0.4 U	NS	NS	NS	NS	1110
MW-8	5/30/2017	0.400 U	0.400 U	0.400 U	0.800 U	0.400 U	NS	NS	NS	NS	172
	5/55/2017	0.400 0	0.400 0	0.400 0	0.000 0	0.400 0	140	140	140	140	172
	6/8/2016	0.4 U	0.4 U	0.4 U	0.8 U	0.4 U	NS	NS	NS	NS	480
MW-9	5/30/2017	0.400 U	0.400 U	0.400 U	0.800 U	0.400 U	NS	NS	NS	NS	84 I
	3,70,2011	-		01100							
	6/8/2016	0.4 U	0.4 U	0.4 U	0.8 U	0.4 U	NS	NS	NS	NS	508
MW-10	5/30/2017	0.400 U	0.400 U	0.400 U	0.800 U	0.400 U	NS	NS	NS	NS	104 I
	3,33,23	555 5	0000	555	0.000	0000					
	6/8/2016	0.4 U	0.4 U	0.4 U	0.8 U	0.4 U	NS	NS	NS	NS	561
MW-11	5/30/2017	0.400 U	0.400 U	0.400 U	0.800 U	0.400 U	NS	NS	NS	NS	176
	3,33,2311	555 5	0000	0000	0.000	0000					
	2/15/2002	1.0 U	1.0 U	1.0 U	3.0 U	3.0 U	NS	NS	NS	NS	400 U
DW-1	2/10/2002	1.00	1.00	1.00	0.0 0	0.00	110	140	110	1,10	400 0

Notes: NS = Not Sampled.

MDL = Method Detection Limit
PQL = Practical Quantitation Limit

U = Not Detected

I = Result > MDL but < PQL

D = Analyte reported from Dilution Analysis

GCTLs = Groundwater Cleanup Target Levels specified in Table I of Chapter 62-777, F.A.C.

TABLE 2B: GROUNDWATER ANALYTICAL SUMMARY

Facility Name: Ariana Discount Beverage

FDEP Facility ID No. 53/8623822

Sar	nple	Naphthalene	1-Methyl- naphthalene	2-Methyl- naphthalene	Acenaphtene	Acenaph- thylene	Anthracene	Benzo (g,h,i) perylene	Flouranthene	Flourene	Phenan- threne	Pyrene
		(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)
	TLs	14	28	28	20	210	2100	210	280	280	210	210
NA	DCs	140	280	280	200	2100	21000	2100	2800	2800	2100	2100
Location	Date											
MW-1	9/13/2001	0.21 U	0.21 U	0.21 U	0.22 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
	6/8/2016	0.047 U	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.014 U	0.023 U	0.023 U	0.023 U	0.023 U
MW-1R	5/30/2017	0.047 U	0.047 U	0.047 U	0.024 U	0.024 U	0.024 U	0.014 U	0.029 I	0.024 U	0.024 U	0.024 U
MW-2	9/13/2001	0.21 U	0.21 U	0.21 U	0.22 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
MW-3	9/13/2001	0.20 U	0.20 U	0.20 U	0.21 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
				_								
	9/13/2001	0.20 U	2	3	0.21 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
	6/8/2016	0.05 I	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.654	0.869	0.023 U	0.142	0.688
MW-4	11/30/2016	0.098	0.0610 i	0.103	0.023 U	0.023 U	0.023 U	0.014 U	0.023 U	0.023 U	0.023 U	0.023 U
	11/30/2016 (filtered)	0.047 U	0.047 U	0.047 U	0.024 U	0.024 U	0.024 U	0.014 U	0.024 U	0.024 U	0.024 U	0.024 U
	5/30/2017	0.047 U	0.047 U	0.058 I	0.024 U	0.024 U	0.024 U	0.051	0.057	0.024 U	0.024 U	0.048
	0/5/0000	00.11	0011	00.11	2011	2011	5011	4.011	0.011	0011	5011	2211
	2/5/2002	20 U	20 U	20 U	20 U	20 U	5.0 U	1.0 U	2.0 U	20 U	5.0 U	2.0 U
MW-5	6/8/2016	0.047 U	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.014 U	0.023 U	0.023 U	0.023 U	0.023 U
	5/30/2017	0.047 U	0.047 U	0.047 U	0.024 U	0.024 U	0.024 U	0.014 U	0.024 U	0.024 U	0.024 U	0.024 U
	2/5/2002	20 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	20 U	5.0 U	2.0 U
MW-6	6/8/2016	0.047 U	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.014 U	0.023 U	0.023 U	0.023 U	0.023 U
	5/30/2017	0.047 U	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.014 U	0.023 U	0.023 U	0.023 U	0.023 U
	2/5/2002	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
MW-7	6/8/2016	0.047 U	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.019 I	0.023 U	0.023 U	0.023 U	0.023 U
	5/30/2017	0.047 U	0.047 U	0.047 U	0.024 U	0.024 U	0.024 U	0.014 U	0.024 U	0.024 U	0.024 U	0.024 U
	0/0/0040	05.4	0.50	0.00	0.07	0.00011	0.00011	0.04411	0.000.11	0.040	0.00011	0.000
MW-8	6/8/2016 5/30/2017	25.1	8.53	9.32	0.07 0.023 U	0.023 U	0.023 U 0.023 U	0.014 U 0.014 U	0.023 U	0.048 0.023 U	0.023 U	0.023 U 0.023 U
MAA-9	5/30/2017	0.379	0.062 I	0.264	0.023 0	0.023 U	0.023 0	0.014 0	0.023 U	0.023 0	0.023 U	0.023 0
	6/8/2016	0.047 U	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.014 U	0.023 U	0.023 U	0.023 U	0.023 U
MW-9	5/30/2017	0.047 U	0.047 U	0.047 U	0.024 U	0.024 U	0.024 U	0.014 U	0.024 U	0.024 U	0.024 U	0.024 U
	0/0/0040	0.04711	0.047.11	0.04711	0.000.11	0.00011	0.00011	0.04411	0.00011	0.00011	0.00011	0.000
MW 40	6/8/2016	0.047 U	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.014 U	0.023 U	0.023 U	0.023 U	0.023 U
MW-10	5/30/2017	0.047 U	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.014 U	0.023 U	0.023 U	0.023 U	0.023 U
	6/8/2016	0.047 U	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.014 U	0.023 U	0.023 U	0.023 U	0.023 U
MW-11	5/30/2017	0.047 U	0.047 U	0.047 U	0.024 U	0.024 U	0.024 U	0.014 U	0.024 U	0.024 U	0.024 U	0.024 U
DW-1	2/5/2002	20 U	20 U	20 U	20 U	20 U	5.0 U	1.0 U	2.0 U	20 U	5.0 U	2.0 U

Notes: NS = Not Sampled.

MDL = Method Detection Limit

PQL = Practical Quantitation Limit

U = Not Detected

I = Result > MDL but < PQL

D = Analyte reported from Dilution Analysis

GCTLs = Groundwater Cleanup Target Levels specified in Table I of Chapter 62-777, F.A.C.

NADCs = Natural Attenuation Default Source Concentrations specified in Table V of Chapter 62-777, F.A.C.

TABLE 2C: GROUNDWATER ANALYTICAL SUMMARY

Facility Name: Ariana Discount Beverage FDEP Facility ID No. 53/8623822

	Sample	Benzo (a) pyrene	Benzo (a) anthracene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Indeno (1,2,3-cd) pyrene
		(μg/L)	(μg/L)	(μg/L)	(µg/L)	(μg/L)	(μg/L)	(µg/L)
	GCTLs	0.2	0.05	0.05	0.5	4.8	0.005	0.05
	NADCs	20	5	5	50	480	0.5	5
Location	Date							
MW-1	9/13/2001	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U
IVI VV-1								
	6/8/2016	0.014 U	0.023 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.014 U
MW-1R	5/30/2017	0.014 U	0.024 U	0.014 U	0.014 U	0.024 U	0.0048 U	0.014 U
	9/13/2001	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U
MW-2	5,15,2551	0.021 0	0.021 0	0.021 0	0.02.1 0	0.0210	0.0210	0.02.10
	9/13/2001	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
MW-3	9/13/2001	0.020 0	0.020 0	0.020 0	0.020 0	0.020 0	0.020 0	0.020 0
	0//0/0004	0.00011	0.000.11	0.00011	0.000.11	0.00011	0.00011	0.0001:
	9/13/2001	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
	6/8/2016	0.599	0.416	0.976	0.34	0.693	0.091	0.639
MW-4	11/30/2016	0.0140 U	0.0230 U	0.0140 U	0.0140 U	0.0230 U	0.00560 i	0.0140 U
	11/30/2016 (filtered)	0.0140 U	0.0240 U	0.0140 U	0.0140 U	0.0240 U	0.00480 U	0.0140 U
	5/30/2017	0.042 I	0.033 I	0.065	0.026 I	0.043 I	0.009 I	0.05
	2/5/2002	0.2 U	0.2 U	0.2 U	0.5 U	1.0 U	0.2 U	0.2 U
	6/8/2016	0.014 U	0.023 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.014 U
MW-5	5/30/2017	0.014 U	0.024 U	0.014 U	0.014 U	0.024 U	0.0048 U	0.014 U
	2/5/2002	0.2 U	0.2 U	0.2 U	0.5 U	1.0 U	0.2 U	0.2 U
	6/8/2016	0.014 U	0.023 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.014 U
MW-6	5/30/2017	0.014 U	0.023 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.014 U
	3/30/2017	0.014 0	0.020 0	0.0140	0.014 0	0.025 0	0.0040 0	0.0140
	2/5/2002	0.2 U	0.2 U	0.2 U	0.5 U	1.0 U	0.2 U	0.5 U
MW-7	6/8/2016	0.016 I	0.023 U	0.02 I	0.016 I	0.023 U	0.0051 I	0.017 I
	5/30/2017	0.014 U	0.024 U	0.014 U	0.014 U	0.024 U	0.0048 U	0.014 U
	6/8/2016	0.014 U	0.023 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.014 U
MW-8	5/30/2017	0.014 U	0.023 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.014 U
	6/8/2016	0.014 U	0.023 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.014 U
MW-9	5/30/2017	0.014 U	0.024 U	0.014 U	0.014 U	0.024 U	0.0048 U	0.014 U
	6/8/2016	0.014 U	0.023 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.014 U
MW-10	5/30/2017	0.014 U	0.023 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.014 U
	6/8/2016	0.014 U	0.023 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.014 U
MW-11	5/30/2017	0.014 U	0.023 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.014 U
**************************************	5/30/2017	0.014 0	0.024 0	0.014 0	0.014 0	0.024 U	0.0046 U	0.014 0
	0/5/0000	0.011	0.011	2011	0.511	4.011	0.011	
DW-1	2/5/2002	0.2 U	0.2 U	0.2 U	0.5 U	1.0 U	0.2 U	0.2 U

Notes: NS = Not Sampled.

MDL = Method Detection Limit

PQL = Practical Quantitation Limit

U = Not Detected

I = Result > MDL but < PQL

D = Analyte reported from Dilution Analysis

GCTLs = Groundwater Cleanup Target Levels specified in Table I of Chapter 62-777, F.A.C.

NADCs = Natural Attenuation Default Source Concentrations specified in Table V of Chapter 62-777, F.A.C.

TABLE 3: SOIL SCREENING SUMMARY

	SAMPLE		OVA	SCREENING RES	SULTS	
Boring Number	Date Collected	Sample Depth (ft bis)	Total Reading (ppm)	Carbon Filtered (ppm)	Net Reading (ppm)	COMMENTS
		2	20	0	20	
SB-1	04/12/01	6	22 170	0 250	22 NQ	
		8	80	150	NQ NQ	
		2	0	0	0	
SB-2	04/12/01	4	0	0	0	
36-2	04/12/01	6	150	150	0	
		8	60	55	5	
		2 4	0	0	0	
SB-3	04/12/01	6	225	70	155	
		8	275	235	40	
		2	0	0	0	
SB-4	04/12/01	4	0	0	0	
		6 8	0 40	0 40	0	
		2	0	0	0	
SB-5	04/12/01	4	0	0	0	
05-0	V-7/12/V1	6	0	0	0	
		8	45 0	17 0	28 0	
		2 4	0	0	0	
SB-6	04/12/01	6	0	0	0	
		8	15	0	15	
		0 - 2	0	-	0	
SB-7	09/12/01	2 - 4	3	-	3	
		4 - 8 0 - 2	0	-	0	
SB-8	09/12/01	2 - 4	0	-	0	
		4 - 6	5	-	5	
	2011015	0 - 2	0	-	0	
SB-9	09/12/01	2 - 4	0	-	0	
		4 - 6 0 - 2	0	-	0	
MW-1	09/12/01	2 - 4	0	-	0	
		4 - 8	0	-	0	
Mar. 2	00/10/01	0 - 2	0	-	0	
MW-2	09/12/01	2 - 4 4 - 6	0	-	0	
		0 - 2	3	0	3	
		2 - 4	0	-	0	
MW-3	09/12/01	4 - 6	0	-	0	
		6 - 8	0 ND	- ND	0	
		8 - 12 0 - 2	NR 2000	NR 40	NR 1960	
MW-4	09/12/01	2 - 4	18	18	0	
		4 - 6	50	25	25	
B416' -	00/05/00	0 - 2	0	NR	0	
MW-5	02/05/02	2 - 4 4 - 6	0	NR NR	0	
		0 - 2	0	NR NR	0	
MW-6	02/08/02	2 - 4	0	NR	0	
		4 - 6	0	NR	0	
		0 - 2	0	0	0	
MW-7	02/08/02	2 - 4 4 - 6	0	0	0	
		6 - 8	100	60	40	
		0 - 2	0	NR	0	
DW-1	02/07/02	2 - 4	0	NR	0	
		4 - 6	70	100	NQ NO	
		6 - 8	225 NR	400	NQ NR	
		2	NR		NR	
SB-1	05/31/16	3	NR		NR	
]	55,57,10	4	NR		NR	
		5	NR ND		NR NB	
		6	NR		NR	

TABLE 3: SOIL SCREENING SUMMARY

	SAMPLE		OVA	SCREENING RES	SULTS	
Boring Number	Date Collected	Sample Depth (ft bis)	Total Reading (ppm)	Carbon Filtered (ppm)	Net Reading (ppm)	COMMENTS
SB-2	05/31/16	1	NR		NR	
		1	NR		NR	
		2	37		37	
SB-3	05/31/16	3	3		3	
		5	NR NR		NR NR	
		6	NR NR		NR	
		1	66		66	
		2	7		7	
an 4	05/04/40	3	NR		NR	
SB-4	05/31/16	4	NR		NR	
		5	NR		NR	
		6	NR		NR	
		1	NR		NR	
		2	NR		NR	
SB-5	05/31/16	3	NR NB		NR	
		4	NR NB		NR	
		5	NR NR		NR NR	
		1	NR NR		NR NR	
		2	NR NR		NR	
05.5	A.F.(C. * * * * * * * * * * * * * * * * * * *	3	NR		NR	
SB-6	05/31/16	4	NR		NR	
		5	NR		NR	
		6	NR		NR	
		1	5		5	
		2	NR		NR	
SB-7	05/31/16	3	NR		NR	
		4	NR		NR	
		5	NR		NR	
		6	4 ND		4 NR	
		2	NR NR		NR NR	
		3	NR		NR	
SB-8	05/31/16	4	NR		NR	
		5	NR		NR	
		6	2		2	
		1	3		3	
		2	NR		NR	
SB-9	05/31/16	3	NR		NR	
	*********	4	NR		NR	
		5	4 ND		4	
		6	NR NB		NR NB	
		2	NR NR		NR NR	
		3	NR NR		NR NR	
SB-10	05/31/16	4	NR		NR	
		5	NR		NR	
		6	NR		NR	
		1	NR		NR	
		2	NR		NR	
SB-11	05/31/16	3	NR		NR	
J		4	NR		NR	
		5	NR		NR	
		6	2		2	
		1 2	NR NR		NR NR	
		3	NR NR		NR NR	
SB-12	05/31/16	4	NR NR		NR	
		5	NR		NR	
		6	NR		NR	
		1	NR		NR	
		2	NR		NR	
SB-13	05/31/16	3	NR		NR	
36-13	03/31/10	4	NR		NR	
		5	NR		NR	
		6	NR		NR	

TABLE 3: SOIL SCREENING SUMMARY

	SAMPLE		OVAS	SCREENING RES	SULTS	
Boring Number	Date Collected	Sample Depth (ft bis)	Total Reading (ppm)	Carbon Filtered (ppm)	Net Reading (ppm)	COMMENTS
SB-14	05/31/16	1		CONCRETE		
		1	NR		NR	
		2	980		980	
SB-15	05/31/16	3	530		530	
36-13	03/31/10	4	129		129	
		5	48		48	
		6	28		28	
		1	NR		NR	
		2	26		26	
SB-16	05/31/16	3	7		7	
3B-10	03/31/10	4	6		6	
		5	NR		NR	
		6	NR		NR	
		1	NR		NR	
		2	2		2	
SB-17	05/31/16	3	NR		NR	
35-17	00/01/10	4	NR		NR	
		5	NR		NR	
		6	NR		NR	
		0 - 1	<1		<1	
SB-10R	03/10/17	1 - 2	0		0	
02	00/10/11	2 - 3	<1		<1	
		3 - 4	0		0	
		0 - 1	<1		<1	
SB-14R	03/10/17	1 - 2	583		583	
02		2 - 3	360		360	
		3 - 4	32		32	
		0 - 1	<1		<1	
SB-18	03/10/17	1 - 2	8		8	
		2 - 3	4		4	
		3 - 4	<1		<1	
		0 - 1	<1		<1	
SB-19	03/10/17	1 - 2	<1		<1	
		2 - 3	<1		<1	
		3 - 4	0		0	
SB-20	06/12/17	0 - 1		CONCRETE		
		1 - 2	317		317	

TABLE 4A: SOIL ANALYTICAL SUMMARY - VOA, TRPH, Metals

Facility Name: Ariana Discount Beverage FDEP Facility ID#: 53/8623822

Sample OVA					Benzene (mg/kg)	Toluene (mg/kg)	Ethyl- benzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	TRPHs (mg/kg)	Arsenic (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)
SCTL for Leachability Based on Groundwater Criteria SCTL for Direct Exposure Residential						0.5	0.6	0.2	0.09	340	*	7.5	38	*
						7,500	1,500	130	4,400	460	2.1	82	210	400
Boring No. / Well ID No.	Date Collected	Depth to Water (ft bis)	Sample Interval (ft bls)	Net OVA Reading (ppm)										
SS1	4/12/2001				0.13 U	0.13 U	0.13 U	0.39 U	0.13 U	46	NS	NS	NS	NS
SS2	4/12/2001				0.18 U	0.18 U	0.18 U	0.54 U	0.18 U	11 U	NS	NS	NS	NS
SS3	4/12/2001				0.15 U	0.15 U	0.15 U	0.45 U	0.15 U	130	NS	NS	NS	NS
SB-15, 2'	5/31/2016	4	2	980	0.00064 U	0.0027 I	0.0013 I	0.0069	0.0016 U	1150	NS	NS	NS	NS
SB-15, 3'	5/31/2016	4	3	530	0.00057 U	0.0022 I	0.0013 I	0.0049	0.0014 U	42.6	NS	NS	NS	NS
SB-3, 2'	5/31/2016	4	2	37	0.00056 U	0.0027	0.00072 I	0.0046	0.0013 U	109	NS	NS	NS	NS
SB-4, 1'	5/31/2016	4	1	66	0.0005 U	0.0022	0.00056 I	0.004	0.0012 U	26.6	NS	NS	NS	NS
SB-10R @ 0-2ft	3/9/2017	4	0 - 2	<1	NS	NS	NS	NS	NS	21.7	NS	NS	NS	NS
SB-14R @ 0-2ft	3/9/2017	4	0 - 2	583	NS	NS	NS	NS	NS	555	NS	NS	NS	NS
SB-18 @ 0-2ft	3/9/2017	4	0 - 2	8	NS	NS	NS	NS	NS	128	NS	NS	NS	NS
SB-19 @ 0-2ft	3/9/2017	4	0 - 2	<1	NS	NS	NS	NS	NS	59.6 U	NS	NS	NS	NS
SB-20 @ 1-2ft	6/12/2017	NA	1- 2	317	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

NOTES: NA = Not Available

NS = Not Sampled

* = Leachability value may be determined using TCLP.

 $\ensuremath{\textbf{Bold}}$ indicates analyte is detected above the SCTL.

TABLE 4B: SOIL ANALYTICAL SUMMARY - Non-Carcinogenic PAHs

Facility Name: Ariana Discount Beverage FDEP Facility ID#: 53/8623822

Sample OVA				Naph- thalene (mg/kg)	1-Methyl- naph- thalene (mg/kg)	2-Methyl- naph- thalene (mg/kg)	Acenaph- thene (mg/kg)	Acenaph- thylene (mg/kg)	Anthra-cene	Benzo (g,h,i) perylene (mg/kg)	Fluoran- thene (mg/kg)	Fluorene (mg/kg)	Phenan- threne (mg/kg)	Pyrene (mg/kg)	
SCTL for Leachability Based on Groundwater Criteria				1.2	3.1	8.5	2.1	27	2,500	32,000	1,200	160	250	880	
SCTL for Direct Exp	SCTL for Direct Exposure Residential				55	200	210	2,400	1,800	21,000	2,500	3,200	2,600	2,200	2,400
Boring No. / Well ID No.	Date Collected	Depth to Water (ft bls)	Sample Interval (ft bls)	Net OVA Reading (ppm)											
SS1	4/12/2001				0.014	0.010 U	0.012	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.013	0.010 U
SS2	4/12/2001				0.010 U	0.076	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
SS3	4/12/2001				0.010 U	0.010 U	0.010 U	0.010 U	0.012	0.010 U	0.010 U	0.15	0.010 U	0.15	0.11
SB-15, 2'	5/31/2016	4	2	980	14	14.2	26.9	0.135 I	0.13 I	0.098 I	0.043 I	0.08 I	0.25 I	0.236 I	0.074 I
SB-15, 3'	5/31/2016	4	3	530	0.124 U	0.124 U	0.124 U	0.062 U	0.062 U	0.062 U	0.037 U	0.062 U	0.062 U	0.062 U	0.062 U
SB-3, 2'	5/31/2016	4	2	37	0.121 U	0.121 U	0.121 U	0.061 U	0.061 U	0.061 U	0.036 U	0.061 U	0.061 U	0.061 U	0.061 U
SB-4, 1'	5/31/2016	4	1	66	0.109 U	0.109 U	0.109 U	0.055 U	0.055 U	0.055 U	0.063 I	0.07 I	0.055 U	0.055 U	0.062 I
SB-10R @ 0-2ft	3/9/2017	4	0 - 2	<1	0.112 U	0.112 U	0.112 U	0.0560 U	0.0560 U	0.0560 U	0.0340 U	0.0560 U	0.0560 U	0.0560 U	0.0560 U
SB-14R @ 0-2ft	3/9/2017	4	0 - 2	583	17.6	6.1	13.9	0.0650 U	0.0650 U	0.0650 U	0.0390 U	0.0650 U	0.0650 U	0.0650 U	0.0650 U
SB-18 @ 0-2ft	3/9/2017	4	0 - 2	8	0.175 U	0.175 U	0.175 U	0.0880 U	0.0880 U	0.0880 U	0.0530 U	0.0880 U	0.0880 U	0.0880 U	0.0880 U
SB-19 @ 0-2ft	3/9/2017	4	0 - 2	<1	0.119 U	0.119 U	0.119 U	0.0600 U	0.0600 U	0.0600 U	0.0360 U	0.0600 U	0.0600 U	0.0600 U	0.0600 U
SB-20 @ 1-2ft	6/12/2017	NA	1- 2	317	13.9	15.1	31.1	0.0120 I	0.0670 U	0.107 I	0.040 U	0.0720 I	0.196 I	0.1991	0.0670 U

NOTES: NA = Not Available

NS = Not Sampled

I = The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

Bold indicates analyte is detected above the SCTL.

TABLE 4C: SOIL ANALYTICAL SUMMARY - Carcinogenic PAHs

Facility Name: Ariana Discount Beverage FDEP Facility ID#: 53/8623822

Sample				Benzo (a) pyrene (mg/kg)	Benzo (a) anthracene (mg/kg)	Benzo(b) fluoranthene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenz(a,h) anthracene (mg/kg)	Indeno (1,2,3- cd) pyrene (mg/kg)	Benzo (a) pyrene equivalent (mg/kg)	
SCTL for Leachabil	SCTL for Leachability Based on Groundwater Criteria					0.8	2.4	24	77	0.7	6.6	8
SCTL for Direct Exp	SCTL for Direct Exposure Residential					1.3	1.3	13	130	0.1	1.3	0.1
SCTL for Direct Exp	SCTL for Direct Exposure Commercia					6.6	6.5	66	640	0.7	6.6	0.7
Boring No. / Well ID No.	Date Collected	Depth to Water (ft bls)	Sample Interval (ft bls)	Net OVA Reading (ppm)								
SS1	4/12/2001				0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	
SS2	4/12/2001				0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	
SS3	4/12/2001				0.022	0.025	0.034	0.010 U	0.049	0.010 U	0.018	
SB-15, 2'	5/31/2016	4	2	980	0.026 U	0.052 I	0.041 I	0.042 U	0.042 U	0.026 I	0.042 U	0.05
SB-15, 3'	5/31/2016	4	3	530	0.023 U	0.037 U	0.032 U	0.037 U	0.037 U	0.0089 U	0.037 U	0.02
SB-3, 2'	5/31/2016	4	2	37	0.022 U	0.036 U	0.034 I	0.036 U	0.036 U	0.0087 U	0.036 U	0.02
SB-4, 1'	5/31/2016	4	1	66	0.065	0.033 U	0.072 I	0.038 I	0.057 I	0.023 I	0.055 I	0.1
SB-10R @ 0-2ft	3/9/2017	4	0 - 2	<1	0.0210 U	0.0340 U	0.0290 U	0.0340 U	0.0340 U	0.00810 U	0.0340 U	
SB-14R @ 0-2ft	3/9/2017	4	0 - 2	583	0.0240 U	0.0390 U	0.0340 U	0.0390 U	0.0390 U	0.00930 U	0.0390 U	
SB-18 @ 0-2ft	3/9/2017	4	0 - 2	8	0.0320 U	0.0530 U	0.0460 U	0.0530 U	0.0530 U	0.0130 U	0.0530 U	
SB-20 @ 1-2ft	6/12/2017	NA	1- 2	317	0.0280 i	0.0460 i	0.0350 U	0.0400 U	0.0400 U	0.00970 U	0.0400 U	

NOTES: NA = Not Available

NS = Not Sampled

I = The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

Bold indicates analyte is detected above the SCTL.



Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Rick Scott Governor

Carlos Lopez-Cantera Lt. Governor

> Noah Valenstein Secretary

December 14, 2017

(Sent via email only to addressee at mminard@mas-env.com)

Mr. Michael Minard MAS Environmental, LLC 1808 Franklin St. Tampa, FL 33602

Subject: LSSI Deliverable Review

Ariana Discount Beverage

315 Rams Gate Rd.

Auburndale, Polk County FDEP Facility ID# 538623822 Discharge Date: 4/6/93 (PLRIP)

Priority Score: 10 (LSSI)

Work Order #: 2017-95-W0338B

Dear Mr. Minard:

The Petroleum Restoration Program (PRP) has reviewed the LSSI Site Assessment Report Addendum dated and received September 30, 2017, and the Response to Comments dated and received December 13, 2017 submitted for this facility. The report is acceptable and demonstrates that the work outlined in Work Order # 2017-95-W0338B was satisfactorily performed. Please remember that pursuant to PRP procedures, the final invoice for this work order must be received within 30 days of receipt of this letter.

The PRP agrees with MAS's recommendation to cease all field activities and place the discharge back into priority score funding order. The petroleum contamination has been generally characterized and the discharge does not meet the LSSI criteria because the cost to remediate the soil impacts would exceed the LSSI Remedial Action funding cap. Revisions to Section 376.3071(12)(b), Florida Statutes (FS) became effective July 1, 2016. If the property owner can affirmatively demonstrate that the revisions to the law can be applied to this facility, the property owner may submit an updated LSSI application and proposal requesting an evaluation. Applications and proposals should be sent to the letterhead address, Mail Station 4580, Attention: Rob Perlowski.

Mr. Michael Minard FDEP Facility ID # 53/8623822 Page 2 December 14, 2017

If you have any questions about the review, please contact me at (850) 222-6446, extension 5029, muanino@northstar.com or at the letterhead address, Mail Station 4585.

Sincerely,

Mark Uanino

NorthStar Contracting Group Site Manager Petroleum Restoration Program Section Five

Work Climi

muanino@northstar.com
|2 |8|17

Felicia Mizener

Contract Manager/Engineering Specialist III

Petroleum Restoration Program

Florida Department of Environmental Protection

Felicia.Mizener@dep.state.fl.us

Reviewed by:

Shawn Inglett, P.G.

State of Florida P.G. No. 2629

NorthStar Contracting Group Senior Geologist

Petroleum Restoration Program Section Five

Date

cc: Dinesh Patel, Lion Food Store, 19 Palm Point Drive, Inglis, FL 34449

ec: File

Old Dixie Trail PD&E Study FPID No: 435391-1-22-01 Contamination Screening Evaluation Report



Map ID 6: CFPL Auburndale



UNIVERSAL Solutions, Inc.

Engineers, Scientists, Environmental Consultants

8339 Stone Run Ct. • Tampa, Florida 33615 (813) 639-1241 • Fax (813) 639-1622

January 23, 2017

Florida Department of Environmental Protection Southwest District Office Waste Cleanup Section 13051 North Telecom Parkway Temple Terrace, FL 33637-0926

Attention: Mr. John Sego, P.G.

Subject: Interim Source Removal Plan

CFPL – Auburndale Facility

101 Bridget Lane

Auburndale, Polk County, Florida

FDEP Site ID No. COM 340016/PROJECT NO. 349214

Dear Mr. Sego:

Pursuant to our conference on December 7, 2016 and your follow up email summarizing the meeting dated December 12, 2016, UNIVERSAL Solutions, Inc. (UNIVERSAL) is pleased to submit the enclosed Interim Source Removal Plan (ISRP) for the above referenced site. In addition, based upon the January 10, 2017 teleconference with Brian Dougherty of the FDEP, the request for additional assessment and subsequent report due January 30th was determined to be unnecessary at this time as confirmatory soil samples will be collected upon completion of the remedial action. Please see Section 5.5 of the attached ISRP. If you have any questions concerning this ISRP or this project in general, please contact us at (813) 639-1241.

Sincerely,

UNIVERSAL Solutions, Inc.

Keith Ford, P.E. Project Engineer

cc: Mr. Jerry Aycock, P.E., Director of Remediation, Southeast Region

Mr. Christopher Fleck, P.E., Manager EHS

INTERIM SOURCE REMOVAL PLAN

CFPL – Auburndale Facility Near 101 Bridget Street, Auburndale, Polk County, Florida Discharge of Jet Fuel FDEP Site ID No. COM 340016/Project No. 349214

UNIVERSAL PROJECT NO. 5490

Prepared for:



Florida Department of Environmental Protection Southwest District Office Waste Cleanup Section 13051 North Telecom Parkway Temple Terrace, FL 33637-0926

January 2017

INTERIM SOURCE REMOVAL PLAN CFPL – AUBURNDALE FACILITY 101 BRIDGET LANE AUBURNDALE, POLK COUNTY, FLORIDA FDEP Site ID No. COM_340016/Project No. 349214 UNIVERSAL PROJECT NO. 5490

I hereby certify that the engineering design has been performed by me or under my direct supervision and in accordance with commonly accepted procedures consistent with the practice of engineering. In my professional judgment, the components contained in this Interim Source Removal Plan satisfy the requirements set forth in Chapter 62-780, F.A.C., and that the engineering design features incorporated in this plan provide reasonable assurance of achieving the objectives in 62-780, F.A.C. for a remedial action.

Keith W. Ford, P.E. Florida License #57449

Date

EXECUTIVE SUMMARY

This Interim Source Removal Plan (ISRP) has been prepared by UNIVERSAL Solutions, Inc. (UNIVERSAL) to provide a recommended design for the remediation of the petroleum impacted soil and groundwater as summarized and depicted in the Supplemental Site Assessment Report dated October 24, 2016 for the CFPL Auburndale Facility located near 101 Bridget Lane, Auburndale, Polk County, Florida. The facility is used to monitor the transmission of petroleum products via a 10-inch underground pipeline that extends from the Port of Tampa to the CFPL Orlando Terminal and the Orlando International Airport. In July 2015, a Jet fuel release was identified at a metering station located along the pipeline in Auburndale, Florida. The leak originated from a 3/8-inch stainless steel tube attached to a petroleum piping block valve and resulted in an estimated 40.5 gallons of Jet fuel being released onto a discrete area of the property. Based upon assessment activities, the petroleum related soil and groundwater contamination impacts do not extend off-site.

In selecting a remedial approach, various alternatives for the recovery, treatment and disposal of the dissolved petroleum related contamination were evaluated. Among the primary factors considered were the long and short term environmental impacts, simplicity of implementation, operation and maintenance requirements, estimates of reliability, feasibility and a comparison of the costs. UNIVERSAL recommends the installation of seven dual phase recovery wells in order to remediate the impacted media. Recovered groundwater will be discharged into the City of Auburndale sanitary sewer system and off-gas will be treated using vapor phase carbon prior to discharge to atmosphere. In the event that the recovered groundwater does not meet the City of Auburndale discharge limitations, it will be treated using liquid phase carbon prior to discharge.

ISRP implementation costs, including system construction, one year of active remediation, one year of post active remediation monitoring, and system removal/site restoration are estimated to be \$660,000.

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APPENDICES

Appendix A: Contaminant Mass Calculations

Appendix B: Dual Phase Extraction System Piping Design Calculations

Appendix C: CFPL Owned Remediation Equipment

Appendix D: Completed RAP Summary Form

INTERIM SOURCE REMOVAL PLAN CFPL – AUBURNDALE FACILITY 101 BRIDGET LANE AUBURNDALE, POLK COUNTY, FLORIDA FDEP Site ID No. COM_340016/Project No. 349214 UNIVERSAL PROJECT NO. 5490

1.0 INTRODUCTION

This Interim Source Removal Plan (ISRP) was prepared by UNIVERSAL Solutions, Inc. (UNIVERSAL) to address petroleum-impacted soil and groundwater at the CFPL – Auburndale facility located near 101 Bridget Lane, Auburndale, Polk County, Florida. An Aerial Map of the CFPL Auburndale facility is provided as **Figure 1**. A Site Map is provided as **Figure 2**.

This ISRP was prepared to fulfill the requirements of Chapter 62-780.700 of the Florida Administrative Code (F.A.C.) for remediation of petroleum related contamination. It is intended to address on-site petroleum contamination associated with the documented July 12, 2015 Jet Fuel release at the CFPL Auburndale facility. The assessment and cleanup are being funded by Central Florida Pipeline LLC (CFPL). This document includes a brief site history, results from the site assessment activities and a recommendation for the treatment of petroleum-impacted soil and groundwater.

1.1 Background Information

On July 12, 2015, Jet fuel was observed leaking from a damaged section of stainless steel tubing connected to a block valve for the 10-inch diameter pipeline at the CFPL Auburndale facility. In response to the release, CFPL shut-down the pipeline, closed the valve on the tubing, and initiated source removal activities. It was determined that approximately 40.5 gallons of Jet fuel was released at the site. In addition, CFPL concluded that the stainless steel tubing had been damaged due to a nearby lightning strike, and that the damage resulted in the subject discharge. CFPL subsequently filed a Discharge Reporting Form (DRF) with the Florida Department of Protection (FDEP) Division of Emergency Response on July 13, 2015.

Following the discovery of the petroleum release, CFPL immediately initiated interim source removal activities at the site in accordance with the regulations set forth by Chapter 62-780.500, F.A.C. SWS Environmental and USI were contracted by CFPL to assist with the removal efforts. SWS Environmental excavated stained soils at the release area via vacuum extraction on July 12, 2015 and July 13, 2015. The final limits of the excavations are presented on **Figure 2**, and the depth of the excavated areas was measured to be approximately 4 ft below grade. In total, 35.04 tons of soil were removed from the site and transported to Clark Environmental in Mulberry,

Florida for proper disposal. The remaining soils in the area of the release were subsequently assessed by USI personnel for petroleum impacts.

1.2 Summary of Contamination Assessment Activities

The findings of the soil quality assessment were documented in the USI prepared Interim Source Removal Report dated September 16, 2015 and submitted to the FDEP Southwest District Office. Subsequent to the Source Removal Report, USI completed supplemental site assessment activities at the CFPL Auburndale facility and submitted the results in a report dated April 6, 2016. However, in order achieve the requirements specified by Rule 62-780 of the Florida Administrative Code (F.A.C.), as part of a FDEP Comment Letter dated April 27, 2016 the FDEP indicated that additional groundwater and soil assessment activities should be performed at the site.

The purpose of the supplemental assessment was to confirm the boundaries of the documented groundwater and soil contaminant plumes with respect to the information provided in the USI Site Assessment Report (SAR) dated April 6, 2016. The general findings of the completed field events are as follows:

June 14, 2016

- Groundwater samples were collected from the deep zone well DMW-1 and shallow zone wells MW-1 through MW-5. The samples were laboratory analyzed for BTEX/MTBE (EPA Method 8260), PAHs (EPA Method 8270), and TRPHs (FL-PRO), and based on the analytical results, the sample collected from only one well, MW-1, exhibited concentrations of petroleum constituents exceeding the respective GCTLs or NADC. The contaminants of concern included Benzene, Toluene, Ethylbenzene, Total Xylenes, and TRPH, and the dissolved-phase impacts are limited to the area of MW-1, which is in the immediate source area. Overall, the groundwater analytical results reported for the field event are consistent with the groundwater analytical data presented by the April 6, 2016 SAR.
- The approximate depth of the water table was found to range between 13.85 ft and 15.25 ft below grade. The unsaturated/vadose zone, therefore, was determined to extend from land surface to 13 ft below grade, and the saturated zone was determined to extend beyond 13 ft below grade.
- Based on the depth-to-groundwater measurements, localized groundwater flows in a general westerly direction. This finding is consistent with the inferred groundwater flow direction presented in the April 6, 2016 SAR.

July 12, 2016

- Eight (8) soil borings (SB-16 through SB-23) were advanced at the facility in an effort to confirm the data provided by the April 6, 2016 SAR. The borings were positioned at locations along the inferred limits of soil impacts as presented in the April 6, 2016 SAR.
- The soils obtained from the unsaturated zone (<13 ft below grade) of each boring did not exhibit concentrations of organic vapors above 10 ppm. However, organic vapor concentrations exceeding 10 ppm were encountered within the saturated zone (>13 ft below grade) of borings SB-16, SB-17, SB-19, and SB-23 consistent with previous SAR findings.
- Five (5) soil samples were retained from unsaturated zone borings SB-16, SB-17, SB-18, SB-20 and SB-22, and the samples were laboratory analyzed for petroleum indicator compounds.
- Only one soil sample, obtained from boring SB-22 at 2 ft below grade, exhibited a concentration of Benzo(a)pyrene and Benzo(a)pyrene Equivalents above the SCTLs for Residential Direct Exposure. The analytical data demonstrated that the remaining soil samples were not impacted by petroleum-related contamination.

September 29, 2016

- Ten (10) soil borings (SB-16R, SB-17R, SB-18R, SB-20R, SB-21R, SB-22R, SB-22A, SB-22B, SB-22C, and SB-23R) were advanced at locations proximal to former soil borings. The purpose of the field event was to define the limits of impacted soils in accordance with Rule 62-780.600(5)(c)3., F.A.C.
- All soil samples obtained from the unsaturated zone (<13 ft below grade) did not exhibit concentrations of organic vapors above 10 ppm.
- Twenty-one (21) soil samples were obtained from the subject soil borings for laboratory analysis of petroleum indicator compounds. An additional, twenty-six (26) samples were placed on hold at the laboratory depending on the results from the original 21 samples.
- The laboratory analytical data showed that the original 21 soil samples did not contain concentrations of constituents above applicable SCTLs. This finding is significant given that the samples obtained from soil borings SB-22R, SB-22A, SB-22B, and SB-22C did not exhibit concentrations of Benzo(a)pyrene and Benzo(a)pyrene Equivalents above applicable SCTLs for Residential Direct Exposure. Thus, it appears that the

concentrations of Benzo(a)pyrene and Benzo(a)pyrene Equivalents from previous analyses were anomalous data.

A total estimated 40.5 gallons of Jet Fuel is documented to have been released at the CFPL Auburndale facility. An excavation was conducted as part of the Initial Remedial Action, but the presence of significant utilities prevented the excavation of all impacted soils. Subsequent assessment activities indicate that both soil and groundwater contamination are present in the subject area. The total volume of impacted groundwater within the treatment area proposed as part of this ISRP was estimated to be approximately 10,278 gallons containing ~0.50 lbs of dissolved petroleum related contaminants (see **Appendix A**, **Contaminant Mass Calculations**). Although excavation activities removed a significant quantity of impacted soils, some portion is known to remain. Based upon the total Jet Fuel release of 40.5 gallons, and a specific gravity for Jet Fuel of ~7 lbs/gallon, the total mass of contamination in the vadose/smear zone soils should be <280 lbs.

Soil boring locations are depicted on Figure 3. OVA/PID readings are summarized on Table 1 and on Figures 4A/4B. Soil analytical data is summarized on Table 2 and on Figure 5. Groundwater analytical results are summarized on Tables 3A/3B and on Figure 6.

1.3 Site Geology/Hydrogeology

The CFPL – Auburndale facility is located in Section 11, Township 28S, and Range 25E in Polk County, Florida. A topographic map is provided as **Figure 7**. During the soil boring and monitoring well installation activities, USI classified the soils that were encountered at each borehole location. The lithology at the site generally consists of the following:

- Stratum I (land surface to 16 ft below grade): tan to yellow/orange fine grained sand (SP) with varying percentages of sand/silt mixtures (SM).
- Stratum II (16-27 ft below grade): tan competent clay (CH).
- Stratum III (27-31 ft below grade): orange fine grained sand with rock fragments (SW).
- Stratum V (31-34 ft below grade): grey clayey sand (SC).
- Stratum VI (34-40 ft below grade): tan/orange silty sands (SM) and light grey fine grained sands with orange mottling (SP).

Cross section maps depicting the lithology are presented as **Figures 8A/8B/8C**.

The recorded depth-to-groundwater measurements are presented in **Table 4**. Based on the measurements and the top of casing elevations, groundwater elevation contour maps were created for the shallow aquifer zone (**Figure 9A/9B**). As illustrated by the map, localized groundwater appears to flow in a general westerly direction.

The hydraulic gradient (i) of the shallow aquifer zone at the CFPL – Auburndale facility has been calculated from the most recent groundwater sampling events. Referring to the inferred flow direction of groundwater and the groundwater contours (**Figure 9A/9B**), up-gradient well MW-3 and down-gradient well MW-5 were best suited for the computation of the hydraulic gradient, subsequently determined to be 0.0049 ft/ft (based upon the two most recent data collected on December 8, 2015 and June 14, 2016). The hydraulic conductivity was estimated as part of previous investigations at the site to be ~50 feet/day. Lastly, the porosity was estimated at 20%. Using these values the flow velocity at the site (V) was calculated to be approximately 1.2 ft/day. The estimated hydrogeologic parameters are presented in **Table 5**.

2.0 REMEDIAL ACTION SELECTION

Active remediation per Chapter 62-780, F.A.C. is required to address the detected soil and dissolved petroleum related contaminants based on the laboratory analytical data collected at the site (**Tables 2/3**). The primary source of contaminants appears to be from the Jet fuel release that occurred on July 12, 2015.

2.1 Groundwater Controls

Off-site contaminant migration does not appear to have occurred in relation to the subject Jet fuel release and does not appear to be a significant threat at this time. As such, groundwater control was not considered as part of this ISRP. However, the remedial strategy recommended will result in some degree of groundwater control.

2.1.1 Design Criteria

Based on the extent and concentration of the petroleum related contaminants present, the lithology identified, and UNIVERSAL's professional judgment and experience, a dual phase remediation system was determined to be the most practical alternative for recovery of the petroleum related contaminants and reducing the potential for future plume migration. The applicability and suitability of this method was evaluated based on local hydrogeologic characteristics, contaminant makeup, remediation equipment availability, and economic feasibility. Other factors considered included site access such as buildings, utilities, etc. (**Figures 1** and **2**).

2.1.2 Process Design

Dual phase extraction is essentially a de-watering system which also draws vapors from the subsurface. The process works by applying a high vacuum to a series of dual phase extraction wells. Groundwater is removed by direct vacuum and/or by air lifting through a small diameter (3/4-inch) drop tube lowered into the well. Air lift is required when groundwater exists at greater than 25 feet bls and an aboveground pump is used. Air lift is achieved by adjusting the vacuum on the drop tube to induce an air flow rate through the tube of >2,500 feet/minute. At this flow

rate, water is entrained in the air stream and is drawn up the tube. Air being drawn through the drop tube will induce a vacuum on the well itself, thereby capturing soil vapors from the dewatered and exposed soils. A higher vapor flow rate can typically be recovered from the well by applying a higher vacuum directly onto the well screen.

The proposed 4" diameter dual phase recovery wells (7) are proposed to be installed to a total depth of 18 feet bls, with a screened interval from 4 - 18 feet bls. The depth and screen length of the recovery wells was determined based on the lack of shallow contamination identified, the historic depth to water measurements, and the confining clay layer identified at 16 feet bls. The borehole/well screen is intentionally designed to be installed slightly into the confining clay layer to provide a sump for the collection of groundwater. Based upon the sandy lithology and past experience, each well is anticipated to have a 15-foot radius of influence (ROI). The proposed locations for the dual phase recovery wells, presented on **Figure 10**, were based predominantly on the extent of the dissolved petroleum plume (both lateral and vertical) and the estimated ROI. A dual phase well construction detail including the wellhead configuration is included on **Figure 11**.

Based upon experience with similar projects, UNIVERSAL expects a vapor recovery rate of up to 25 acfm under a vacuum of 40" wc applied to each of the wells. The relatively narrow lense of groundwater (0-3) feet, depending on the season) present above the confining clay layer is anticipated to yield <0.25 gpm from each well under steady state conditions. In order to draw the groundwater into the system, a vacuum of up to 10" Hg is proposed for the groundwater recovery drop tube. A vacuum pump capable of 180 scfm at a vacuum of 13" Hg should be sufficient to achieve the design well yield and anticipated system pressure losses. **Appendix B** presents the details of recovery pipe sizing and vacuum needed for the system design.

A 10 hp rotary claw positive displacement pump equipped with an air/water pre-separator was selected as the appropriate technology to recover contaminants from the recovery wells based on performance characteristics, product reliability, and maintenance requirements. The recommended pump is capable of extracting over 180 acfm at a vacuum of up to 25" Hg under continuous duty conditions. A summary of the remediation system design is presented in **Table** 6. Each dual phase recovery well will be equipped with individual vacuum gauges, flow control and shutoff valves, and drop tubes for control of groundwater recovery. Controls for the pump will consist of vacuum/pressure gauges and a flow control valve. The pre-separator tank will utilize a transfer pump with float controls to pump the accumulated groundwater to the City of Auburndale sanitary sewer system.

CFPL has access to a trailer mounted Dual Phase remediation system formerly used at another site. The remediation system is in good condition and appears appropriate for use at this site. The system is trailer mounted and major components include two (2) 10 hp Busch 1322 rotary claw pumps, a manifold equipped with eight 2-inch legs, knockout tank, a control panel, and telemetry. Details of the system are included in **Appendix C**.

2.2 Soil Treatment

The most practical alternatives for contaminated soil remediation are soil venting, dual phase extraction, and excavation with incineration. Dual phase extraction was chosen over soil venting due to the need for groundwater recovery and because of the contamination located in the zone of groundwater fluctuation. Unlike soil venting, dual phase extraction depresses the water table so that contaminated soil in the zone of fluctuation can be reached by vapor extraction.

Although excavation with incineration represents the quickest and most effective means to remediate contaminated soils, it typically becomes impractical or unfeasible due to depth and onsite surface structures. The excessively contaminated soil beneath the petroleum product utilities and surface structures would require the removal/demolition and reinstallation of the equipment, which is not considered practical. In addition, the use of groundwater extraction for groundwater remediation and plume migration control at this site will require recovery wells, ideal for vapor extraction, to be installed regardless of whether the soils are excavated or not. Dual phase extraction is an accepted and proven technique for removing petroleum based volatile organic compounds (VOC) from the unsaturated zone of soils. The relatively permeable soils and concentrations of contaminants makes this technology a viable option for the site. For these reasons dual phase extraction has been chosen for soil remediation.

Air emission limits are based on the acceptable limitation of 5.5 lbs/day for any single Hazardous Air Pollutant (HAP) or 13.7 lbs./day combined, per 62-780, F.A.C. Treatment of the off-gas from the dual phase extraction system can be accomplished using several different methods. Most common are activated carbon, thermal oxidation and catalytic oxidation. Due to the relatively small volume of contaminants remaining at the site, activated carbon was determined to be the most cost effective method of off-gas treatment.

2.3 Groundwater Treatment

2.3.1 Design Criteria

Groundwater treatment was evaluated and the system design was based on the following criteria:

- 1. The impacted groundwater lense is narrow $\sim 1-3$ feet in thickness. In addition, the lithology in this area is comprised predominantly of fine grained sands. Once steady state conditions have been reached, groundwater is expected to be recovered from the dual phase extraction wells at a relatively low flow rate, anticipated to be <0.25 gallons per minute (gpm) per well (<1.75 gpm total).
- 2. Effluent concentration requirements are in accordance with groundwater cleanup target levels presented in Chapter 62-777, F.A.C. if re-infiltration into the surficial aquifer is proposed, or limitations of the receiving municipality if discharging to sanitary sewer.

2.3.2 Alternative Selection

Recovered groundwater is planned to be disposed of into the City of Auburndale sanitary sewer system. Based upon the initial system startup testing/analytical results, pre-treatment of the recovered groundwater stream may not be necessary. However, in the event that it is required, liquid phase carbon will be used. Vessel sizing will be performed at that time and will be based on actual system flowrates and contaminant concentrations realized under steady state conditions.

2.3.3 Process Design

A process flow diagram is presented on **Figure 13**. It is estimated that groundwater will be recovered at <1.75 gpm under steady state conditions. This flowrate was based on UNIVERSAL's experience using this technology at similar sites.

The treatment system has been designed to operate safely with minimal operation and maintenance requirements. The following safety features are provided to prevent overflows and discharges of untreated groundwater to the environment:

- 1. Overflow switch in the air/water separator tank;
- 2. Blower malfunction switch, which turns off the recovery pumps;
- 3. Careful monitoring for excessive back pressure through the liquid phase carbon (if required by the City of Auburndale).

Iron and calcium scaling and biofouling of the groundwater treatment system is a possibility at the site. Pretreatment of groundwater is not included in this design. If accumulation of scale becomes excessive, pre-treatment may be added to the design in the future as necessary.

A summary of the system design is presented in **Table 6**. Construction details are outlined in **Section 3.2**. Monitoring and maintenance of the treatment system will be performed by trained personnel as discussed in **Section 5.0**.

2.4 Groundwater Disposal

2.4.1 Design Criteria

Due largely to the lithology and limited thickness of recoverable groundwater above the confining clay layer, the selected disposal option at the CFPL Auburndale site is based on an overall anticipated flow rate of <1.75 gpm. The selected route for the disposal of the groundwater must effectively process the treated water without adversely impacting the groundwater extraction process or causing detrimental environmental effects. The following section will outline the disposal selection process.

2.4.2 Alternative Selection

Three disposal options for the treated effluent were considered:

- storm sewer
- re-infiltration
- sanitary sewer

Discharge to the storm sewer will require connection to the storm sewer and a National Pollutant Discharge Elimination System (NPDES) permit. An NPDES permit will require an annual fee of \$2,500, additional sampling and quarterly submittal of sampling results in the form of a Discharge Monitoring Report.

Re-infiltration will require installation of an infiltration gallery, associated piping and a shut-off switch for overflow control. The depth to groundwater (13 - 16 feet bls) makes re-infiltration a viable option. If this option is implemented, discharge should be directed up-gradient of the contaminant plume.

Where technically feasible, disposal into the sanitary sewer is a logical and viable disposal alternative. However, the facility does not have a current connection with the City of Auburndale sanitary sewer system. Mr. John Dickson, City of Auburndale Public Works Director, was contacted concerning the potential to discharge to the sanitary sewer system. Mr. Dickson indicated that there is a sanitary sewer line in the area of the site that could potentially be accessed. Costs associated with discharge to the sanitary sewer include connecting to the sewer line, sampling of the treated effluent, a per gallon fee for discharge and any additional fees required by local ordinances prior to hook-up to the sewer system. In the event that the recovered groundwater does not meet the City of Auburndale discharge limitations, it will be treated using liquid phase carbon prior to discharge.

For the reasons listed above, recovered groundwater is proposed to be disposed of into the City of Auburndale sanitary sewer system. If for some reason this becomes too cost prohibitive, or other problems arise, a ISRP Addendum will be prepared for an alternative disposal method, such as discharge to an infiltration gallery.

3.0 RECOMMENDED REMEDIAL ACTION

3.1 Design Summary

UNIVERSAL recommends that Source Removal activities be implemented at the CFPL Auburndale facility. The recommended system will utilize seven (7) dual phase extraction wells for remediation of groundwater and smear zone related contamination. Groundwater and vapors from the dual phase extraction wells will be recovered using a positive displacement blower equipped with a knock-out tank. The recovered groundwater will be disposed into the City of

Auburndale sanitary sewer system. In the event that the recovered groundwater does not meet the City of Auburndale discharge limitations, it will be treated using liquid phase carbon prior to discharge.

Vapor effluent will be treated by activated carbon for the first 30 days of operation. If, after 30 days, analytical results indicate that less than 13.7 lbs/day of petroleum related vapors are being emitted from the dual phase extraction system, the activated carbon will be removed from the system. A summary of the remediation system equipment and operating parameters is presented in **Table 6**.

3.2 Construction Details

General details of the proposed dual phase extraction wells are presented on **Figure 11**. A site layout showing the recovery well locations, piping, and treatment area is presented on **Figure 12**. General details of the dual phase extraction system are presented on **Figure 13** (Process Flow Diagram).

The facility is kept locked and secured at all times. The southwestern edge of the site property was chosen for the remediation equipment which will be enclosed within an equipment trailer. Trenches will be excavated to a depth of approximately 2.5 feet below land surface (bls) and will be re-surfaced to match the existing grade. Pipes will be placed side by side with the top of each pipe being no less than 18 inches from the surface.

CFPL has access to a trailer mounted Dual Phase remediation system formerly used at another site. The remediation system is in good condition and appears appropriate for use at this site. The system is trailer mounted and major components include two (2) 10 hp Busch 1322 rotary claw pumps, a manifold equipped with eight 2-inch legs, KO tank, a control panel, and telemetry. Details of the system are included in **Appendix C**.

Site work will be performed in accordance with applicable codes and necessary permits will be obtained. Once construction is completed, record drawings signed and sealed by a Florida registered professional engineer will be submitted to the FDEP.

Piping and fitting selection for the construction of the recovery and treatment system will depend upon the application, cost effectiveness, ease of installation and characteristics of the material. The piping material for different components of the dual phase recovery and treatment system are as follows:

<u>From</u>	<u>To</u>	<u>Pipe</u>	<u>Joints</u>
down-well	well head	³ / ₄ " Sch. 40 PVC	Solvent based cement
well head (liquid)	recovery manifold	³ / ₄ " flex tubing	hose barb w/clamp
well head (vapor)	recovery manifold	2" Sch 40 PVC	Solvent based cement
recovery manifold	exhauster	3" and 4" Sch 80 PVC	Solvent based cement

Upon approval of this ISRP by the FDEP, UNIVERSAL will prepare and submit construction drawings to the City of Auburndale for a permit and subsequent system installation.

4.0 PROJECT LIFE ESTIMATE

UNIVERSAL is not aware of an appropriate model for determining project life using dual phase remediation technology. Based upon UNIVERSAL's experience with similar sites, the vast bulk of contamination is expected to be recovered within the first year of system operation. The target cleanup goal for the project will be the respective GCTLs/SCTLs, per 62-777, FAC. At the end of the first year of system operation an evaluation will be made to determine if contaminant concentrations have been reduced sufficiently to achieve No Further Action, per 62-780, FAC. In the event that the site does not meet the minimum criteria for closure, recommendations will be made regarding continued system operation, system modifications, and/or an evaluation for the approval of alternative cleanup target levels and subsequent closure with conditions. A minimum of one year of monitoring is recommended following active remediation.

5.0 MONITORING, MAINTENANCE AND REPORTING

5.1 Treatment System Monitoring

The influent/effluent recovered groundwater and vapor streams will be sampled daily for the first 3 days of startup, per Chapter 62-780, F.A.C. The influent/effluent recovered groundwater and vapor streams will be sampled monthly thereafter. All influent/effluent groundwater samples will be analyzed using EPA Method 8260 (BTEX/MTBE/Naphthalene) and all air samples will be analyzed using EPA 18 (BTEX/TRPH).

5.2 Monitoring Well Sampling

Monitoring wells MW-1 through MW-5 are proposed for the designated monitoring wells to evaluate the progress of remediation. Per Chapter 62-780 F.A.C., water level data will be collected in conjunction with designated well sampling. Groundwater samples will be collected from the designated monitoring wells quarterly for the first year and analyzed using EPA Method 8260 (BTEX/MTBE/Naphthalene). A complete round of groundwater samples will be conducted as a baseline prior to treatment system startup and subsequently on an annual basis to adequately evaluate the effectiveness of remediation efforts and to monitor potential off-site dissolved petroleum contaminants. The monitoring wells proposed to be sampled include MW-1, 2, 3, 4, and 5. All annual groundwater samples will be analyzed using Method 8260 (BTEX/MTBE), Method 8720 (PAHs), and FL-PRO (TRPH).

5.3 Maintenance

Treatment system maintenance site visits will be conducted daily for the first three days and once at the end of the first week, weekly during the remainder of the first month and monthly thereafter. Maintenance will include checking airflows, pressure/vacuum readings, high level switches, telemetry system functions, oil levels and normal system operational checks. Hour meters will be installed on the major equipment since they give valuable data in evaluating system performance and troubleshooting.

Routine preventative maintenance will be conducted as part of the standard monthly system Operation & Maintenance (O&M) procedures. A copy of the manufacturers' O&M manuals will be kept onsite so that field technicians can perform maintenance as recommended. Maintenance items, such as lubricants and inexpensive high-wear parts, will be kept onsite for convenience and to reduce system downtime. Manufacturer phone numbers will be kept onsite and in the office so that they can be reached on short notice if repair items are needed or questions arise. If it is determined that a repair is needed the manufacturer will be notified as soon as possible to determine the necessary steps and costs for the repair.

Equipment maintenance will be performed in accordance with manufacturers' recommendations and the operations manual. This maintenance checklist will include but not be limited to the following:

- 1. Check lubricating points and oil levels;
- 2. Record motor amperage draw and compare to nameplate rating;
- 3. Record pressures and flow rates and compare with performance charts, and;
- 4. Measure discharge temperatures.

This list will be updated based on the equipment operations manual and the manufacturers' recommendations.

Common high-wear parts that are likely to be needed for onsite storage include the following:

- Blower intake filter;
- Blower lubricating oil/grease.

5.4 Reporting

After system construction is completed and system operation is initiated, quarterly and annual reports will be submitted in accordance with 62-780, F.A.C. The reports will summarize system operation and remediation progress at the site. Groundwater elevation, analytical and operational data will be summarized on the respective FDEP Program tables. In addition, groundwater contour and distribution of dissolved petroleum constituents' figures will be provided annually.

After system construction is completed and operation is initiated, UNIVERSAL will submit quarterly reports to the FDEP. The quarterly reports will summarize system operation and remediation progress at the site. Groundwater elevation, analytical and operational data will be summarized on the respective tables. In addition, figures depicting groundwater contour and distribution of dissolved petroleum constituents will be provided when necessary data is collected.

Groundwater remedial activities, as designed in this ISRP, will be terminated once the groundwater cleanup target levels as defined in Chapter 62-780, F.A.C. for No Further Action, or for Natural Attenuation are reached, or alternative Site Rehabilitation Levels are determined by a Risk Assessment, or other FDEP approved procedure.

5.5 Post Active Remediation Soil Sampling

Following the first year of system operation, the Annual O&M report will be prepared and will include recommendations concerning termination or continued operation of the remediation system. If it is agreed by both CFPL and the FDEP that the remedial activities have sufficiently removed the petroleum related contamination, confirmatory soil samples will be collected from the areas considered most likely to be impacted. Borings will be completed in the locations depicted on **Figure 14**. Soil samples will be collected on two-foot intervals from land surface to within two feet of the water table (typically encountered at 14 feet bls). The soil samples will be screened using an OVA/PID and the two samples corresponding with the highest OVA/PID readings from each boring will be submitted to a laboratory for analysis. In the event that the boring corresponds with no positive OVA readings, the two lab samples will be collected from 4 and 8 feet bls. Each sample will be analyzed using EPA Method 8260 (BTEX/MTBE), 8270 (PAHs), and FL-PRO (TRPH). The analytical results will be summarized along with further recommendations and submitted to the FDEP for approval.

6.0 ESTIMATED PROJECT COSTS

The estimated remediation system capital costs (\$555,594) are presented in **Table 7**. This includes construction package preparation, equipment capital and procurement costs, contractor installation costs, management and expenses. The estimated operation and maintenance (O&M) costs are presented in **Table 8**. As the project life estimate is dependent on data collected during the first year of active remediation, **Table 8** data reflects the first year of operation only (\$67,745). Additional yearly costs for O&M, if warranted, will be based on the evaluation of project life conducted after the first year of system operation. The cost of reporting, project management, data analysis, project planning, analytical costs and other miscellaneous items have been considered in this cost estimate.

7.0 REMARKS

The recommendations, findings, and specifications contained in this report represent our professional opinions. These opinions were arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended.



UNIVERSAL Solutions, Inc.

Engineers, Scientists, Environmental Consultants 8339 Stone Run Ct. • Tampa, Florida 33615 (813) 639-1241 • Fax (813) 639-1622

January 13, 2023

FDEP Southwest District Office Waste Cleanup Section 13051 North Telecom Parkway Temple Terrace, FL 33637-0926

Attn: Mr. John Sego, P.G.

Subject: Year 5, Quarter 4 Annual O&M Report (December 2021–November 2022)

CFPL – Auburndale Facility

Facility ID: COM_340016/Project No. 349214

UNIVERSAL Project No.: 5490

Dear Mr. Sego

UNIVERSAL Solutions, Inc. (UNIVERSAL) is working on this project as a subcontractor to AECOM and has completed O&M activities for the above referenced facility. The purpose of this Report is to document the results of the most recent O&M and provide recommendations for future site activities.

The quarterly operating data is summarized on FDEP authorized tables. Specifically:

List of Tables

Table 1A: Site Summary

Table 1B: Site Performance Summary
Table 1C: Treatment Well Detail
Table 1D: Process Summary

Table 1E: Maintenance Summary

Table 2: Ground Water Recovery System Performance Summary

Table 3C: Multiphase Extraction Performance Summary

Table 4A: GW Elevation

Table 5: Groundwater Treatment System Analytical Summary

Table 6: MW Analytical Summary

Table 7: Vapor Treatment System Analytical Summary

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Figure 1: Site Map

Figure 2: Remediation System Layout

Figure 3: Groundwater Analytical Summary Map

Figure 4: Groundwater Elevation Map Figure 5: Remediation System Influence

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Appendix A: Laboratory Analytical Reports, COCs, and Sampling Logs

Appendix B: Milestone Tables

^{*} Only the RAI tables applicable to an MPX system are included.

Background Information

On July 12, 2015, jet fuel was observed leaking from a damaged section of stainless-steel tubing connected to a block valve for the 10-inch diameter pipeline at the CFPL Auburndale facility. In response to the release, CFPL shut down the pipeline, closed the valve of the tubing, and initiated source removal activities. It was determined that approximately 40.5 gallons of jet fuel was released at the site. In addition, CFPL concluded that the stainless-steel tubing had been damaged due to a nearby lightning strike, and that the damage resulted in the subject discharge. CFPL subsequently filled a Discharge Reporting Form (DRF) with the Florida Department of Environmental Protection (FDEP) Division of Emergency Response on July 13, 2015. A Site Map is provided as **Figure 1**.

Following the discovery of the petroleum release, CFPL immediately initiated interim source removal activities at the site in accordance with the regulations set forth of Chapter 62-780.500, F.A.C. SWS Environmental and UNIVERSAL were contracted by CFPL to assist with the removal efforts. SWS Environmental excavated stained soils at the release area via vacuum extraction on July 12-13, 2015. The final limits of the excavations are presented on **Figure 1**, and the depth of the excavated areas was measured to be approximately 4 feet below grade. In total, 35.04 tons of soil were removed from the site and transported to Clark Environmental in Mulberry, Florida for proper disposal. The remaining soils in the area of the release were subsequently assessed by UNIVERSAL personnel for petroleum impacts.

Site Assessment Highlights

As reported in the 2017 ISRP:

- The lithology for the facility can generally be characterized as tan to yellow/orange fine grained sand with varying percentages of sand/silt mixtures from land surface to 16' below land surface (bls). From 16' to 27' bls the lithology consists of tan competent clay, from 27' 31' bls it is orange fine-grained sand with rock fragments, from 31' 34' bls it consists of grey clayey sand, and from 34' 40' bls the lithology is tan/orange silty sands and light grey fine-grained sands with orange mottling.
- A summary of groundwater elevation data indicates depth to water ranges from approximately 13 to 16 feet below grade during groundwater gauging activities conducted during June 2016. The localized direction of groundwater flow for the surficial aquifer has been consistently to the westerly direction.
- The hydraulic gradient (i) of the shallow aquifer zone at the CFPL Auburndale facility was calculated from groundwater sampling events available prior to the ISRP preparation. Referring to the inferred flow direction of groundwater and the groundwater contours, upgradient well MW-3 and down-gradient well MW-5 were best suited for the computation of the hydraulic gradient, subsequently determined to be 0.0049 ft/ft (based upon data collected on December 8, 2015 and June 14, 2016). The hydraulic conductivity was estimated as part of previous investigations at the site to be approximately 50 feet/day. Lastly, the porosity was estimated at 20%. Using these values, the flow velocity at the site (V) was calculated to be approximately 1.2 ft/day.

• The total volume of impacted groundwater within the treatment area proposed as part of the remedial action was estimated to be approximately 10,278 gallons containing approximately 0.50 pounds (lbs) of dissolved petroleum related contaminants. Although excavation activities removed a significant quantity of impacted soils, some portion is known to remain. Based upon the total Jet Fuel release of 40.5 gallons, and a specific gravity for Jet Fuel of approximately 7 lbs/gallon, the total mass of contamination in the vadose/smear zone soils is not believed to exceed 280 lbs.

The installation of seven (7) dual phase extraction wells was completed by AECOM from August 1 - 4, 2017. The extraction wells were constructed using four-inch diameter schedule 40 PVC and were installed to a total vertical depth of approximately 18 feet below land surface (bls) with 13 feet of 0.010" slotted screen.

The dual phase extraction system trenching, and piping installation activities were completed by AECOM under the supervision and direction of UNIVERSAL and as depicted in the approved RAP. Remedial action construction activities were completed from August 1, 2017 through November 10, 2017. All system trenching along with piping to each well head was completed during this period. The trailer mounted remediation system was delivered, positioned in place, plumbed to the DPE piping, and anchored to the ground in accordance with local code. The CFPL Auburndale facility is an unmanned facility surrounded by a 6-feet high security fence that also serves to protect the remediation equipment from unauthorized access. The remediation system layout is shown in **Figure 2**.

UNIVERSAL conducted a baseline groundwater-sampling event on November 7, 2017. Samples were collected from the following facility monitoring wells; MW - 1, 2, 3, 4, and 5. The samples were sent under chain-of-custody to Accutest of Orlando FL to be analyzed using EPA Method 8260 (BTEX/MTBE), EPA Method 8270 (PAH's), and FL-PRO (TRPH).

Startup procedures began on November 27, 2017, with a review of system components and testing of fail-safes. The system was operated for a short period and no significant problems were encountered, but the system was not left running upon departure. On November 28th, the system was re-started, and the vacuum adjusted to each of the well heads to maximize the groundwater and vapor recovery rate.

O&M Visits

This report summarizes the past year of system operation including the most recent quarter. The field activities are summarized below.

December 15, 2021

The system was up and running upon arrival. UNIVERSAL personnel conducted O&M and a general system inspection. As previously reported last quarter, it was noted that the groundwater table was below the depth of the recovery wells which were installed just into the top of a confining clay layer. Since groundwater recovery was not possible, vapor recovery was applied

directly to the well casing and was limited to only DPs 2 and 3 in an effort to focus air flow in the impacted soils around MW-1. In addition, operation of blower #2 was initiated to maximize the air flow until the spring rainy season commences. No effluent liquid sample could be collected due to a lack of water in the KO tank. Upon completion of O&M, the site was secured, and the system was left operational.

January 5, 2022

The system was up and running upon arrival. UNIVERSAL personnel conducted O&M and a general system inspection. Both MPX units were in operation. The battery for the recovered liquid totalizer was found to be low and was replaced. A water discharge sample was successfully collected during this visit. Upon completion of O&M, the site was secured, and the system was left operational.

February 8, 2022

The system was up and running upon arrival. UNIVERSAL personnel conducted O&M and a general system inspection. Both MPX units were in operation. Although quarterly groundwater sampling was scheduled to be conducted, all shallow wells were found to be dry due to the ongoing drought. As such, no groundwater samples could be collected, and no effluent liquid sample could be collected due to a lack of water in the KO tank. Upon completion of O&M, the site was secured, and the system was left operational.

March 8, 2022

The system was up and running upon arrival. UNIVERSAL personnel conducted O&M and a general system inspection. As previously reported last quarter, it was noted that the groundwater table was below the depth of the recovery wells which were installed just into the top of a confining clay layer. Continued operation of blower #2 was conducted to maximize the air flow until the rainy season commences. No effluent liquid sample could be collected due to a lack of water in the KO tank. The telemetry system hardware was upgraded to be compatible with the new 5G Network. Upon completion of O&M, the site was secured, and the system was left operational.

April 7, 2022

The system was up and running upon arrival. UNIVERSAL personnel conducted O&M and a general system inspection. Both MPX units were in operation. No effluent liquid sample could be collected due to a lack of water in the KO tank. Upon completion of O&M, the site was secured, and the system was left operational.

May 20, 2022

The system was up and running upon arrival. UNIVERSAL personnel conducted O&M and a general system inspection. Both MPX units were in operation. Although quarterly groundwater sampling was scheduled to be conducted, all shallow wells were found to be dry due to the ongoing drought. As such, no groundwater samples could be collected, and no effluent liquid sample could be collected due to a lack of water in the KO tank. Upon completion of O&M, the site was secured, and the system was left operational.

June 20, 2022

The system was up and running upon arrival. UNIVERSAL personnel conducted O&M and a general system inspection. As reported last quarter, the groundwater table was below the depth of the recovery wells which were installed just into the top of a confining clay layer. An effluent water and air sample were successfully collected. Upon completion of O&M, the site was secured, and the system was left operational.

July 12, 2022

The system was up and running upon arrival. UNIVERSAL personnel conducted O&M and a general system inspection. An effluent water and air sample were collected. Upon completion of O&M, the site was secured, and the system was left operational.

August 2, 2022

The system was up and running upon arrival. UNIVERSAL personnel conducted O&M and performed a general system inspection. Quarterly groundwater sampling was conducted. However, due to the very limited amount of water in the wells, the samples were collected using a disposable bailer. An effluent water and air sample were collected. Upon completion of O&M, the site was secured, and the system was left operational.

September 2, 2022

The system was up and running upon arrival. UNIVERSAL personnel conducted O&M and a general system inspection. An effluent water and air sample were collected. Upon completion of O&M, the site was secured, and the system was left operational.

September 26 – October 4, 2022

The system operation was temporarily suspended due to the encroaching Hurricane Ian.

October 5, 2022

The system was up and running upon arrival. UNIVERSAL personnel conducted O&M and a general system inspection. An effluent water and air sample were collected. Upon completion of O&M, the site was secured, and the system was left operational.

November 1 - 10, 2022

The system operation was temporarily suspended due to the encroaching Hurricane Nicole. This event coincided with the system suspension required for the annual GW sampling.

November 11, 2022

The system operation had been temporarily suspended at least one week prior to the site visit in preparation for the annual sampling event. Annual groundwater sampling was conducted. Following the sampling event, the system was re-started, and UNIVERSAL personnel conducted O&M and a general system inspection. An effluent water and air sample were collected. Upon completion of O&M, the site was secured, and the system was left operational.

System runtimes were noted during each site visit and are summarized in **Tables 2** and **3C.** The MPX well data is summarized in **Table 8**. UNIVERSAL personnel also collected system operating and influence readings. System data is available in **Table 11**. Vacuum readings are depicted on **Figure 3**.

Sampling Activities

Groundwater Elevation and Sampling

Groundwater elevation measurements were collected from monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5 and DW-1 on November 11, 2022. Historic elevations are summarized in **Table 4A**, and an inferred groundwater elevation map is presented as **Figure 4**. Based upon the elevations, groundwater appears to be flowing to the west, consistent with historical flow patterns. Groundwater laboratory analytical results are included as **Table 6**. The monitoring well analytical results from this quarter sampling are depicted on **Figure 5**.

Vapor Sampling

A vapor sample was collected for laboratory analysis during each O&M site visit. The data and analytical results are included on **Table 7**.

Conclusions and Recommendations

The results of the November 11, 2022, annual sampling event indicated all contaminants analyzed for in groundwater samples collected from all site monitoring wells were below GCTLs. As such, all constituents were within the established milestones. Milestone tables are included in **Appendix B**.

All monitoring wells were gauged for LNAPL as part of the sampling, but none was detected.

A total of 1,228,355 gallons of groundwater have been recovered to date. Of this total, 795 gallons were recovered during the most recent quarter of operation.

The to-date recovered pounds of vapor phase petroleum related products is approximately 543 lbs. It was noted that the recovered contaminants in the vapor stream have fallen below the laboratory detection limit of 10 mg/m³. This would indicate that no significant soil related contamination remains within the area of treatment.

Issues encountered during this year of operation include:

- A depleted battery in the knockout tank totalizer. The battery was replaced on January 5, 2022.
- Lack of groundwater recovery due to the ongoing drought. However, this could be considered advantageous since the normally saturated soils are better exposed to vapor recovery thereby making the contaminants in this zone subject to volatilization.
- A required telemetry hardware update to make it compatible with the new 5G network.
- A depleted groundwater table resulting in lack of groundwater in monitoring wells for

sample collection.

- Hurricane Ian necessitated a temporary suspension of system operation from September 26 October 4, 2022.
- A crack was noted on the piping between the two bag filters. The part was replaced and no leaks were subsequently noted.
- Hurricane Nicole necessitated a temporary suspension of system operation from October 1 10, 2022. However, this largely coincided with the system suspension required for the annual sampling.

Based upon the 20^{th} quarter of system operation, the remediation system is operating satisfactorily with a 100% run time for this quarter and a 94% overall runtime. UNIVERSAL recommends continued remediation at the site.

Respectfully,

UNIVERSAL Solutions, Inc.

Keith Ford, PE Senior Engineer

cc: Mr. RJ Sherman, Kinder Morgan Manager of Remediation

Mr. Gary Babka, AECOM Project Manager

Mr. Bob Lunardini, AECOM Principal Engineer

YEAR 5 ANNUAL O&M REPORT CFPL AUBURNDALE AUBURNDALE, POLK COUNTY, FLORIDA FDEP FACILITY ID COM_340016/Project No. 349214

UNIVERSAL ID: 5155

I, Keith Ford, P.E. #57449, certify that I currently hold an active license in the state of Florida and am competent through education or experience to provide the engineering recommendations contained in this report. I further certify that, in my professional judgment, this report meets the requirements of Section 62-780 FAC, and was prepared by me or under my responsible charge. Moreover, I certify that UNIVERSAL Solutions, Inc. holds an active certificate of authorization #7270 to provide the engineering service.



	TABLE 1A:	SITE SUMMARY	RAI	Non-RAI
Facility Information			Χ	
Facility Name:	CFPL - Auburndale	e Facility		
Facility Address:	near 101 Bridget La	ane		
Facility City:	Auburndale	Report Date (mm-dd-yy):	1/13	3/2023
FDEP FAC ID:	M_340016/Proj No	. 3492 Report Period Start date:	7/1	3/2022
County:	53 Polk	Report Period End date:	11/	11/2022
Team/LP:		Report Period:	١	/5Q4
Team/LP PM:	John Sego	O&M Inspector:		
Contractor:	UNIVERSAL Solu	tions RA Specialist:		
Contractor PM:	Keith Ford	Program:		
Telemetry Phone No.:		Site Score:		
System Summary				
System Size (S,M,L):	S	No. Treatment Points:	7	MPE
System Type:	MPE			
Milestone Summary				
Key Well Count:	1	Goal (90%, 70% NAM, CTLs):_	(CTLs
Key Well ID:	MW-1	Key Well Change (yes/no):		No
Baseline Sample Date:	11/7/2017	Milestone Change: (yes/no):		No
Critical Dates				
RAP Approval Date:	1/31/2017	System Startup Date:	11/2	27/2017
RAMP Approval Date:		Cleanup Time (yrs.):		2.5
RAC Completion Date:	11/10/2017	Predicted EAR Date:	5/2	7/2020
Discharge Date:	7/12/2015	EAR Date Change (yes/no):		
Discharge Date:		Date CTL's Reached:		
PARM Start Date:		SRCO Issue Date:		
SA Summary				
Lithology:	Sand	DTW Max.:		16
Contaminant Groups:	BTEX, PAHs(I)DTW Min.:		12
Product Type(s):	Jet Fuel	Initial Plume Area (ft²):		2290
Highest COC Name:	Total Xylenes	Current Plume Area (ft ²):		0
Highest COC (ug/l):	9.7	Free Product (yes/no):		No
Remediation History				
Previous System Type:	None	Source Removal Date:	7/1	2/2015
Date Started:		Source Removal Tons:		35
Date Ended:		Source Removal Method:	Conv	ventional
Facility History				
Active Facility (yes/no)	No	Tank Capacity:		
Number of Tanks		Date Installed:		_
		Date Removed:		
Cost Summary				
RAC Cost:		Funding CAP Amount:		
Equipment Cost:		Source Removal Cost:		
Annual O&M Cost:				
Notes:				

TABLE 1B: SITE PERFORMANCE SUMMARY

Facility Name:CFPL - Auburndale FacilityStartup Date:11/27/2017Facility Address:near 101 Bridget Lane, AuburndaleSystem Type:MPEFDEP FAC ID:COM 340016/Proj No. 349214

Key Wells Meeting All Milestones (yes/no)

				1,5												
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
MW-1	NO	NO	YES	NO	YES	NO	YES	YES	NO	NO	YES	NO	NO	NO	NO	NO
	Q17	Q18	Q19	Q20												
	NA	NA	YES	YES												
	•		•	•											•	

Run Time Summary (%)

Report Period	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
MPX	100	100	81	97	94	96	92	100	100	100	100	78	84	99	91	77
	Q17	Q18	Q19	Q20												
MPX	100	100	100	100												
<u>Cumulative</u>	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
MPX	99	99.5	93	94	94	94	94	94	95	95	96	95	94	94	94	93
	Q17	Q18	Q19	Q20												
MPX	93	94	93	94												

TABLE 1C - TREATMENT WELL DETAILS

Facility Name:	CFPL - Auburndale		FDEP FAC ID:	COM_340016/Proj N		
Facility Address:	near 101 Bridget La	ane, Auburndale	System Type:	MPE		
December Trump	MDE	I				
Process Type Well Count	MPE 7					
Well Name	DP-1 thru DP-7					
Well Type (HW, VW)						
Diameter (inches)	VW					
	4					
Vell Depth (feet)	18					
Screened Length (feet)	13					
Design Flow (gpm)	0.25					
Design Flow (scfm)						
Startup (Optimal) Flow (gpm)	400					
Startup (Optimal) Flow (scfm)	180					
Design Pressure (psi)						
Startup (Optimal) Pressure (psi)						
Design Vacuum (in. H ₂ O)						
Startup (Optimal) Vacuum (in. H ₂ O)						
Design Vacuum (in. Hg)	10					
Startup (Optimal) Vacuum (in. Hg)	6					
Slot Size (inches)	0.01					
Well Material (HDPE, PVC)	PVC					
nstallation Method (DP, HS, MR, DD, other)	HS					
Process Type						
Vell Count						
Vell Name						
Well Type (HW, VW)						
Diameter (inches)						
Well Depth (feet)						
Screened Length (feet)						
Design Flow Rate (gpm)						
Design Flow Rate (scfm)						
Startup (Optimal) Flow (gpm)						
Startup (Optimal) Flow (scfm)						
Design Pressure (psi)						
Startup (Optimal) Pressure (psi)						
Design Vacuum (in. H ₂ O)						
Startup (Optimal) Vacuum (in. H ₂ O)						
Design Vacuum (in. Hg)						
Startup (Optimal) Vacuum (in. Hg)						
Slot Size (inches)						
Vell Material (HDPE, PVC)						
nstallation Method (DP, HS, MR, DD, other)						
		l				

TABLE 1D: REMEDIAL PROCESS SUMMARY

Facility Name:	CFPL - Auburndale Facility	FDEP FAC ID:	COM_340016/Proj No. 349214
Facility Address:	near 101 Bridget Lane, Auburndale		MPE
, ac, ,		34	
Treatment Process 1:	Multi-Phase Extraction	Serial Number:	
Equipment Type:	Dual Phase Vacuum	Property #	
Manufacturer:	H2K Technologies Inc.	Enclosure Type:	
Model #	Busch 1322	Trailer Tag No.	
Equipment HP:	10	Process Flow (SCFM):	180
Phase/Voltage:	3 ph/480v	Process Pressure (psi):	
Warranty Exp. Date:		Process Vacuum (In.H ₂ O):	
		Process Vacuum (in.Hg):	8
	_		
Treatment Process 2:		Serial Number:	
Equipment Type:		Property #	
Manufacturer:		Enclosure Type:	
Model #		Trailer Tag No.	
Equipment HP:		Process Flow (SCFM):	
Phase/Voltage:		Process Pressure (psi):	
Warranty Exp. Date:		Process Vacuum (in.H ₂ O):	
		Process Vacuum (in.Hg):	
Tanaka and Dun 2		Corial Nursels are	
Treatment Process 3:	L	Serial Number:	
Equipment Type:		Property #	
Manufacturer:		Enclosure Type:	
Model #		Trailer Tag No.	
Equipment HP:	-	Process Flow (SCFM):	-
Phase/Voltage:	-	Process Pressure (psi):	-
Warranty Exp. Date:		Process Vacuum (in.H ₂ O):	
		Process Vacuum (in.Hg):	
Treatment Process 4:		Serial Number:	
Equipment Type:		Property #	
Manufacturer:		Enclosure Type:	
Model #		Trailer Tag No.	
Equipment HP:		Process Flow (SCFM):	
Phase/Voltage:		Process Pressure (psi):	
Warranty Exp. Date:		Process Vacuum (in.H ₂ O):	-
Warranty Exp. Bate.		Process Vacuum (in.Hg):	
		Treeses vacaam (mm g).	
Treatment Process 5:		Serial Number:	
Equipment Type:		Property #	
Manufacturer:		Enclosure Type:	
Model #		Trailer Tag No.	
Equipment HP:		Process Flow (SCFM):	
Phase/Voltage:		Process Pressure (psi):	
Warranty Exp. Date:		Process Vacuum (in H ₂ O):	
		Process Vacuum (in.Hg):	
		<u> </u>	
Treatment Process 6:		Serial Number:	
Equipment Type:		Property #	
Manufacturer:		Enclosure Type:	
Model #		Trailer Tag No.	
Equipment HP:		Process Flow (SCFM):	
Phase/Voltage:		Process Pressure (psl):	
Warranty Exp. Date:		Process Vacuum (in.H ₂ O):	
		Process Vacuum (in.Hg):	
Treatment Process 7:		Serial Number:	1
Equipment Type:		Property #	-
Manufacturer:	_	Enclosure Type:	
Model #	_	Trailer Tag No.	
Equipment HP:		Process Flow (SCFM):	
Phase/Voltage:		Process Pressure (psi):	
Warranty Exp. Date:	_	Process Vacuum (In.H ₂ O):	
		Process Vacuum (in.Hg):	

TABLE 1E: REMEDIAL SYSTEM MAINTENANCE SUMMARY

Facility Name: CFPL - Auburndale Facility Report Date: 12/10/2022
Facility Address: near 101 Bridget Lane, Auburndale Report Type: Y5Q4
FDEP# COM_340016/Proj No. 349214 Startup Date: 11/27/2017

Date:	Type:	System Maintenance Description
8/29/2018	RM	Removed Spent carbon absorber and replaced with new reactivated absorber
9/10/2018	RM	Changed bag filters, cleaned strainer
10/18/2018	RM	Installed ball valve on final effluent point on the liquid phase carbon discharge piping
11/20/2018	RM	Slight leak on the first carbon vessel temporarily sealed with caulk
2/13/2019	RM	Head unit on first carbon vessel replaced
3/19/2019	RM	Slight air leak repaired where VE discharge line ties into carbon drums
7/16/2019	RM	Replaced vacuum intake filter
9/12/2019	RM	Cleaned bag filter and wye strainer
12/13/2019	RM	Telemetry battery was replaced.
5/6/2020	RM	Oil change on the Busch Unit #1 (33,082 hrs)
7/13/2021	RM	Fire Extinguisher Replaced Due to Date
8/17/2021	RM	Cleaned wye strainer and replaced SVE filter
9/8/2021	CF	Replaced both MPX main breakers and transfer pump breaker
1/5/2022	RM	Changed totalizer battery
3/8/2022	RM	Telemetry upgraded to 5G
7/12/2022	RM	Replaced Telemetry Battery
9/2/2022	RM	Changed bag filters, cleaned strainer
10/5/2022	RM	Repaired cracked pipe between bag filters

TABLE 2: GROUND WATER RECOVERY SYSTEM PERFORMANCE SUMMARY

Code Arrive

on

off

off

on

Depart

on

on

off

off

Facility Name: CFPL - Auburndale Facility Startup Date: Treatment Process Status Codes: 11/27/2017

Facility ID#: COM_340016/Proj No. 349214

esign riow.	0.5	gpiii		
			Design Capacity Percentage = (Total Gallons Pumped/Design Flow)*(days/1440)	

								I Gallons Pumped/De							
Site Visit	Days Between	Days Since	Gallons	Instantaneous	Average	Total Gallons	Design Capacity	Design Capacity	Hour Meter	Daily operating design	% Runtime	% Runtime		Product	Process
Date	Site Visits	Startup	Pumped	Flow - GPM	GPM	Pumped	% (period)	% (total)	Reading	Runtime (hours)	(period)	(total)	Gals	Total	Status
11/27/17	1	1	151	NM	0.10	1,510	21%	210%	12987		100%	100%			3
11/28/17	1	2	251	NM	0.17	4,020	35%	279%	12991	4	100%	100%			2
11/29/17	1	3	833	NM	0.58	12,350	116%	572%	13013	22	100%	100%			1
11/30/17	1	4	7,220	NM	5.01	19,570	1003%	680%	13037	24	100%	100%			1
12/07/17	7	10	24,210	NM	2.40	43,780	480%	608%	13191	24	92%	94%			1
12/14/17	7	17	7,170	NM	0.71	50,950	142%	416%	13359	24	100%	96%			1
12/20/17	6	23	10,500	NM	1.22	61,450	243%	371%	13502	24	99%	97%			1
01/18/18	29	52	8,040	NM	0.19	69,490	39%	186%	14200	24	100%	99%			1
02/15/18	28	80	640	NM	0.02	70,130	3%	122%	14869	24	100%	99%			1
03/21/18	34	114	-63,116	NM	-1.29	7014	-258%	9%	15683	24	100%	99%			1
04/16/18	26	140 171	63,496	NM	1.70	70510	339%	70%	16307	24	100%	99%			
05/17/18	31 27		30	NM	0.00	70,540	0%	57%	17051	24	100%	100%			1
06/13/18 07/23/18	40	198 238	NM NM	NM NM	NM NM	NM	NM NM	NM NM	17698 18660	24 24	100% 100%	100% 100%			1 1
08/16/18	24	238	10,000	NM	0.29	354300	58%	188%	18841	24	31%	93%			2
09/10/18	25	262	9,400	NM	0.29	363700	52%	176%	19440	24	100%	93%			2
10/18/18	38	325	103,000	NM		466700	376%	199%	20350	24	100%	95%			1
					1.88							95%			
11/20/18	33 23	358 381	20,600	NM NM	0.43	487300 490030	87% 16%	189% 179%	21071	24 24	91% 100%	95%			2
12/13/18 01/15/19	23 33	381 414	2,730 41.390	NM NM	0.08	490030 531420	16% 174%	179% 178%	21622 22413	24 24	100%	95% 95%			1
01/15/19	29	414	6,910	NM NM	0.87	531420	174% 33%	178% 169%	22413	24 24	75%	95%			1 1
03/19/19	34	477	5,390	NM	0.17	543,720	22%	158%	23745	24	100%	94%			1
04/10/19	22	499	300	NM	0.0	544,020	2%	151%	24169	24	80%	94%			1
05/20/19	40	539	90	NM	0.0	544,110	0%	140%	25130	24	100%	94%			1
06/10/19	21	560		NM		544,110		135%	25634	24	100%	94%			1
07/16/19	36	596	1,760	NM	0.0	545,870	7%	127%	26318	24	79%	93%			2
08/16/19	31	627	199,580	NM	4.5	745,450	894%	165%	27055	24	99%	94%			1
09/12/19	27	654	156,560	NM	4.0	902,010	805%	192%	27534	24	74%	93%			1
10/14/19	32	686	119,820	NM	2.6	1,021,830	520%	207%	28302	24	100%	93%			1
11/20/19	37	723	60,320	NM	1.1	1,082,150	226%	208%	29056	24	85%	93%			2
12/13/19	23	746	47,240	NM	1.4	1,129,390	285%	210%	29604	24	99%	93%			1
01/06/20	24	770	6,460	NM	0.2	1,135,850	37%	205%	30179	24	100%	93%			1
02/12/20	37 27	807	3,690	NM	0.1	1,139,540	14%	196%	31064	24	100% 100%	93%			1
03/10/20 04/07/20	28	834 862	1,030 80	NM NM	0.0	1,140,570 1,140,650	5% 0%	190% 184%	31714 32386	24 24	100%	94% 94%			1
05/06/20	28	891	0	NM	0.0	1,140,650	0%	178%	32386	24	100%	94%			1
06/09/20	34	925	10	NM	0.0	1,140,660	0%	171%	33896	24	100%	94%			1 1
07/14/20	35	960	1,120	NM	0.0	1,141,780	4%	165%	34767	24	100%	95%			1
08/12/20	29	989	5.080	NM	0.1	1,146,860	24%	161%	35434	24	100%	95%			1
09/23/20	42	1,031	3,860	NM	0.1	1,150,720	13%	155%	35994	24	56%	93%			2
10/06/20	13	1,044	28,380	NM	1.5	1,179,100	303%	157%	36304	24	99%	93%			1
11/03/20	28	1.072	17,430	NM	0.4	1,196,530	86%	155%	36785	24	72%	93%			2
12/09/20	36	1,108	3,730	NM	0.1	1,200,260	14%	150%	37650	24	100%	93%			2
01/20/21	42	1,150	980	NM	0.0	1,200,260	3%	145%	38655	24	100%	93%			1
02/10/21	21	1,171	20	NM	0.0	1,201,240	0%	142%	38774	24	24%	92%			2
03/16/21	34	1,171	2,020	NM	0.0	1,201,260	8%	139%	39588	24	100%	92%			1
04/06/21	21	1,205	0	NM	0.0	1,203,280	0%	136%	39661	24	14%	91%			1
05/05/21	29	1,255	100	NM	0.0	1,203,280	0%	133%	40357	24	100%	91%			1
06/21/21	47	1,302	-80	NM	0.0	1,203,300	0%	128%	41485	24	100%	91%			1
07/13/21	22	1,324	130	NM	0.0	1,203,430	1%	126%	41850	16.7	99%	91%			2
08/17/21	35	1,359	5.600	NM	0.0	1,209,030	22%	124%	42475	24	74%	91%			2
09/08/21	22	1,339	890	NM	0.0	1,209,920	6%	122%	42530	24	10%	90%			2
10/19/21	41	1,422	90	NM	0.0	1,210,010	0%	118%	43512	24	100%	90%			1
11/02/21	14	1,422	80	NM	0.0	1,210,010	1%	117%	43678	24	49%	90%			2
12/15/21	43	1,436	0	NM	0.0	1,210,090	0 %	114%	43076	24	100%	90%			1
01/05/22	21	1,500	0	NM	0.0	1,210,090	0 %	112%	45213	24	101%	90%			1
02/08/22	34	1,534	0	NM	0.0	1,210,090	0 %	110%	46029	24	100%	90%			1
03/08/22	28	1,562	0	NM	0.0	1,210,090	0 %	108%	46700	24	100%	90%			1
04/07/22	30	1,592	0	NM	0.0	1,210,090	0 %	106%	47418	24	100%	91%			1
05/20/22	43	1,635	0	NM	0.0	1,210,090	0 %	103%	48451	24	100%	91%			1
06/20/22	31	1,666	830	NM	0.0	1,210,920	0 %	101%	49196	24	100%	91%			1
07/12/22	22	1,688	850	NM	0.0	1,211,770	0 %	100%	49725	24	100%	91%			1
08/02/22	21	1,709	0	NM	0.0	1,211,770	0 %	98%	50218	24	98%	91%			1
	31	1,709	5,970	NM	0.0	1,211,770	27%	98%	50218	24	98% 65%	91%			1
09/02/22 10/05/22	31	1,740	9,820	NM NM	0.1	1,217,740	41%	96%	50703	24 24	63%	91%			1
	33	1,773	9,820 795	NM NM	0.2	1,227,560	41% 3%	96%	51198 51849	24 24	73%	90%			
11/11/22	3/	1,810	795	INIVI	0.01	1,228,355	3%	94%	51849	24	13%	90%			2

TABLE 3C: MULTIPHASE EXTRACTION PERFORMANCE SUMMARY

CFPL - Auburndale Facility COM_340016/Proj No. 349214 11/27/2017 Startup Date:

Facility Name: Facility ID#:

Code	Arrive	Depart
1	on	on
2	off	on
3	off	off
4	on	off

				X Pump 1		X Pump 2		X Pump 3						
Site	Days	Days	Hour	Daily	Hour	Daily	Hour	Daily	Hours of	Total Hours	Approved	Percent	Percent	Process
Visit	Between	Since	Meter	Designed Run	Meter	Designed Run	Meter	Designed Run	Operation	of Operation	Down Time	Run Time	Run Time	Status
Date	Site Visits	Startup	Reading	Time (hours)	Reading	Time (hours)	Reading	Time (hours)	Period	Cumulative	(hours)	(period)	(cumulative)	
11/27/17	1	1	12,987 12,991	24 24	13,136 13,136				4	4	20	100.00%	100.00%	3
11/29/17	1	2	13,013	24	13,136				22	26	20	100.00%	100.00%	2
11/30/17	1	3	13,037	24	13,136				24	50		100.00%	100.00%	1
12/07/17	7	10	13,191	24	13,136				154	204		91.67%	94.17%	1
12/14/17	7	17	13,359	24	13,136				168	372		100.00%	96.57%	1
12/20/17	6	23	13,502	24	13,136				143	515		99.31%	97.28%	1
01/18/18	29	52	14,200	24	13,136				698	1,213		100.29%	98.96%	1
02/15/18	28 34	80 114	14,869 15,683	24 24	13,136 13,136				669 814	1,882 2,696		99.55% 99.75%	99.17% 99.34%	1
03/21/18	26	140	16,307	24	13,136				624	3,320		100.00%	99.46%	1
05/17/18	31	171	17,051	24	13,136				744	4,064		100.00%	99.56%	1
06/13/18	27	198	17,698	24	13,136				647	4,711		99.88%	99.60%	1
07/23/18	40	238	18,660	24	13,136				962	5,673		100.19%	99.70%	1
08/16/18	24	262	18,841	24	13,136				181	5,854		31.42%	93.45%	2
09/10/18	25	287	19,440	24	13,136				599	6,453		99.83%	94.00%	1
10/18/18	38	325	20,350	24 24	13,136				910	7,363		99.78%	94.68%	1
11/20/18 12/16/18	33 26	358 384	21,071 21,622	24	13,136 13,136				721 551	8,084 8,635		91.04% 88.30%	94.34% 93.93%	2
01/15/19	30	414	22,413	24	13,136				791	9,426		109.86%	95.09%	1
02/13/19	29	443	22,933	24	13,136				520	9,946		74.64%	93.75%	2
03/19/19	34	477	23,745	24	13,136				813	10,758		99.57%	94.16%	1
04/10/19	22	499	24,169	24	13,136				424	11,182		80.30%	93.55%	1
05/20/19	40	539	25,130	24	13,136				961	12,143		100.10%	94.04%	1
06/10/19	21	560	25,634	24	13,136				504	12,647		100.00%	94.26%	1
07/16/19 08/16/19	36 31	596 627	26,318 27,055	24 24	13,136 13,136				684 737	13,331 14,068		79.17% 99.06%	93.35% 93.63%	2
09/12/19	27	654	27,534	24	13,136				479	14,547	169	100.00%	93.90%	1
10/14/19	32	686	28,302	24	13,136				768	15,315	103	100.00%	94.18%	1
11/20/19	37	723	29,056	24	13,136				754	16,069	134	100.00%	94.48%	1
12/13/19	23	746	29,604	24	13,136				548	16,617		99.28%	94.63%	1
01/06/20	24	770	30,179	24	13,136				575	17,192		99.83%	94.79%	1
02/12/20	37	807	31,064	24	13,136				885	18,077		99.66%	95.01%	1
03/10/20 04/07/20	27 28	834 862	31,714	24 24	13,136				650	18,727		100.00%	95.18% 95.34%	1
05/06/20	28	891	32,386 33,082	24	13,136 13,136				672 696	19,399 20,095		100.00%	95.49%	1
06/09/20	34	925	33896	24	13,136				814	20,909		99.75%	95.65%	1
07/14/20	35	960	34767	24	13,136				871	21,780		100.00%	95.94%	1
08/12/20	29	989	35434	24	13,136				667	22,447		95.83%	95.94%	1
09/23/20	42	1,031	35994	24	13,136				560	23,007		55.56%	94.29%	1
10/06/20	13	1,044	36304	24	13,136				310	23,317		99.36%	94.36%	1
11/03/20	28	1,072	36785	24	13,136				481	23,798	191	100.00%	94.50%	1
12/09/20 01/20/21	36 42	1,108 1,150	37650 38655	24 24	13,136 13,136				865 1,005	24,663 25,668		100.00% 99.70%	94.69% 94.87%	2 1
02/10/21	21	1,171	38774	24	13,136				1,005	25,787		23.61%	93.59%	2
03/16/21	34	1,205	39588	24	13,136				814	26,601		99.75%	93.77%	2
04/06/21	21	1,226	39661	24	13,496				433	27,034	50	95.83%	93.80%	1
05/05/21	29	1,255	40357	24	13,496				696	27,730		100.00%	93.94%	2
06/21/21	47	1,302	41485	24	13,496				1,128	28,858		100.00%	94.16%	1
07/13/21	22	1,324	41850	24	13,496				365	29,223	163	100.00%	94.26%	2
08/17/21 09/08/21	35 22	1,359 1,381	42475 42530	24 24	13,496 13,496				625 55	29,848 29,903		74.40% 10.42%	93.75% 92.42%	2
10/17/21	39	1,381	42530 43512	24	13,496				982	30,885		10.42%	92.42%	1
11/02/21	16	1,426	43678	24	13,496	24			83	30,968	216	77.86%	92.60%	2
12/15/21	43	1,479	44706	24	13,496				1,028	31,996		99.61%	92.80%	1
01/05/22	21	1,500	45213	24	14,003	24			507	32,503		100.60%	92.91%	1
02/08/22	34	1,534	46029	24	14,819	24			816	33,319		100.00%	93.07%	1
03/08/22	28	1,562	46700	24	15,490	24			671	33,990		99.85%	93.19%	1
04/07/22	30	1,592	47418	24	16,208	24			718	34,708		99.72%	93.31%	1
05/20/22 06/20/22	43 31	1,635 1,666	48451 49196	24 24	17,241 17,986	24 24			1,033 745	35,741 36,486		100.10%	93.49% 93.61%	1
06/20/22	22	1,688	49196	24	18,514	24			745 529	36,486		100.13%	93.61%	1
08/02/22	21	1,709	50218	24	18,517	24			248	37,013		49.21%	93.15%	1
09/02/22	31	1,740	50703	24	19,004	8			729	37,992		97.98%	93.24%	1
10/05/22	33	1,773	51198	24	19,073	-			564	38,556	228	100.00%	93.36%	1
11/11/22	37	1,810	51849	24	19,073				651	39,207	237	100.00%	93.50%	2

TABLE 4A: GROUNDWATER ELEVATION TABLE (No FP)

CFPL - Auburndale Facility Facility Name: Facility ID#: COM_340016/Proj No. 349214 All Measurements = Feet

No Data = Blank

WELL NO.	MW-1	MW-2	MW-3	MW-4	MW-5	DMW-1
DIAMETER (inches)	2	2	2	2	2	2
WELL DEPTH	20.00	20.00	20.00	20.00	20.00	40
SCREEN INTERVAL	5-20	5-20	5-20	5-20	5-20	35-40
TOC ELEVATION	100.00	99.73	99.25	99.94	100.25	99.84

DATE	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.
12/9/2015	83.67	16.33		84.65	15.08		84.70	14.55		84.47	15.47		84.36	15.89		84.24	15.60	
6/14/2016	85.19	14.81	1.52	85.29	14.44	0.64	85.40	13.85	0.70	85.16	14.78	0.69	84.97	15.28	0.61	84.93	14.91	0.69
11/7/2017	85.91	14.09	0.72	85.97	13.76	0.68	86.03	13.22	0.63	85.82	14.12	0.66	85.67	14.58	0.70			
11/27/2017	84.98	15.02	-0.93	85.09	14.64	-0.88	85.21	14.04	-0.82	84.95	14.99	-0.87	84.79	15.46	-0.88	84.48	15.36	
11/28/2017	84.85	15.15	-0.13	84.55	15.18	-0.54	85.15	14.10	-0.06	84.04	15.90	-0.91	84.64	15.61	-0.15	84.43	15.41	-0.05
11/29/2017	84.80	15.20	-0.05	84.97	14.76	0.42	85.08	14.17	-0.07	84.76	15.18	0.72	84.67	15.58	0.03	84.38	15.46	-0.05
11/30/2017	84.72	15.28	-0.08	84.93	14.80	-0.04	85.03	14.22	-0.05	84.71	15.23	-0.05	84.64	15.61	-0.03	84.36	15.48	-0.02
12/7/2017	84.50	15.50	-0.22	84.65	15.08	-0.28	84.75	14.50	-0.28	84.44	15.50	-0.27	84.36	15.89	-0.28	84.06	15.78	-0.30
12/14/2017	84.25	15.75	-0.25	84.15	15.58	-0.50	84.52	14.73	-0.23	84.20	15.74	-0.24	84.12	16.13	-0.24	83.85	15.99	-0.21
12/20/2017	84.19	15.81	-0.06	84.13	15.60	-0.02	84.49	14.76	-0.03	84.19	15.75	-0.01	84.10	16.15	-0.02	83.80	16.04	-0.05
1/18/2018	84.10	15.90	-0.09	84.04	15.69	-0.09	84.27	14.98	-0.22	83.98	15.96	-0.21	83.94	16.31	-0.16	83.75	16.09	-0.05
2/15/2018	82.52	17.48	-1.58	82.83	16.90	-1.21	82.76	16.49	-1.51	82.79	17.15	-1.19	82.60	17.65	-1.34			
3/21/2018	81.80	18.20	-0.72	81.77	17.96	-1.06	81.68	17.57	-1.08	81.49	18.45	-1.30	81.97	18.28	-0.63	81.51	18.33	-2.24
4/16/2018	82.47	17.53	0.67	82.40	17.33	0.63	82.53	16.72	0.85	82.61	17.33	1.12	82.52	17.73	0.55			
5/17/2018	83.22	16.78	0.75	81.82	17.91	-0.58	81.68	17.57	-0.85	81.61	18.33	-1.00	81.82	18.43	-0.70	81.51	18.33	0.00
6/13/2018	84.12	15.88	0.90	84.25	15.48	2.43	80.62	18.63	-1.06	84.16	15.78	2.55	83.78	16.47	1.96			
7/23/2018	84.35	15.65	0.23	84.89	14.84	0.64	84.90	14.35	4.28	84.35	15.59	0.19	84.25	16.00	0.47			
8/16/2018	86.63	13.37	2.28	86.70	13.03	1.81	86.78	12.47	1.88	86.64	13.30	2.29	86.50	13.75	2.25			
9/10/2018	86.30	13.70	-0.33	87.44	12.29	0.74	86.50	12.75	-0.28	86.31	13.63	-0.33	86.19	14.06	-0.31	86.02	13.82	0.00
10/18/2018	86.25	13.75	-0.05	86.34	13.39	-1.10	86.37	12.88	-0.13	86.14	13.80	-0.17	86.07	14.18	-0.12	86.19	13.65	0.17
11/20/2018	84.90	15.10	-1.35	85.06	14.67	-1.28	85.13	14.12	-1.24	84.82	15.12	-1.32	84.70	15.55	-1.37	84.54	15.30	-1.65
12/13/2018	84.25	15.75	-0.65	84.37	15.36	-0.69	84.44	14.81	-0.69	84.09	15.85	-0.73	83.95	16.30	-0.75	83.89	15.95	-0.65
1/15/2019	83.98	16.02	-0.27	84.13	15.60	-0.24	84.18	15.07	-0.26	83.86	16.08	-0.23	83.73	16.52	-0.22	00.00	10.00	0.00
2/13/2019	84.80	15.20	0.82	84.93	14.80	0.80	85.02	14.23	0.84	84.79	15.15	0.93	84.65	15.60	0.92			
3/19/2019	84.55	15.45	-0.25	84.58	15.15	-0.35	84.56	14.69	-0.46	84.51	15.43	-0.28	84.36	15.89	-0.29			
4/10/2019	82.86	17.14	-1.69	82.87	16.86	-1.71	82.53	16.72	-2.03	82.84	17.10	-1.67	82.68	17.57	-1.68			
5/20/2019	83.16	16.84	0.30	82.48	17.25	-0.39	82.43	16.82	-0.10	82.66	17.28	-0.18	82.43	17.82	-0.25			
6/10/2019	83.20	16.80	0.04	82.09	17.64	-0.39	81.83	17.42	-0.60	81.82	18.12	-0.84	81.86	18.39	-0.57			
7/16/2019	84.86	15.14	1.66	84.91	14.82	2.82	85.13	14.12	3.30	84.94	15.00	3.12	84.60	15.65	2.74			
8/16/2019	86.98	13.02	2.12	87.18	12.55	2.27	87.29	11.96	2.16	87.11	12.83	2.17	86.83	13.42	2.23			
9/12/2019	86.39	13.61	-0.59	86.63	13.10	-0.55	86.69	12.56	-0.60	86.56	13.38	-0.55	86.83	13.42	0.00			
10/14/2019	86.15	13.85	-0.24	86.25	13.48	-0.38	86.28	12.97	-0.41	86.04	13.90	-0.52	85.98	14.27	-0.85			
11/20/2019	86.32	13.68	0.17	86.41	13.32	0.16	86.45	12.80	0.17	86.24	13.70	0.20	86.14	14.11	0.16	86.04	13.80	2.15
12/13/2019	85.57	14.43	-0.75	85.63	14.10	-0.78	85.67	13.58	-0.78	85.43	14.51	-0.81	85.33	14.92	-0.81	00.04	13.00	2.10
1/6/2020	85.14	14.86	-0.73	85.20	14.53	-0.43	85.23	14.02	-0.76	85.05	14.89	-0.38	84.94	15.31	-0.39			
2/12/2020	84.09	15.91	-1.05	84.20	15.53	-1.00	84.27	14.98	-0.96	84.02	15.92	-1.03	83.88	16.37	-1.06			
3/10/2020	83.41	16.59	-0.68	83.38	16.35	-0.82	83.21	16.04	-1.06	83.26	16.68	-0.76	83.10	17.15	-0.78			
4/7/2020	82.92	17.08	-0.49	82.02	17.71	-1.36	81.98	17.27	-1.23	82.31	17.63	-0.76	82.17	18.08	-0.70	81.85	17.00	-4.19
5/6/2020	82.47	17.53	-0.45	81.63	18.10	-0.39	81.52	17.73	-0.46	81.46	18.48	-0.85	81.52	18.73	-0.65	01.00	17.55	-4.13
6/9/2020	82.04	17.96	-0.43	81.59	18.14	-0.04	81.27	17.73	-0.40	81.50	18.44	0.04	81.29	18.96	-0.03			
7/14/2020	82.98	17.02	0.94	82.26	17.47	0.67	82.32	16.93	1.05	82.82	17.12	1.32	82.31	17.94	1.02			
8/12/2020	83.89	16.11	0.94	84.08	15.65	1.82	83.27	15.98	0.95	83.91	16.03	1.09	83.48	16.77	1.17			
09/23/20	84.80	15.20	0.91	84.92	14.81	0.84	95.26	3.99	11.99	84.76	15.18	0.85	84.40	15.85	0.92			
10/06/20	85.14	14.86	0.34	85.27	14.46	0.35	85.39	13.86	-9.87	85.08	14.86	0.32	84.72	15.53	0.32			
11/03/20	84.33	15.67	-0.81	84.46	15.27	-0.81	84.60	14.65	-0.79	84.31	15.63	-0.77	84.14	16.11	-0.58	83.86	15.98	2.01
12/09/20	83.65	16.35	-0.68	83.67	16.06	-0.79	83.72	15.53	-0.79	83.51	16.43	-0.77	83.29	16.11	-0.85	83.20	16.64	-0.66
01/20/21	83.27	16.73	-0.38	82.96	16.77	-0.73	82.90	16.35	-0.82	83.08	16.86	-0.43	82.80	17.45	-0.49	33.20	10.04	-0.00
02/10/21	83.17	16.83	-0.30	82.51	17.22	-0.45	82.42	16.83	-0.62	82.64	17.30	-0.44	82.35	17.43	-0.45			
03/16/21	83.27	16.73	0.10	82.31	17.42	-0.45	82.22	17.03	-0.46	82.43	17.51	-0.44	82.14		-0.43			
04/06/21	83.02	16.73	-0.25	82.38	17.42	0.07	82.30	16.95	0.20	82.43	17.33	0.18	82.37	18.11 17.88	0.23			
05/05/21	83.13	16.87	0.25	82.06	17.35	-0.32	82.04		-0.26		17.88			18.25	-0.37			
06/21/21	82.61		-0.52	80.59		-1.47	80.47	18.78	-1.57	80.46	19.48		80.83	19.42	-1.17			
07/13/21	84.08		1.47	83.97	19.14 15.76	3.38	84.70	14.55	4.23	84.06	15.88		82.97	17.28	2.14			
08/17/21	83.50			84.09		0.12			-0.36	83.94		-0.12		16.67	0.61			
09/08/21	83.42 83.00	16.58 17.00	-0.08	83.26	16.47 17.83	-0.83	81.92		-1.02	83.49 82.34		-0.45		17.23	-0.56 -1.02			
10/19/21 11/02/21	82.88		-0.42 -0.12		18.33	-1.36	81.38		-1.40 -0.54	82.34		-1.15 -0.86	82.00 81.62	18.25 18.63	-0.38	81.11	18 72	-2.09
						-0.50										01.11	10./3	-2.09
12/15/21 01/05/22	81.99	18.01	-0.89	80.51	19.22 19.26	-0.89		18.77	-0.90	80.56			80.71	19.54	-0.91			
	81.68		-0.31			-0.04	80.43		-0.05	80.44			80.80	19.45	0.09			
02/08/22	80.31	19.69	-1.37	79.92	19.81	-0.55	79.37	19.88	-1.06	80.15	19.79	I -∪.∠9	ou.42	19.83	-0.38			

TABLE 4A: GROUNDWATER ELEVATION TABLE (No FP)

No	Data =	Blank	

WELL NO.	MW-1	MW-2	MW-3	MW-4	MW-5	DMW-1
DIAMETER (inches)	2	2	2	2	2	2
WELL DEPTH	20.00	20.00	20.00	20.00	20.00	40
SCREEN INTERVAL	5-20	5-20	5-20	5-20	5-20	35-40
TOC ELEVATION	100.00	99.73	99.25	99.94	100.25	99.84

DATE	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.
03/08/22		>20			>20			>20			>20			>20				
04/07/22		>20			>20			>20			>20			>20				
05/20/22		>20			>20			>20			>20			>20				
06/20/22	82.32	17.68	82.32	81.26	18.47	81.26	80.45	18.80	80.45	82.06	17.88	82.06	81.40	18.85	81.40			
07/12/22	83.04	16.96	0.72	81.12	18.61	-0.14	81.05	18.20	0.60	82.04	17.90	-0.02	81.09	19.16	-0.31			
08/02/22	82.23	17.77	-0.81	81.07	18.66	-0.05	80.40	18.85	-0.65	81.06	18.88	-0.98	80.81	19.44	-0.28			
09/02/22	84.12	15.88	1.89	84.18	15.55	3.11	84.80	14.45	4.40	84.10	15.84	3.04	83.42	16.83	2.61			
10/05/22	88.85	11.15	4.73	88.88	10.85	4.70	88.95	10.30	4.15	88.83	11.11	4.73	88.74	11.51	5.32			
11/11/22	86.95	13.05	-1.90	87.21	12.52	-1.67	87.27	11.98	-1.68	86.91	13.03	-1.92	86.75	13.50	-1.99	86.76	13.08	86.76

TABLE 5: GROUNDWATER TREATMENT SYSTEM ANALYTICAL SUMMARY

Facility Name: CFPL - Auburndale Facility Facility Facility ID#: COM_340016/Proj No. 349214 Not Sampled = NS
Analytical Results = µg/I
Mass Recovered = Ibs

												wass Rec	covered = lbs
Sample		Hour	Instantaneous	Total Gallon			Ethyl	Total	Total				VOA Mass
Location	Date	Meter	Flow - GPM	Pumped	Benzene		Benzene		VOA	MTBE			Recovered (lbs)
Before Carbon	11/27/17	641	5	1510	0.20 U	0.45 U	0.26 U	0.56 U	0	0.41 U	9.2		0
	11/28/17	642	5	4020	0.20 U	0.45 U	0.26 U	0.56 U	0	0.41 U	7.0		0
	11/29/17	644	5	12350	0.20 U	0.45 U	0.26 U	0.56 U	0	0.41 U	0.73 U		0
	11/30/17	645	5	19570	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U		0
	12/1/17	647	5	26410	0.31 U	0.3 U	0.36 U	1.1 l	0	0.23 U	1.0 U		0
	12/7/17	654	5	43780	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U		0
	12/14/17	659	5	50950	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U		0
	12/20/17	662	5	61450	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U		0
	1/18/18	665	5	69490	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U		0
	2/15/18	665	5	70130	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U		0
	3/21/18	666	5	70140	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	5.3		0
	4/16/18	666	5	70510	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U		0
	5/17/18	666	5	70540	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U		0
	6/13/18	670	5	NM	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U		0
	7/23/18	683	5	I VIVI	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U		0
	8/16/18	711	5	354300	0.31 U	0.3 U	0.30 U	0.72 U	0	0.23 U	1.6 U		0
		711	5	363700	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	9/10/18												
	10/18/18	770	5	466700	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	11/20/18	874	5	487300	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	12/13/18	877	5	490030	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	1/15/19	912	5	531420	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	2/13/19	919	5	538330	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.6U		0
	3/19/19	924	5	543720	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	4/10/19	938	5	544020	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	5/20/19	938	5	544110	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	6/10/19	938	5	544110	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	7/16/19	938	5	545870	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	8/16/19	1010	5	745450	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	9/12/19	1082	5	902010	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	10/14/19	1155	5	1021830	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	11/20/19	1198	5	1082150	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	12/13/19	1250	5	1129390	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	1/6/20	1251	5	1135850	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	2/12/20	1252	5	1139540	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	3/10/20	1252	5	1140570	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	4/7/20	1252	5	1140650	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	5/6/20	1252	5	1140650	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	6/9/20	1252	5	1,140,660	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	7/14/20	1252	5	1,141,780	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	8/12/20	1253	5	1,141,760	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
									0	0.44 U			0
	9/23/20	1253	5	1,150,720	0.25 U	0.24 U	0.27 U	0.50 U			1.6 U		
	10/6/20	1253	5	1,179,100	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	11/3/20	1253	5	1,196,530	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	12/9/20	1264.2	5	1,200,260	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	1/20/21	1264.3	5	1,201,240	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	2/10/21	1264.3	5	1,201,260	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	3/16/21	1264.7	5	1,203,280	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	4/6/21	1264.7	5	1,203,680	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	5/5/21	1264.7	5	1,203,680	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	6/21/21	1264.7	5	1,203,300	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	7/13/21	1264.8	5	1,203,430	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	8/17/21	1265.0	5	1,209,030	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	9/8/21	1288.5	5	1,209,920	0.25 U	0.24 U	0.27 U	0.58 I	0	0.44 U	1.6 U		0
	10/19/21	1288.5	5	1,210,010	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	11/2/21	1288.5	5	1,210,090	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	1/5/22	1288	5	1210090	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	2/8/22	1288	NA	1210090	NA	NA	NA	NA	NA	NA	NA NA		0
	3/8/22	1288	NA NA	1210090	NA	NA	NA	NA	NA	NA	NA NA		0
	4/7/22	1288	NA NA	1210090	NA	NA	NA	NA	NA	NA	NA NA		0
	5/20/22	1288	NA NA	1210090	NA	NA	NA NA	NA	NA	NA	NA NA		0
	9/11/01	1288	5	1210090	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	7/12/22		5	1211770	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
		1288											
	8/2/22	1289	5	1211770	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	9/2/22	1289	5	1211770	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	10/5/22	1291	5	1227560	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U		0
	11/11/22	1318	5	1228355	0.50 U	0.50 U	0.50 U	0.50 U	0	1.0 U	1.0 U		0

TABLE 5: GROUNDWATER TREATMENT SYSTEM ANALYTICAL SUMMARY

Facility Name: CFPL - Auburndale Facility Facility ID#: COM_340016/Proj No. 349214 Not Sampled = NS

If Non-Detect Use MDL "U" Not Sampled = NS Analytical Results = µg/I Mass Recovered = Ibs

												Mass Recovered = lbs
Sample Location	Date	Hour Meter	Instantaneous Flow - GPM	Total Gallons Pumped		Toluene	Ethyl Benzene	Total Xylenes	Total VOA	MTBE	Naphthalene	VOA Mas Recovered (
Between Carbon	11/27/17	641	5	1510	0.20 U	0.45 U	0.26 U	0.56 U	0	0.41 U	0.73 U	0
	11/28/17	642	5	4020	0.20 U	0.45 U	0.26 U	0.56 U	0	0.41 U	0.73 U	0
	11/29/17	644	5	12350	0.20 U	0.45 U	0.26 U	0.56 U	0	0.41 U	0.73 U	0
	11/30/17	645	5	19570	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	0
	12/1/17	647	5	26410	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	0
	12/7/17	654	5	43780	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	0
	12/14/17	659	5	50950	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	0
	12/20/17	662	5	61450	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	0
	1/18/18	665	5	69490	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	0
	2/15/18	665	5	70130	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	0
	3/21/18	666	5	70140	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	0
	4/16/18	666	5	70510	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	0
	5/17/18	666	5	70540	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	0
	6/13/18	670	5	NM	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	0
	7/23/18	683	5	NM	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	0
	8/16/18	711	5	354300	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	0
	9/10/18	712	5	363700	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	0
	10/18/18	770	5	466700	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	0
	11/20/18 12/13/18	874 877	5 5	487300 490030	0.25 U 0.25 U	0.24 U 0.24 U	0.27 U 0.27 U	0.50 U 0.50 U	0	0.44 U 0.44 U	1.6 U 1.6 U	0
										0.44 U		
	1/15/19 2/13/19	912 919	5 5	531420 538330	0.25 U 0.25U	0.24 U 0.24U	0.27 U 0.27U	0.50 U 0.50U	0	0.44 U 0.44U	1.6 U 1.6U	0
	3/19/19	919	5	538330	0.25 U	0.24U 0.24 U	0.27U 0.27 U	0.50U	0		1.6U 1.6 U	0
	3/19/19 4/10/19	924	5	543720 544020	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U 0.44 U	1.6 U	0
	5/20/19	938	5	544110	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	0
	6/10/19	938	5	544110	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	0
	7/16/19	938	5	545870	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	0
	8/16/19	1010	5	745450	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	0
	9/12/19	1010	5	902010	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	0
	10/14/19	1155	5	1021830	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	0
	11/20/19	1198	5	1082150	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	0
	12/13/19	1250	5	1129390	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	0
	12/13/13	1230	3	1123330	0.23 0	0.24 0	0.27 0	0.50 0	0	0.44 0	1.00	0
After Carbon	11/27/17	641	5	1510	0.20 U	0.45 U	0.26 U	0.56 U	0	0.41 U	0.73 U	0
inter Garberr	11/28/17	642	5	4020	0.20 U	0.45 U	0.26 U	0.56 U	0	0.41 U	0.73 U	0
	11/29/17	644	5	12350	0.20 U	0.45 U	0.26 U	0.56 U	0	0.41 U	0.73 U	0
	11/30/17	645	5	19570	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	0
	12/1/17	647	5	26410	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	0
	12/7/17	654	5	43780	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	0
	12/14/17	659	5	50950	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	0
	12/20/17	662	5	61450	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	0
	1/18/18	665	5	69490	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	0
	2/15/18	665	5	70130	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	0
	3/21/18	666	5	70140	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	0
	4/16/18	666	5	70510	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	0
	5/17/18	666	5	70540	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	0
	6/13/18	670	5	NM	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	0
	7/23/18	683	5	NM	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	0
	8/16/18	711	5	354300	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	0
	9/10/18	712	5	363700	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	0
	10/18/18	770	5	466700	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	0
	11/20/18	874	5	487300	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	0
	12/13/18	877	5	490030	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	0
	1/15/19	912	5	531420	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	0
	2/13/19	919	5	538330	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.6U	0
	3/19/19	924	5	543720	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	0
	4/10/19	938	5	544020	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	0
	5/20/19	938	5	544110	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	0
	6/10/19	938	5	544110	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	0
	7/16/19	938	5	545870	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	0
	8/16/19	1010	5	745450	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	0
				902010	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	0
	9/12/19	1082	5	902010	0.25 0	0.24 0	0.27	0.00 0				
	9/12/19 10/14/19	1082	5	1021830	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	0

TABLE 6: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY

Facility Name: CFPL - Auburndale Facility Facility ID#: COM_340016/Proj No. 349214 If Non-Detect Use MDL "U"

Not Sampled = NS

Analytical Results = up/l

								acility ib#.			10) 140. 5-				cal Results =	
B= Base K= Key W			NADC CTL'S	100 1	400 40	300 30	200 20	NA NA	200 20	140 14	280 28	280 28	50 5	2 0.02	NA NA	150 15
Location		Date	DTW	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Total VOA	MTBE	Naptha- lene	Methyl nap, 1	Methyl nap, 2	TRPH	EDB	Dissolved Lead	Total Lead
ΓW-1	6-16	10/12/15	14.83	96.5	449	222	1,620a	767.5	1.5 U	119	61.7	72.5	11500	NS	NS	NS
ΓW-2	6-16	10/12/15	16.76	74.0	837	528	3,690	5,129	6.0 U	3,480	4,790	6,020	580	NS	NS	NS
ΓW-3	6-16	10/12/15	15.01	0.20 U	0.40 U	0.20 U	0.51 U	1.31 U	0.30 U	0.32 U	0.32 U	0.32 U	140 U	NS	NS	NS
MW-1	5-20	12/9/15 6/14/16	16.33 14.81	40.6 5.4	113 41.1	207 61.3	1,030 305	1390.6 412.8	1.5 U 0.4 U	12.1 3.8 I	35.2	38.5 3.2 U	41600 5440	NS NS	NS NS	NS NS
		11/7/17	14.09	1.9 I	15.8	54.4	318	388.2	0.4 U	48.5	20.2	16.2 I	42900	NS	NS	NS
		2/15/18	17.48	10.1	42.8	96.3	771	920.2	0.23 U	190	NS	NS	NS	NS	NS	NS
		5/17/18	16.78	1.6 U	12.6	117	649	778.6	1.1 U	139	NS	NS	NS	NS	NS	NS
		8/16/18	13.37	0.25 U	0.38 I	3	17	19.8	0.44 U	2.71	NS	NS	NS 6900 IS	NS	NS	NS
		11/20/18 2/13/19	15.10 15.20	2.0 1.2	5.8 2.5	51 33	270 140	328.8 177	0.44U 0.44U	20 I 35	22 NS	23 NS	6800 J3 NS	NS NS	NS NS	NS NS
		5/20/19	16.84	4.8 I	4.0 1	89	340	429	2.2U	69	NS	NS	NS	NS	NS	NS
		8/16/19	13.02	0.25U	0.24U	3.7	14	17.7	0.44U	2.91	NS	NS	NS	NS	NS	NS
		11/20/19	13.68	0.25U	0.24U	2.8	9.7	12.5	0.44U	1.51	2.3	1.9	4800	NS	NS	NS
		2/12/20	15.91	2.8	0.611	67	190	260.4	0.44U	72	NS	NS	NS	NS	NS	NS
		5/6/20 8/12/20	17.53 16.11	7.7 0.25 U	0.25I 0.24 U	74 6.7	190 32	272.0 38.7	0.44U 0.44 U	47 23	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS
		11/3/20	15.67	0.921	0.24U	14	57	71	0.44U	7.61	10	9.2	11000	NS	NS	NS
		2/10/21	16.83	1.5	0.24U	28	65	94.5	0.44U	23	NS	NS	NS	NS	NS	NS
		5/5/2021	16.87	2.3	0.24U	26	83	85.3	0.44U	31	NS	NS	NS	NS	NS	NS
		8/17/21	16.5	1.6	0.24U	31	98	130.6	0.44U	27	NS	NS	NS	NS	NS	NS
		11/02/21 8/2/22	17.12 17.77	1.9 0.25U	0.24U 0.24U	35 40	76 90	112.9 130	0.44U 0.44U	1.2U 48	0.59U NS	0.62U NS	12000 NS	NS NS	NS NS	NS NS
		11/11/22	13.05	0.50U	0.50U	0.50U	0.50U	0	1.0U	0.22	0.25	0.0511	3.9U	NS	NS	NS
	5.00	10/0/15	45.00	0.00.11	0.4011	0.0011	0.54.11	4.04.11	0.0011	0.0511	0.05.11	0.05.11	45011	NO	NO	NO
MW-2	5-20	12/9/15 6/14/16	15.08 14.44	0.20 U 0.2 U	0.40 U 0.2 U	0.20 U 0.25 U	0.51 U 0.56 U	1.31 U 0	0.30 U 0.2 U	0.35 U 0.32 U	0.35 U 0.32 U	0.35 U 0.32 U	150 U 172 I	NS NS	NS NS	NS NS
		11/7/17	13.76	0.2 U	0.2 U	0.25 U	0.30 U	0	0.23 U	0.32 U	0.32 U	0.32 U	815	NS	NS	NS
		2/15/18	16.90	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	NS	NS	NS	NS	NS	NS
		5/17/18	17.91	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	NS	NS	NS	NS	NS	NS
		8/16/18	13.03	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	NS	NS	NS	NS	NS	NS
		11/20/18 2/13/19	14.67	0.25 U 0.25U	0.24 U 0.24U	0.27 U 0.27U	0.50 U 0.50U	0	0.44 U 0.44U	1.2 U 1.6U	0.22 U NS	0.22 U NS	310 U NS	NS NS	NS NS	NS NS
		5/20/19	14.80 17.25	0.25 U	0.24U 0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	NS	NS NS	NS	NS	NS	NS
		8/16/19	12.55	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.6U	NS	NS	NS	NS	NS	NS
		11/20/19	13.32	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.2U	0.57U	0.60U	240 U	NS	NS	NS
		2/12/20	15.53	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.6U	NS	NS	NS	NS	NS	NS
		5/6/20	18.10	0.25U	0.24U	0.27U	0.581	0	0.44U 0.44U	1.6U 1.6U	NS	NS	NS	NS NS	NS	NS
		8/12/20 11/3/20	15.65 15.27	0.25U 0.25U	0.24U 0.24U	0.27U 0.27U	0.58I 0.50U	0	0.44U	1.6U	NS 0.59U	NS 0.62U	NS 240 U	NS	NS NS	NS NS
		2/10/21	17.22	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.6U	NS	NS	NS	NS	NS	NS
		5/5/2021	17.67	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.6U	NS	NS	NS	NS	NS	NS
		8/17/21	15.64	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.6U	NS	NS	NS	NS	NS	NS
		11/02/21 8/2/22	18.33	0.25U 0.25U	0.24U 0.24U	0.27U 0.27U	0.50U 0.50U	0	0.44U 0.44U	1.2U	0.59U	0.62U	0.24U NS	NS NS	NS NS	NS
		11/11/22	18.66 12.52	0.25U 0.50U	0.24U 0.50U	0.27U 0.50U	0.50U	0	1.0U	1.6U 0.050U	0.050U	NS 0.050U	3.9U	NS	NS	NS NS
		,,	12.02	0.000	0.000	0.000	0.000	Ů		0.0000	0.0000	0.0000	0.00	110		
MW-3	5-20	12/9/15	14.55	0.20 U	0.40 U	0.20 U	0.51 U	1.31 U	0.30 U	0.33 U	0.33 U	0.33 U	150 U	NS	NS	NS
		6/14/16	13.85	0.2 U	0.2 U	0.25 U	0.56 U	0	0.2 U	0.32 U	0.32 U	0.32 U	140 U	NS	NS	NS
		11/7/17	13.22	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U		0.32 U	0.32 U	140 U	NS	NS	NS
		2/15/18 5/17/18	16.49 17.57	0.31 U 0.31 U	0.3 U 0.3 U	0.36 U 0.36 U	0.72 U 0.72 U	0	0.23 U 0.23 U	1.0 U 1.0 U	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS
		8/16/18	12.47	0.31 U	0.3 U 0.24 U	0.36 U	0.72 U	0	0.23 U	1.6 U	NS	NS NS	NS	NS	NS	NS
		11/20/18	14.12	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.2 U	0.23 U	0.23 U	320 U	NS	NS	NS
		2/13/19	14.23	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.2 U	0.23 U	0.23 U	320 U	NS	NS	NS
		5/20/19	16.82	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	NS	NS	NS	NS	NS	NS
		8/16/19 11/20/19	11.96 12.8	0.25U 0.25U	0.24U 0.24U	0.27U 0.27U	0.50U 0.50U	0	0.44U 0.44U	1.6U 1.2U	NS 0.57U	NS 0.60U	NS 240 U	NS NS	NS NS	NS NS
		2/12/20	14.98	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.6U	NS	NS	NS NS	NS	NS	NS
		5/6/20	17.73	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.6U	NS	NS	NS	NS	NS	NS
-		8/12/20	15.98	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.6U	NS	NS	NS	NS	NS	NS
		11/3/20	14.65	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.2U	0.59U	0.62U	240 U	NS	NS	NS
		2/10/21	16.83	0.25U 0.25U	0.24U 0.24U	0.27U 0.27U	0.50U 0.50U	0	0.44U 0.44U	1.6U 1.6U	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS
		5/5/2021 8/17/21	17.21 14.91	0.25U 0.25U	0.24U 0.24U	0.27U	0.50U	0	0.44U 0.44U	1.6U	NS NS	NS NS	NS NS	NS	NS NS	NS
		11/02/21	17.87	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.2U	0.59U	0.62U	0.531	NS	NS	NS
		8/2/22 11/11/22	18.85 11.98	0.25U 0.50U	0.24U 0.50U	0.27U 0.50U	0.50U 0.50U	0	0.44U 1.0U	1.6U 0.050U	NS 0.050U	NS 0.050U	NS 3.9U	NS NS	NS NS	NS NS

TABLE 6: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY

Facility Name: CFPL - Auburndale Facility Facility ID#: COM_340016/Proj No. 349214 If Non-Detect Use MDL "U"

Not Sampled = NS

Analytical Results = up/l

				•							-			Analyti	cal Results =	μg/l
B= Base I K= Key W			NADC CTL'S	100 1	400 40	300 30	200 20	NA NA	200 20	140 14	280 28	280 28	50 5	2 0.02	NA NA	150 15
Location		Date	DTW	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Total VOA	MTBE	Naptha- lene	Methyl nap, 1	Methyl nap, 2	TRPH	EDB	Dissolved Lead	Total Lead
MW-4	5-20	12/9/15	15.47	0.20 U	0.40 U	0.20 U	0.51 U	1.31 U	0.30 U	0.32 U	0.32 U	0.32 U	140 U	NS	NS	NS
		6/14/16	14.78	0.2 U	0.33 I	1.2	5.3	6.5	0.2 U	0.32 U	0.32 U	0.32 U	1750	NS	NS	NS
		11/7/17	14.12	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	0.32 U	0.32 U	0.32 U	173 I	NS	NS	NS
		2/15/18	17.15	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	NS	NS	NS	NS	NS	NS
		5/17/18	18.33	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	NS	NS	NS	NS	NS	NS
		8/16/18	13.30	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	NS	NS	NS	NS	NS	NS
		11/20/18	15.14	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.2 U	0.22 U	0.22 U	320 U	NS	NS	NS
		2/13/19	15.15	0.25 U	0.24 U	0.27 U	0.50 U	1	0.44 U	1.2 U	0.22 U	0.22 U	320 U	NS	NS	NS
		5/20/19	17.28	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	NS	NS	NS	NS	NS	NS
		8/16/19	12.83	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.6U	NS	NS	NS	NS	NS	NS
		11/20/19	13.7	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.2U	0.57U	0.60U	240 U	NS	NS	NS
		2/12/20	15.92	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.6U	NS	NS	NS	NS	NS	NS
		5/6/20	18.48	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.6U	NS	NS	NS	NS	NS	NS
		8/12/20	16.03	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.6U	NS	NS	NS	NS	NS	NS
		11/3/20	15.63	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.2U	0.59U	0.62U	240 U	NS	NS	NS
		2/10/21	17.30	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.6U	NS	NS	NS	NS	NS	NS
		5/5/2021	17.88	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.6U	NS	NS	NS	NS	NS	NS
		8/17/21	16.00	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.6U	NS	NS	NS	NS	NS	NS
		11/02/21	18.46	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.2U	0.59U	0.62U	0.24U	NS	NS	NS
		8/2/22	18.88	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.6U	NS	NS	NS	NS	NS	NS
		11/11/22	13.03	0.50U	0.50U	0.50U	0.50U	0	1.0U	0.050U	0.050U	0.050U	3.9U	NS	NS	NS
MW-5	5-20	12/9/15	15.89	0.20 U	0.41 I	0.20 U	0.51 U	1.32 U	0.30 U	0.32 U	0.32 U	0.32 U	140 U	NS	NS	NS
		6/14/16	15.28	0.2 U	0.2 U	0.25 U	0.56 U	0	0.2 U	0.32 U	0.32 U	0.32 U	140 U	NS	NS	NS
		11/7/17	14.58	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	0.32 U	0.32 U	0.32 U	475	NS	NS	NS
		2/15/18	17.65	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	NS	NS	NS	NS	NS	NS
		5/17/18	18.43	0.31 U	0.3 U	0.36 U	0.72 U	0	0.23 U	1.0 U	NS	NS	NS	NS	NS	NS
		8/16/18	13.75	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	NS	NS	NS	NS	NS	NS
		11/20/18	15.55	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.2 U	0.22 U	0.22 U	310 U	NS	NS	NS
		2/13/19	15.60	0.25 U	0.24 U	0.27 U	0.50 U	1	0.44 U	1.2 U	0.22 U	0.22 U	310 U	NS	NS	NS
		5/20/19	17.82	0.25 U	0.24 U	0.27 U	0.50 U	0	0.44 U	1.6 U	NS	NS	NS	NS	NS	NS
		8/16/19	13.42	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.6U	NS	NS	NS	NS	NS	NS
		11/20/19	14.11	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.2U	0.57U	0.60U	240 U	NS	NS	NS
		2/12/20	16.37	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.6U	NS	NS	NS	NS	NS	NS
		5/6/20	18.73	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.6U	NS	NS	NS	NS	NS	NS
		8/12/20	16.77	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.6U	NS	NS	NS	NS	NS	NS
		11/3/20	16.11	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.2U	0.59U	0.62U	240 U	NS	NS	NS
		2/10/21	17.90	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.6U	NS	NS	NS	NS	NS	NS
		5/5/2021	18.25	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.6U	NS	NS	NS	NS	NS	NS
		8/17/21	16.67	0.391	0.24U	0.27U	0.50U	0	0.44U	1.6U	NS	NS	NS	NS	NS	NS
		11/02/21	18.63	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.2U	0.59U	0.62U	0.24U	NS	NS	NS
		11/11/22	13.08	0.50U	0.50U	0.50U	0.50U	0	1.0U	0.050U	0.050U	0.050U	3.9U	NS	NS	NS
5101/4		10/0/1	15.05	0.001:						0.001:	0.0011	0.001:	1005	110		
DMW-1	35-40	12/9/15	15.60	0.20 U	0.52	2.3	20.3	23	0.30 U	0.33 U	0.33 U	0.33 U	1060	NS	NS	NS
		6/14/16	14.91	0.2 U	0.2 U	0.25 U	0.56 U	0	0.2 U	0.32 U	0.32 U	0.32 U	140 U	NS	NS	NS
		11/20/19	13.8	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.2U	0.57U	0.60U	240 U	NS	NS	NS
		11/3/20	15.98	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.3U	0.62U	0.64U	240 U	NS	NS	NS
		11/02/21	18.73	0.25U	0.24U	0.27U	0.50U	0	0.44U	1.2U	0.59U	0.62U	0.24U	NS	NS	NS
		11/11/22	13.08	0.50U	0.50U	0.50U	0.50U	0	1.0U	0.0561	0.050U	0.050U	3.9U	NS	NS	NS
			1						1	1	ı	I	1			1

TABLE 7: VAPOR TREATMENT SYSTEM ANALYTICAL SUMMARY

Facility Name: CFPL - Auburndale Facility Facility ID#: COM_340016/Proj N If Non-Detect Use MDL "U" Not Sampled = NS
Analytical Results = mg/m³

Samp Location	Date	Hour Meter	System Vacuum (in of H20)	Flow Rate (scfm)	OVA (ppm)	Benzene		Ethyl Benzene	_	Total VOA	TPH	Emission Rate (lb/day)	Total Mass Recovered (lbs)
Before Carbon	11/27/2017	12,987	103	180	5	0.045 U	0.028 U	0.027 U	0.11 U	0	0.33 U	0.00	0
	11/28/2017	12,991	103	180	5	0.045 U	0.028 U	0.027 U	0.11 U	0	0.33 U	0.00	0
	11/29/2017	13,013 13,037	102 98	180 180	7 6	0.045 U 0.045 U	0.028 U 0.028 U	0.027 U 0.027 U	0.11 U 0.11 U	0	0.33 U 0.33 U	0.00	0
	12/1/2017	13061	92	180	66	0.045 U	0.028 U	0.027 U	1.3 U	0	195	3.16	2
	12/7/2017	13191	84	180	77	0.32 U	0.38 U	0.741	1.3 U	0	217	3.51	20
	12/1/2017	13359	88	180	74	0.32 U	0.38 U	0.74 I	1.3 U	0	217	3.54	44
	12/20/2017	13502	79	180	63	0.32 U	0.38 U	0.56 I	1.3 U	0	186	3.01	64
	1/18/2018	14200	79	180	78	0.32 U	0.38 U	0.91	1.3 U	0	229	3.71	162
	2/15/2018	14869	79	180	12	0.093 U	0.057 U	0.043 U	8.3	0	34.2	0.55	221
	3/21/2018	15638	68	180	88	0.32 U	0.38 U	0.83	1.3 U	0	258	4.18	297
	4/16/2018	16307	68	180	64	0.32 U	0.38 U	0.43 U	1.3 U	0	188.0	3.04	397
	5/17/2018	17051	68	180	51	0.32 U	0.38 U	0.43 U	1.3 U	0	150.0	2.43	482
	6/13/2018	17698	85	180	18	0.32 U	0.38 U	0.43 U	1.3 U	0	53.0	0.86	526
	7/23/2018	18660	82	180	0	0.32 U	0.45 U	0.43 U	1.3 U	0	2.4 U	0.00	543
	8/16/2018	18841	75	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	10 U	0.00	543
	9/10/2018	19440	102	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	10 U	0.00	543
	10/18/2018	20350	72	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	10 U	0.00	543
	11/20/2018	21071	80	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	10 U	0.00	543
	12/13/2018	21622	65	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	10 U	0.00	543
	1/15/2019	22413	69	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	10 U	0.00	543
	2/13/2019	22932	82	180	0	0.44U	1.0U	0.36U	1.27U	0	36U	0.00	543
	3/19/2019	23745	71	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	4/10/2019	24169	69	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	5/20/2019	25130	68	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	7/16/2019	26318	97	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	8/16/2019	27055	97	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	9/12/2019	27534	96	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	10/14/2019	28302	98	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	11/20/2019	29056	98	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	12/13/2019	29604	109	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	1/6/2020	30179	109	180	0	0.44 U	1.0 U	0.36 U	0.39 I	0	36 U	0.00	543
	2/12/2020	31064	80	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	3/10/2020	31714	95	180	0	0.40 U	0.98 U	0.54 U	1.6 U	0	50 U	0.00	543
	4/7/2020	32386	61	180	0	0.40 U	0.98 U	0.54 U	1.6 U	0	50 U	0.00	543
	5/6/2020	33082	68	180	0	0.40 U	0.98 U	0.54 U	1.6 U	0	50 U	0.00	543
	6/10/2020	33896	102	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	7/14/2020	34767	88	180	0	0.40 U	0.98 U	0.54 U	1.6 U	0	36 U	0.00	543
	8/12/2020	35434	88	180	0	0.40 U	0.98 U	0.54 U	1.6 U	0	50 U	0.00	543
	09/23/20	35994	95	180	0	0.40 U	0.98 U	0.54 U	1.6 U	0	50 U	0.00	543
	10/06/20	36304	95	180	0	0.40 U	0.98 U	0.54 U	1.6 U	0	50 U	0.00	543
	11/03/20	36785	102	180	0	0.40 U	0.98 U	0.54 U	1.6 U	0	50 U	0.00	543
	12/09/20	37650	102	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	01/20/21	38655 38774	95 82	180 180	0	0.44 U	1.0 U	0.36 U	1.27 U 1.27 U	0	36 U	0.00	543
	02/10/21	39588	88	180	0	0.44 U 0.44 U	1.0 U	0.36 U 0.36 U	1.27 U	0	36 U 36 U	0.00	543 543
	03/16/21 04/06/21	39588	88	180	0	0.44 U	1.0 U 1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	05/05/21	40357	75	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	06/21/21	41485	88	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	07/13/21	41850	95	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	08/17/21	42475	88	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	09/08/21	42530	88	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	10/19/21	43512	T7	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	11/02/21	43678	41	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	12/15/21	44706	84	360	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	01/05/22	45213	84	360	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	02/08/22	46029	84	360	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	03/08/22	46700	95	360	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	04/07/22	47418	136	360	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	05/20/22	48451	116	360	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	6/20/2022	49196	95	180	0	0.40 U	0.98 U	0.54 U	1.6 U	0	50 U	0.00	543
	7/12/2022	49725	88	180	0	0.40 U	0.98 U	0.54 U	1.6 U	0	50 U	0.00	543
	8/2/2022	50218	95	180	0	0.40 U	0.98 U	0.54 U	1.6 U	0	50 U	0.00	543
	9/2/2022	50703	95	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	10/5/2022	51198	102	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	543
	11/11/2022	51849	95	180	0	0.40 U	0.98 U	0.54 U	1.6 U	0	36 U	0.00	543
			·			- · · · · ·	<u> </u>					· · · · · ·	

TABLE 7: VAPOR TREATMENT SYSTEM ANALYTICAL SUMMARY

Facility Name: CFPL - Auburndale Facility Facility ID#: COM_340016/Proj N If Non-Detect Use MDL "U" Not Sampled = NS
Analytical Results = mg/m³

Sam Location	ple Date	Hour Meter	System Vacuum (in of H20)	Flow Rate (scfm)	OVA (ppm)	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Total VOA	TPH	Emission Rate (lb/day)	Total Mass Recovered (lbs)
Btn Carbon	11/27/2017	12,987	103	180	0	0.045 U	0.028 U	0.027 U	0.11 U	0	0.33 U	0.00	0
	11/28/2017	12,991	103	180	0	0.045 U	0.028 U	0.027 U	0.11 U	0	0.33 U	0.00	0
	11/29/2017	13,013	102	180	0	0.045 U	0.028 U	0.027 U	0.11 U	0	0.33 U	0.00	0
	11/30/2017	13,037	98	180	0	0.045 U	0.028 U	0.027 U	0.11 U	0	0.33 U	0.00	0
	12/1/2017	13061	92	180	0	0.32 U	0.38 U	0.74 I	1.3 U	0	7.1	0.11	0
	12/7/2017	13191	84	180	0	0.32 U	0.38 U	0.74 I	1.3 U	0	7.1	0.11	1
	12/14/2017	13359	88	180	0	0.32 U	0.38 U	0.43 U	1.3 U	0	7.1	0.11	1
	12/20/2017	13502	79	180	37	0.32 U	0.38 U	1.8 I	1.3 U	0	109	1.76	7
	1/18/2018	14200	79	180	61	0.32 U	0.38 U	0.69	1.3 U	0	181	2.93	75
	2/15/2018	14869	79	180	12	0.093 U	0.057 U	0.043 U	13	0	34.5	0.56	124
	5/17/2018	17051	68	180	50	0.32 U	0.38 U	0.43 U	1.3 U	0	146.0	2.36	257
	6/13/2018	17698	85	180	20	0.32 U	0.38 U	0.43 U	1.3 U	0	58.9	0.95	301
	7/23/2018	18660	86	180	0	0.32 U	0.38 U	0.43 U	1.3 U	0	2.4 U	0.00	321
	8/16/2018	18841	75	180	0	0.32 U	0.38 U	0.43 U	1.3 U	0	10 U	0.00	321

TABLE 7: VAPOR TREATMENT SYSTEM ANALYTICAL SUMMARY

Facility Name: CFPL - Auburndale Facility Facility ID#: COM_340016/Proj N If Non-Detect Use MDL "U" Not Sampled = NS
Analytical Results = mg/m³

Sam	ple	Hour	System Vacuum	Flow Rate	OVA			Ethyl	Total	Total		Emission	Total Mass
Location	Date	Meter	(in of H20)	(scfm)	(ppm)	Benzene	Toluene	Benzene	Xylenes	VOA	TPH	Rate (lb/day)	Recovered (lbs)
After Carbon	11/27/2017	12,987	103	180	0	0.045 U	0.028 U	0.027 U	0.11 U	0	0.33 U	0.00	0
	11/28/2017	12,991	103	180	0	0.045 U	0.028 U	0.027 U	0.11 U	0	0.33 U	0.00	0
	11/29/2017	13,013	102	180	0	0.045 U	0.028 U	0.027 U	0.11 U	0	0.33 U	0.00	0
	11/30/2017	13,037	98	180	0	0.045 U	0.028 U	0.027 U	0.11 U	0	0.33 U	0.00	0
	12/1/2017	13061	92	180	0	0.32 U	0.38 U	0.74 I	1.3 U	0	7.1	0.11	0
	12/7/2017	13191	84	180	0	0.32 U	0.38 U	0.74 I	1.3 U	0	7.1	0.11	1
	12/14/2017	13359	88	180	0	0.32 U	0.38 U	0.43 U	1.3 U	0	7.1	0.11	1
	12/20/2017	13502	79	180	0	0.32 U	0.38 U	0.43 U	1.3 U	0	7.1	0.11	2
	1/18/2018	14200	79	180	45	0.32 U	0.38 U	1.7	1.3 U	0	134	2.17	35
	2/15/2018	14869	79	180	12	0.093 U	0.057 U	0.043 U	12	0	36.5	0.59	74
	3/21/2018	15638	68	180	64	0.32 U	0.38 U	0.61	1.3 U	0	187	3.03	132
	4/16/2018	16307	68	180	48	0.32 U	0.38 U	0.43 U	1.3 U	0	141.0	2.28	206
	5/17/2018	17051	68	180	58	0.32 U	0.38 U	0.43 U	1.3 U	0	170.0	2.75	284
	6/13/2018	17698	85	180	27	0.32 U	0.38 U	0.43 U	1.3 U	0	79.2	1.28	338
	7/23/2018	18660	86	180	0	0.32 U	0.38 U	0.43 U	1.3 U	0	2.4 U	0.00	364
	8/16/2018	18841	75	180	0	0.32 U	0.38 U	0.43 U	1.3 U	0	10 U	0.00	364
	9/10/2018	19440	102	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	10 U	0.00	364
	10/18/2018	20350	72	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	10 U	0.00	364
	11/20/2018	21071	80	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	10 U	0.00	364
	12/13/2018	21622	65	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	10 U	0.00	364
	1/15/2019	22413	69	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	10 U	0.00	364
	2/22/2019	22932	82	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	364
	3/19/2019	23745	71	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	364
	4/10/2019	24169	69	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	364
	5/20/2019	25130	68	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	364
	5/20/2019	25130	68	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	364
	7/16/2019	26318	97	180	0	0.44 U	1.0 U	0.41 I	0.88 I	0	36 U	0.00	364
	8/16/2019	27055	97	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	364
	9/12/2019	27534	96	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	364
	10/14/2019	28302	98	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	364
	11/20/2019	29056	98	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	364
	12/13/2019	29604	109	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	364
	1/6/2020	30179	109	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	364
	2/12/2020	31064	80	180	0	0.44 U	1.0 U	0.36 U	1.27 U	0	36 U	0.00	364
	3/10/2020	31714	95	180	0	0.40 U	0.98 U	0.54 U	1.6 U	0	50 U	0.00	364
	4/7/2020	32386	61	180	0	0.40 U	0.98 U	0.54 U	1.6 U	0	50 U	0.00	364
	5/6/2020	33082	68	180	0	0.40 U	0.98 U	0.54 U	1.6 U	0	50 U	0.00	364

TABLE 8: SVE/MPX WELL DATA

Facility Name: CFPL - Auburndale Facility

COM_340016/Proj No. 349

All Measurements = Feet No Data = Blank OVA Readings = ppm Vacuum = in of Hg Flow = scfm

Standard Temp = 60 °F Standard Pressure = 29.92"Hg

WELL NO.	DP-1	DP-2	DP-3
DIAMETER (inches)	4	4	4
WELL DEPTH	18	18	18
SCREEN INT.	5-18'	5-18'	5-18'
DESIGN FLOW/VAC	25scfm/5"Hg	25scfm/5"Hg	25scfm/5"Hg
OPTIMAL FLOW/VAC			

	Flow		uum			Flow		uum			Flow		uum	l
Date	Mani-	Mani-	Well-	OVA	Date	Mani-	Mani-	Well-	OVA	Date	Mani-	Mani-	Well-	OVA
	fold	fold	head			fold	fold	head			fold	fold	head	
11/27/17		7.0	5.0		11/27/17		7.0	5.0		11/27/17		7.0	5.0	
11/28/17		7.0	5.0		11/28/17		7.0	5.0		11/28/17		7.0	5.0	
11/29/17		7.0	5.0		11/29/17		7.0	5.0		11/29/17		7.0	5.0	
11/30/17		7.0	5.0		11/30/17		7.0	5.0		11/30/17		7.0	5.0	
12/7/17			6.0		12/7/17			7.0		12/7/17			5.5	
12/14/17		6.5	6.0		12/14/17		6.5	6.0		12/14/17		6.5	5.5	
12/20/17			6.0		12/20/17			6.0		12/20/17			5.0	
1/18/18		6.5	5.5		1/18/18		6.5	5.5		1/18/18		6.5	5.0	
2/15/18		6.5	6.0		2/15/18		6.5	5.0		2/15/18		6.5	4.5	
3/21/18		5.0			3/21/18		5.0			3/21/18		4.5		
4/16/18		5.0			4/16/18		5.0			4/16/18		5.0		
5/17/18		5.0			5/17/18		4.5			5/17/18		4.5		
6/13/18		5.5			6/13/18		5.5			6/13/18		5.0		
7/23/18		5.0	4.5		7/23/18		5.0	4.5		7/23/18		5.0	4.0	
8/16/18		4.0			5/16/18		4.0			8/16/18		4.0		
9/10/18		5.0			9/10/18		5.5			9/10/18		6.0		
10/18/18		5.0	4.0		10/18/18		5.0	3.5		10/18/18		5.0	3.5	
11/20/18		5.5	5.0		11/20/18		5.0	4.0		11/20/18		5.0	4.0	
12/13/18		4.0	3.5		12/13/18		4.5	3.5		12/13/18		4.5	3.5	
1/15/19		4.5	3.5		1/15/19		5.0	3.5		1/15/19		5.0	4.0	
2/13/19		5.0			2/13/19		5.0			2/13/19		5.5		
3/19/19		5.0	4.0		3/19/19		5.0	4.0		3/19/19		4.5	3.5	
4/10/19		5.0	4.0		4/10/19		5.5	4.0		4/10/19		5.0	3.5	
5/20/19		5.0	4.0		5/20/19		5.5	4.5		5/20/19		5.0	4.0	
6/10/19		4.0	NM		6/10/19		4.5	NM		6/10/19		4.0	NM	
7/16/19		7.0	NM		7/16/19		7.0	NM		7/16/19		5.5	MM	
8/16/19		6.5	5.5		8/16/19		6.0	5.0		8/16/19		6.0	5.0	
9/12/19		6.5	NM		9/12/19		6.0	NM		9/12/19		6.5	NM	
10/14/19		7.0	5.5		10/14/19		7.0	6.0		10/14/19		6.0	4.5	
11/20/19		6.0	5.5		11/20/19		6.0	5.0		11/20/19		5.5	4.0	
12/13/19		6.5	5.5		12/13/19		6.0	5.0		12/13/19		6.5	5.0	
1/6/20		6.5	5.5		1/6/20		5.5	5.0		1/6/20		6.0	5.0	
2/12/20		5.0	4.5		2/12/20		4.5	4.0		2/12/20		5.0	4.5	
3/10/20		5.0	NM		3/10/20		4.5	NM		3/10/20		5.0	NM	
4/7/20		3.5	3.5		4/7/20		3.0	3.0		4/7/20		3.0	3.0	
5/6/20		4.5	NM		5/6/20		4.0	NM		5/6/20		5.0	NM	
6/9/20		6.5	5.0		6/9/20		6.5	5.5		6/9/20		7.0	6.0	
7/14/20		5.5	NM		7/14/20		6.0	NM		7/14/20		5.5	NM	
8/12/20		5.0	NM		8/12/20		5.0	NM		8/12/20		5.0	NM	
09/23/20		6.5	5.5		09/23/20		6.5	5.5		09/23/20		6.0	5.0	
10/06/20		6.0	5.5		10/06/20		6.0	5.5		10/06/20		5.5	5.0	
11/03/20		6.0	5.5		11/03/20		6.5	6.0		11/03/20		5.5	5.0	
12/09/20		7.0	5.5		12/09/20		7.0	5.5		12/09/20		7.0	5.0	
01/20/21		6.0	5.0		01/20/21		6.0	5.0		01/20/21		5.5	4.5	
02/10/21		5.0	3.5		02/10/21		5.5	3.5		02/10/21		5.0	3.5	
03/16/21		6.0	3.5		03/16/21		6.0	3.5		03/16/21		5.5	4.0	
04/06/21		5.5	NM		04/06/21		5.0	NM		04/06/21		5.5	MM	
05/05/21		5.0	3.5		05/05/21		5.0	3.5		05/05/21		5.0	4.0	
06/21/21		5.0	3.5		06/21/21		5.0	3.5		06/21/21		5.0	4.0	
07/13/21		6.0	4.5		07/13/21		6.0	5.0		07/13/21		5.5	4.5	
08/17/21		5.5	4.0		08/17/21		5.5	3.5		08/17/21		5.5	4.0	
09/08/21		5.5	4.0		09/08/21		5.5	4.5		09/08/21		5.0	4.5	
10/19/21		0.0	0.0		10/19/21		2.5	2.0		10/19/21		2.5	2.0	
11/02/21		0.0	0.0		11/02/21		2.5	2.0		11/02/21		2.5	2.0	
02/08/22		0.0	0.0		02/08/22		4.0	3.5		02/08/22		4.5	4.0	
03/08/22		4.5	3.5		03/08/22		5.0	4.0		03/08/22		4.5	3.5	
04/07/22		9.0	8.5		04/07/22		9.5	9.0		04/07/22		10.0	9.5	
05/20/22		8.5	8.0		05/20/22		8.0	7.5		05/20/22		7.5	7.0	
06/20/22		5.5	4.5		06/20/22		6.0	5.0		06/20/22		5.5	4.5	
07/12/22		5.5	3.5		07/12/22		5.0	3.0		07/12/22		5.5	3.5	
08/02/22		11.0	10.0		08/02/22		11.0	9.5		08/02/22		10.0	9.0	
09/02/22		7.0	5.5		09/02/22		7.0	5.5		09/02/22		6.5	5.0	
10/05/22		7.0	5.5		10/05/22		6.5	5.0		10/05/22		7.0	5.5	
11/11/22		7.0	6.0		11/11/22		7.0	5.5		11/11/22		7.0	6.0	
								-						

TABLE 8: SVE/MPX WELL DATA

Facility Name: CFPL - Auburndale Facility

Standard Temp = 60 °F

COM_340016/Proj No. 349 Standard Pressure = 29.92"Hg

All Measurements = Feet No Data = Blank OVA Readings = ppm Vacuum = in of Hg Flow = scfm

			1104 = 301111
WELL NO.	DP-4	DP-5	DP-6
DIAMETER (inches)	4	4	4
WELL DEPTH	18	18	18
SCREEN INT.	5-18'	5-18'	5-18'
DESIGN FLOW/VAC	25scfm/5"Hg	25scfm/5"Hg	25scfm/5"Hg
OPTIMAL FLOW/VAC			

D-4-	Flow		ium	- ~~	l	Flow		cuum	01/4	D-4-	Flow		uum	0
Date	Mani-	Mani-	Well-		Date	Mani-	Mani-	Well-	OVA	Date	Mani-	Mani- Well-		OVA
44107147	fold	fold	head		44/07/47	fold	fold	head		44/07/47	fold	fold	head	
11/27/17 11/28/17		7.0	5.0 5.0		11/27/17		7.0 7.0	5.0		11/27/17 11/28/17		7.0 7.0	5.0 5.0	
11/28/17		7.0	5.0		11/28/17		7.0	5.0		11/28/17		7.0	5.0	
11/29/17		7.0	5.0		11/30/17		7.0	5.0		11/30/17		7.0	5.0	
12/7/17		7.0	7.0		12/7/17		7.0	5.0		12/7/17		7.0	6.0	
12/1/17		6.5	6.5		12/1/17		6.5	5.0		12/1/17		6.5	6.0	
12/20/17		0.0	5.5		12/20/17		0.5	4.5		12/20/17		0.5	6.0	
1/18/18		6.5	6.5		1/18/18		6.5	4.5		1/18/18		6.5	5.5	
2/15/18		6.5	5.0		2/15/18		6.5	4.5		2/15/18		6.5	5.0	
3/21/18		5.0	0.0		3/21/18		4.5	1.0		3/21/18		5.0	0.0	
4/16/18		5.0			4/16/18		5.0			4/16/18		5.0		
5/17/18		4.5			5/17/18		5.0			5/17/18		5.0		
6/13/18		5.5			6/13/18		5.0			6/13/18		5.5		
7/23/18		4.5	4.0		7/23/18		4.5	4.0		7/23/18		5.0	4.5	
8/16/18		6.0			8/16/18		5.0			8/16/18		5.5		
9/10/18		5.0			9/10/18		7.0			9/10/18		6.0		
10/18/18		6.0	4.0		10/18/18		5.0	3.0		10/18/18		5.0	4.0	
11/20/18		6.5	5.0		11/20/18		6.0	4.5		11/20/18		6.0	4.0	
12/13/18		5.0	4.0		12/13/18		4.5	3.5		12/13/18		4.0	3.5	
1/15/19		5.0	4.0		1/15/19		4.5	3.5		1/15/19		4.5	3.5	
2/13/19		5.0			2/13/19		5.5			2/13/19		5.0		
3/19/19		5.0	4.0		3/19/19		5.0	3.5		3/19/19		4.5	3.5	
4/10/19		5.0	3.5		4/10/19		5.0	3.0		4/10/19		5.0	3.5	
5/20/19		5.0	4.0		5/20/19		5.0	4.0		5/20/19		4.5	3.5	
6/10/19		4.5	NM		6/10/19		4.5	NM		6/10/19		4.5	NM	
7/16/19		5.0	NM		7/16/19		7.5	NM		7/16/19		7.5	NM	
8/16/19		5.0	4.5		8/16/19		7.0	6.0		8/16/19		7.0	6.5	
9/12/19		4.5	NM		9/12/19		7.5	NM		9/12/19		7.5	NM	
10/14/19		4.0	3.0		10/14/19		7.0	6.0		10/14/19		6.0	5.0	
11/20/19		5.0	4.5		11/20/19		7.0	5.5		11/20/19		7.0	5.5	
12/13/19		4.5	4.0		12/13/19		6.5	5.5		12/13/19		7.0	5.5	
1/6/20		4.5	3.5		1/6/20		6.0	5.0		1/6/20		7.0	6.0	
2/12/20		6.0	5.0 NM		2/12/20		6.0	5.0 NM		2/12/20		6.0	5.0 NM	
3/10/20 4/7/20		6.0	4.5		3/10/20 4/7/20		5.0	3.5		3/10/20 4/7/20		5.0	3.5	
5/6/20		4.5	4.5 NM		5/6/20		3.5 4.5	NM		5/6/20		3.5 5.0	NM	
6/9/20		7.0	6.0		6/9/20		6.5	6.0		6/9/20		7.0	6.5	
7/14/20		6.5	NM		7/14/20		6.0	NM		7/14/20		6.0	NM	
8/12/20		5.0	NM		8/12/20		5.0	NM		8/12/20		5.0	NM	
09/23/20		7.0	6.5		09/23/20		6.5	5.0		09/23/20		6.5	5.0	
10/06/20		6.0	5.5		10/06/20		6.0	5.5		10/06/20		5.5	5.0	
11/03/20		6.0	5.5		11/03/20		6.5	6.0		11/03/20		5.5	5.0	
12/09/20		7.0	6.0		12/09/20		7.0	5.5		12/09/20		7.0	6.0	
01/20/21		6.5	5.0		01/20/21		6.0	5.0		01/20/21		6.5	5.5	
02/10/21		6.0	4.0		02/10/21		5.5	5.5		02/10/21		5.0	4.5	
03/16/21		6.5	4.0		03/16/21		6.0	5.0		03/16/21		5.5	4.0	
04/06/21		5.5	NM		04/06/21		6.0	NM		04/06/21		5.5	NM	
05/05/21		4.5	3.5		05/05/21		5.0	4.0		05/05/21		5.0	3.5	
06/21/21		5.0	3.5		06/21/21		5.5	4.0		06/21/21		5.0	3.5	
07/13/21		5.5	4.0		07/13/21		6.0	4.5		07/13/21		6.0	5.0	
08/17/21		5.5	3.5		08/17/21		5.0	3.5		08/17/21		5.0	3.5	
09/08/21		5.5	4.0		09/08/21		5.0	4.5		09/08/21		5.0	4.5	
10/19/21		0.0	0.0		10/19/21		0.0	0.0		10/19/21		0.0	0.0	
11/02/21		0.0	0.0		11/02/21		0.0	0.0		11/02/21		0.0	0.0	
02/08/22		0.0	0.0		02/08/22		0.0	0.0		02/08/22		0.0	0.0	
03/08/22		5.0	3.5		03/08/22		45.0	3.5		03/08/22		5.0	4.0	
04/07/22		10.0	9.5		04/07/22		10.0	9.5		04/07/22		10.0	9.5	
05/20/22		8.0	7.5		05/20/22		8.0	7.5		05/20/22		8.5	8.0	
06/20/22		6.0	4.5		06/20/22		6.0	5.0		06/20/22		5.5	4.5	
07/12/22		5.0	2.5		07/12/22		5.0	3.0		07/12/22		5.0	3.0	
08/02/22		11.0	10.0		08/02/22		11.0	9.5		08/02/22		11.0	10.0	
09/02/22		7.0	5.0		09/02/22		6.5	5.0		09/02/22		7.0	5.5	
10/05/22		7.0	5.0		10/05/22		6.5	5.0		10/05/22		7.0	5.0	
11/11/22		7.5	6.5		11/11/22		7.0	5.5		11/11/22		7.0	6.0	

TABLE 8: SVE/MPX WELL DATA

Facility Name: CFPL - Auburndale Facility

Standard Temp = 60 °F

COM_340016/Proj No. 349

Standard Pressure = 29.92"Hg

All Measurements = Feet No Data = Blank OVA Readings = ppm Vacuum = in of Hg Flow = scfm

WELL NO.	DP-7
DIAMETER (inches)	4
WELL DEPTH	18
SCREEN INT.	5-18'
DESIGN FLOW/VAC	25scfm/5"Hg
OPTIMAL FLOW/VAC	

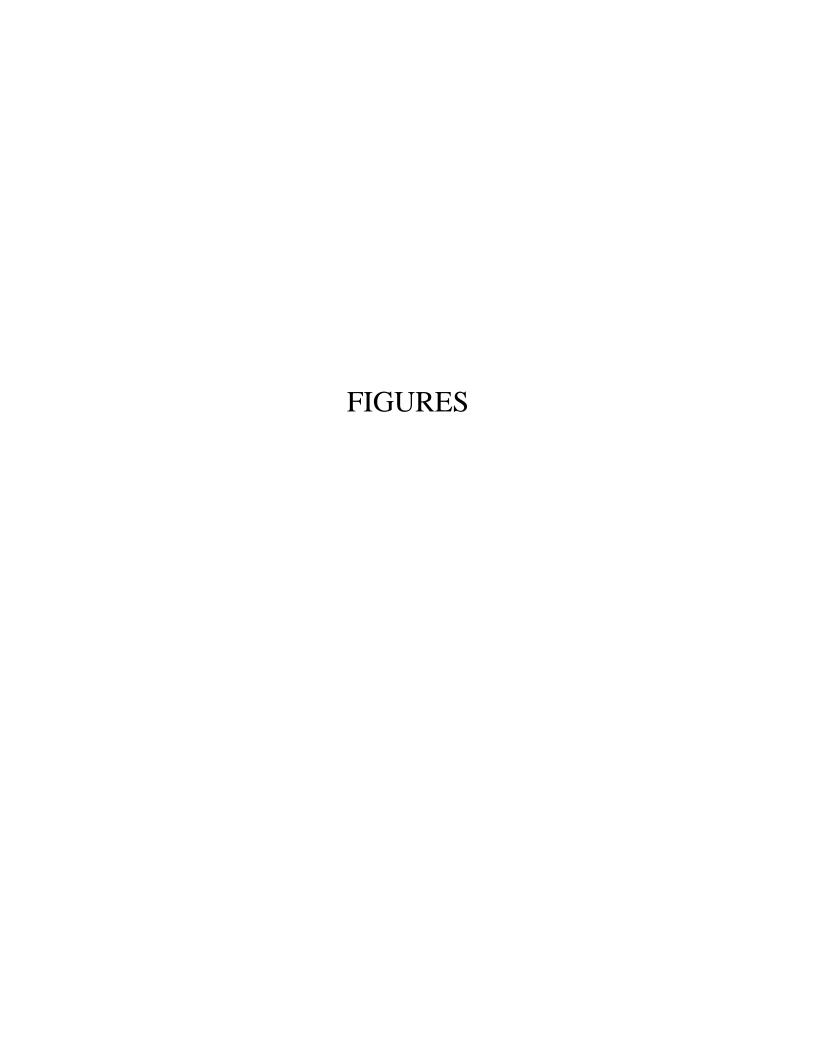
	Flow	Vac	uum	
Date	Mani-	Mani-	Well-	OVA
	fold	fold	head	
11/27/17		7.0	5.0	
11/28/17		7.0	5.0	
11/29/17		7.0	5.0	
11/30/17		7.0	5.0	
12/7/17 12/14/17		0.5	5.5	
12/14/17		6.5	5.5 5.5	
1/18/18		6.5	5.5	
2/15/18		6.5	5.0	
3/21/18		4.5		
4/16/18		5.0		
5/17/18		4.5		
6/13/18		5.0		
7/23/18		5.0	4.5	
8/16/18		5.0		
9/10/18		6.0	0.5	
10/18/18 11/20/18		5.0	2.5	
12/13/18		7.0 4.0	3.0 2.5	
1/15/19		4.5	3.0	
2/13/19		5.0	0.0	
3/19/19		5.0	3.0	
4/10/19		5.0	3.0	
5/20/19		5.0	3.5	
6/10/19		4.5	NM	
7/16/19		7.5	NM	
8/16/19		6.0	4.5	
9/12/19		7.0	NM	
10/14/19		6.0	4.5	
11/20/19		6.0	5.5 6.0	
1/6/20		7.0	6.0	
2/12/20		6.0	5.0	
3/10/20		5.0	NM	
4/7/20		3.5	3.5	
5/6/20		4.5	NM	
6/9/20		7.0	6.0	
7/14/20		6.0	NM	
8/12/20		5.0	NM	
09/23/20		6.0	6.0	
10/06/20		6.5	6.0	
11/03/20		7.0	6.5	
12/09/20	—	7.0	6.0 5.5	
01/20/21 02/10/21		6.5 5.0	4.5	
03/16/21		6.0	4.5	
04/06/21		6.0	NM	
05/05/21		5.0	4.0	
06/21/21		5.0	3.5	
07/13/21		6.0	4.5	
08/17/21		5.0	3.5	
09/08/21		5.0	4.0	
10/19/21	l	0.0	0.0	
11/02/21		0.0	0.0	
02/08/22		0.0 5.0	0.0 4.0	
03/08/22 04/07/22		9.0	8.5	
05/20/22	-	8.0	7.5	
06/20/22		6.0	5.0	
07/12/22		5.0	2.5	
08/02/22		11.0	10.0	
09/02/22		6.5	5.0	
10/05/22		7.0	5.0	
11/11/22		7.0	6.0	
1	I			

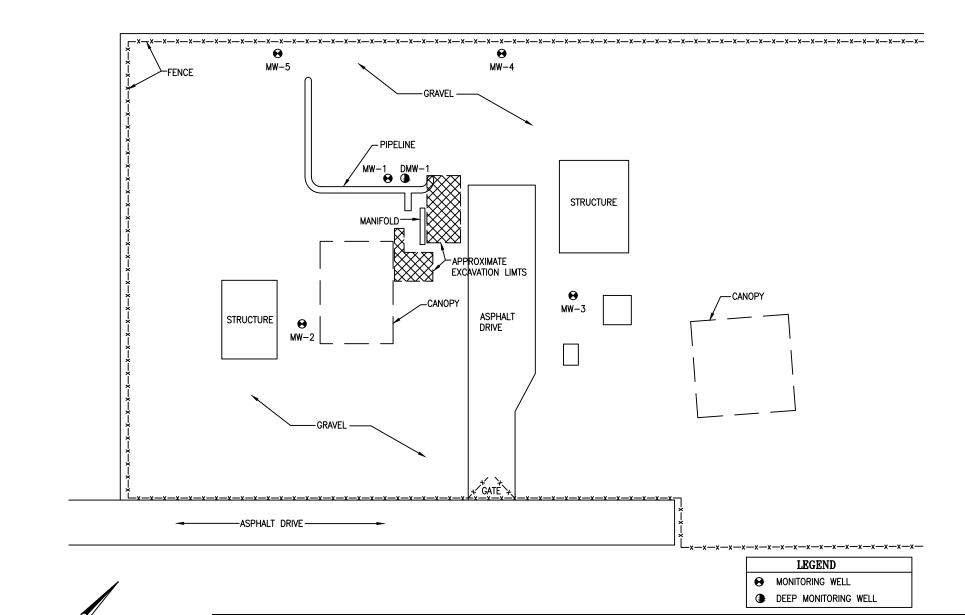
5532 RASummaryTable-12.11.2017.xls T8 - SVE-MPX Well

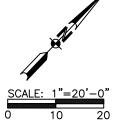
TABLE 11: SYSTEM INFLUENCE MONITORING PARAMETERS

racility Name:	acility Name: CFPL - Auburndale Facility		Facility ID#: 123456789				6789	6789 DTW = Feet D.O mg/l				Vac/Press = in of H ₂ O Obs Visual Observations				
WELL NO.	L NO. MW-1			MW-2			MW-3				MW-4					
WELL DEPTH			20				20				20				20	
SCREEN INT.			5-20				5-20				5-20				5-20	
DATE	DTW	D.O.	Vac/Press	Obs.	DTW	D.O.	Vac/Press	Obs.	DTW	D.O.	Vac/Press	Obs.	DTW	D.O.	Vac/Press	Obs.
11/27/17	15.02		-0.70		14.64		-0.20		14.04		-0.10		14.99		-0.25	
11/28/17	15.15		-0.70		15.18		-0.16		14.10		-0.10		15.19		-0.30	
11/29/17	15.20		0.73		14.76		0.14		14.17		0.10		15.18		0.30	
11/30/17	15.28		-0.70		14.80		-0.12		14.22		-0.10		15.23		-0.30	
12/7/17 12/14/17	15.50 15.75		-0.80 -0.78		15.08 15.58		-0.10 -0.10		14.50 14.73		-0.12 -0.10		15.50 15.74		-0.24 -0.24	
12/20/17	15.75		-0.78		15.60		-0.10		14.76		-0.10		15.74		-0.24	
1/18/18	15.90		-0.80		15.69		-0.10		14.76		-0.10		15.75		-0.20	
2/15/18	17.48		-0.80		16.90		-0.10		16.49		-0.10		17.15		-0.30	
3/21/18	18.20		-0.90	5" of LNAPL	17.96		-0.20		17.57		-0.20		18.45		-0.40	
4/16/18	17.53		-0.80	2" of LNAPL	17.33		-0.10		16.72		-0.10		17.33		-0.20	
5/17/18	16.78		-0.76	2" of LNAPL	17.91		-0.10		17.57		-0.10		18.33		-0.18	
6/13/18	15.88		-0.09		15.48		-0.02		18.63		-0.02		15.78		-0.02	
7/23/18	15.65		-1.00		14.84		-0.20		14.35		0.00		15.59		-0.20	
8/16/18	13.37		NM		13.03		NM		12.47		NM		13.30		NM	
9/10/18	13.70		1.40		12.29		0.40		12.75		0.00		13.63		0.40	
10/18/18	13.75		-1.40		13.39		-0.40		12.88		0.00		13.80		-0.70	
11/20/18	15.10		-1.50		14.67		-0.20		14.12		-0.04		15.12		-0.16	
12/13/18	15.75		-1.20		15.36		-0.40		14.81		0.00		15.85		-0.60	
1/15/19	16.02		-1.40		15.60		-0.40		15.07		-0.20		16.08		-0.60	
2/13/19	15.20		-1.40		14.80		-0.40		14.23		0.00		15.15		-0.40	
3/19/19	15.45		-1.00		15.15		-0.40		14.69		0.00		15.43		-0.40	
4/10/19 5/20/19	17.14 16.84		-1.00 -1.20		16.86 17.25		-0.60 -0.10		16.72 16.82		0.00 -0.04		17.10 17.28		-0.40 -0.20	
6/10/19	16.80		-1.00		17.64		-0.10		17.42		0.00		18.12		-0.40	
7/16/19	15.14		-1.20		14.82		-0.60		14.12		-0.08		15.00		-0.40	
8/16/19	13.02		-1.80		12.55		-0.80		11.96		-0.10		12.83		-0.80	
9/12/19	13.61		-1.60		13.10		-0.40		12.56		0.00		13.38		-0.02	
10/14/19	13.85		-1.60		13.48		-0.20		12.97		0.00		13.90		-0.10	
11/20/19	13.68		-1.80		13.32		-0.20		12.80		0.00		13.70		-0.20	
12/13/19	14.43		-1.60		14.10		-0.20		13.58		0.00		14.51		-0.20	
1/6/20	14.86		-1.80		14.53		-0.20		14.02		0.00		14.89		-0.20	
2/12/20	15.91		-1.60		15.53		-0.15		14.98		0.00		15.92		-0.20	
3/10/20	16.59		-1.20		16.35		-0.20		16.04		-0.08		16.68		-0.30	
4/7/20	17.08		-1.40		17.71		-0.20		17.27		-0.10		17.63		-0.25	
5/6/20	17.53		-1.20		18.10		-0.20		17.73		-0.10		18.48		-0.40	
6/9/20	17.96		-1.00		18.14		-0.10		17.98		0.00		18.44		-0.20	
7/14/20	17.02		-1.20		17.47		-0.40		16.93		-0.16		17.12		-0.30	
8/12/20	16.11		-1.20 -1.10		15.65		-0.44 -0.30		15.98		-0.12 -0.10		16.03		-0.28 -0.20	
09/23/20 10/06/20	15.20 14.86		-1.10 -1.20		14.81 14.46		-0.30		13.99 13.86		-0.10 -0.10		15.18 14.86		-0.20	
11/03/20	15.67		-1.20		15.27		-0.24		14.65		-0.10		15.63		-0.30	
12/09/20	16.35		-1.00		16.06		-0.20		15.53		0.02		16.43		-0.40	
01/20/21	16.73		-1.00		16.77		-0.20		16.35		0.02		16.86		0.00	
02/10/21	16.83		-0.80		17.22		-0.10		16.83		0.00		17.30		-0.20	
03/16/21	16.75		-1.20		17.42		-0.10		17.03		0.00		17.51		-0.20	
04/06/21	16.98		-1.00		17.35		-0.20		16.95		0.00		17.33		-0.10	
05/05/21	16.87		NM		17.67		NM		17.21		NM		17.88		NM	
06/21/21	17.39		-0.80		19.14		-0.16		18.78		-0.04		19.48		-0.20	
07/13/21	15.92		-0.60		15.76		-0.20		14.55		-0.02		15.88		-0.20	
08/17/21	16.50		-0.80		15.64		-0.20		14.91		-0.04		16.00		-0.20	
11/02/21	17.12		-1.20		18.33		-0.10	-	17.87		0.00	-	18.46		-0.10	
02/08/22	19.69		-3.40		19.81		-0.04		19.81		0.00		19.79		-0.28	
05/20/22	>20		-1.80		>20		-0.28		>20		-0.06		>20		-0.44	
08/02/22 11/11/22	17.77 13.05		-0.20 -0.20		18.66		0.00 -0.10		18.85		0.00		18.88 13.03		0.00 -0.20	
					12.52		-0.10		11.98		0.00				-0.20	

WELL NO.			MW-5													
WELL DEPTH	20															
SCREEN INT.			5-20													
DATE	DTW	D.O.	Vac/Press	Obs.	DTW	D.O.	Vac/Press	Obs.	DTW	D.O.	Vac/Press	Obs.	DTW	D.O.	Vac/Press	Obs.
11/27/17	15.46		-0.05													
11/28/17	15.61		-0.06													
11/29/17	15.58		-0.04													Ĺ
11/30/17	15.61		-0.40													
12/7/17	15.89		-0.60													
12/14/17	16.13		-0.06													
12/20/18 1/18/18	16.15 16.31		-0.05 -0.08						1							-
2/15/18	17.65		-0.08													
3/21/18	18.28		-0.10													
4/16/18	17.73		-0.10													
5/17/18	18.43		-0.10													
6/13/18	16.47		-0.01													
7/23/18	16.00		-0.10													
8/16/18	13.75		NM													
9/10/18	14.06		-0.10													
10/18/18	14.18		-0.20													
11/20/18	15.55		-0.10													<u> </u>
12/13/18	16.30		-0.20													<u> </u>
1/15/19 2/13/19	16.52 15.60		-0.20 -0.20						-							
3/19/19	15.60		-0.20													
4/10/19	17.57		-0.20													
5/20/19	17.82		-0.05													
6/10/19	18.39		-0.20													
7/16/19	13.42		-1.00													
8/16/19	13.42		-1.00													
9/12/19	13.72		-0.02													
10/14/19	14.27		-0.10													<u> </u>
11/20/19	14.11		-0.10													<u> </u>
12/13/19	14.92		-0.10													
1/6/20 2/12/20	15.31		-0.10 -0.15						-							
3/10/20	16.37 17.15		-0.15													
4/7/20	18.08		-0.02													
5/6/20	18.73		-0.02													
6/9/20	18.96		0.00													
7/14/20	17.94		-0.20													
8/12/20	16.77		-0.20													
09/23/20	15.85		-0.10													
10/06/20	15.53		-0.10													
11/03/20	16.11		-0.10													
12/09/20	16.96		-0.20													
01/20/21	17.85		-0.06							-						<u> </u>
02/10/21	17.90		0.00						-							—
03/16/21 04/06/21	18.11 17.88		0.00		-					-						<u> </u>
05/05/21	18.25		NM													
06/21/21	19.42		-0.06													
07/13/21	17.28		-0.04													
08/17/21	16.67		-0.04													
11/02/21	18.63		0.00													
02/08/22	19.83		-0.30													
05/20/22	>20		-0.12													
08/02/22	19.44		0.00													
11/11/22	13.08		-0.10													



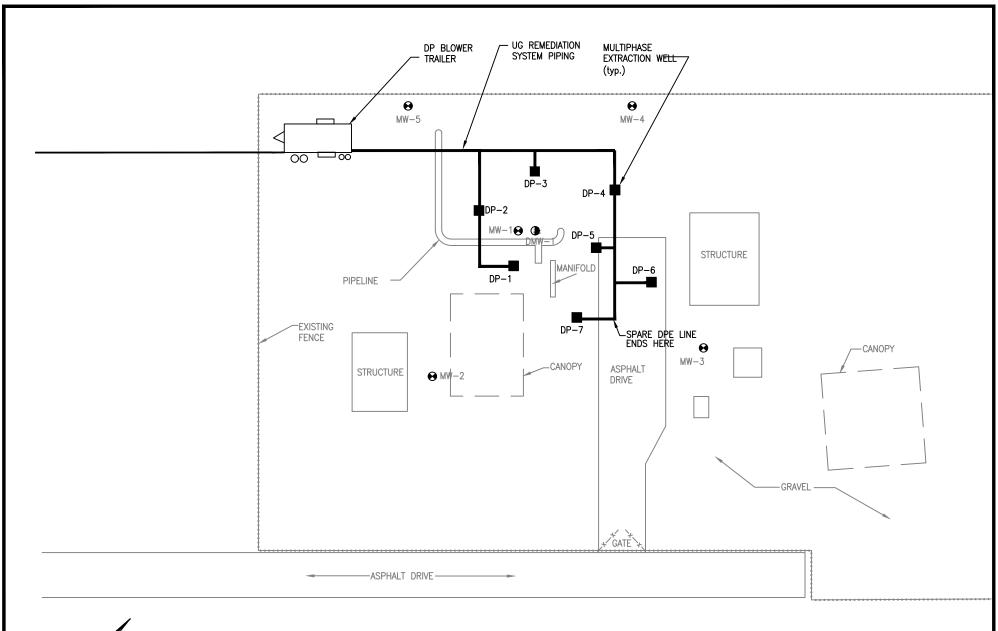


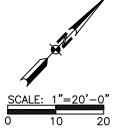




8339 Stone Run Ct. Tampa, Florida 33615 ph. (813) 639-1241 fx. (813) 639-1622 FIGURE 1 SITE MAP CFPL-AUBURNDALE FACILITY AUBURNDALE, FLORIDA

DATE	PROJ. NO.			
DEC 2022	5490			
PROJ. MGR. J.D.	REVIEWED BY J.M.			
DRAWING NO. FIG 2	DRAWN BY D.S.M.			
FDEP SITE ID: COM_340016				

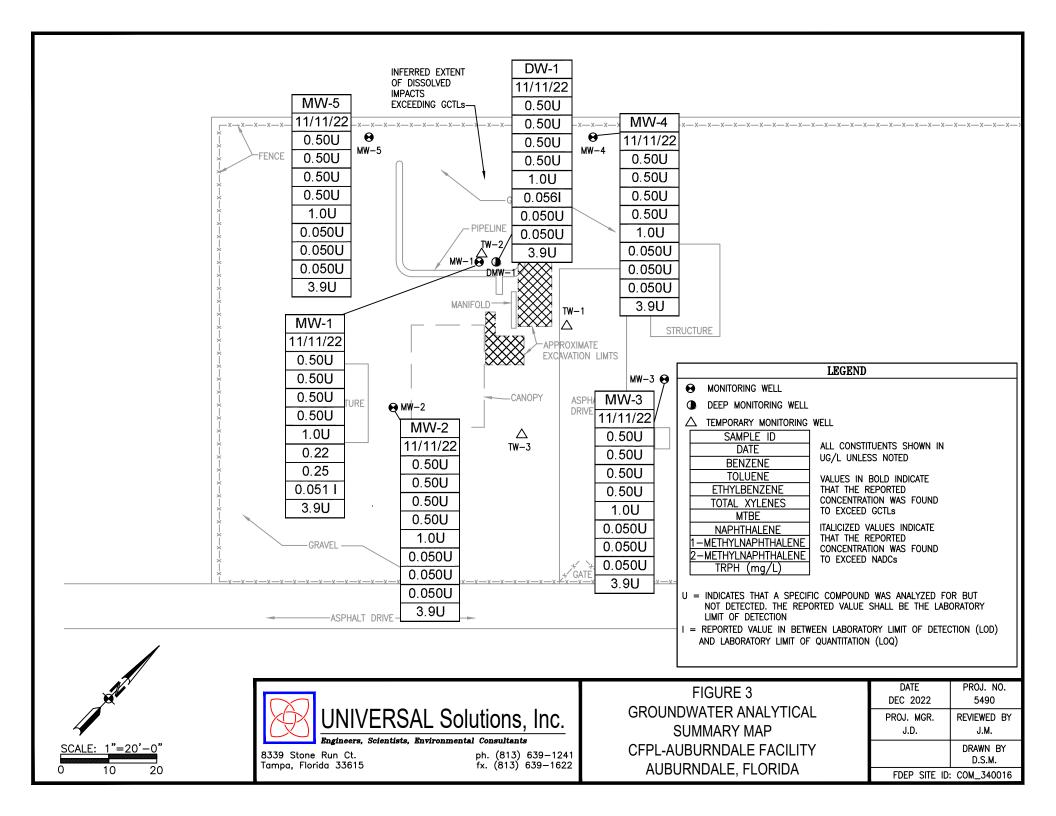


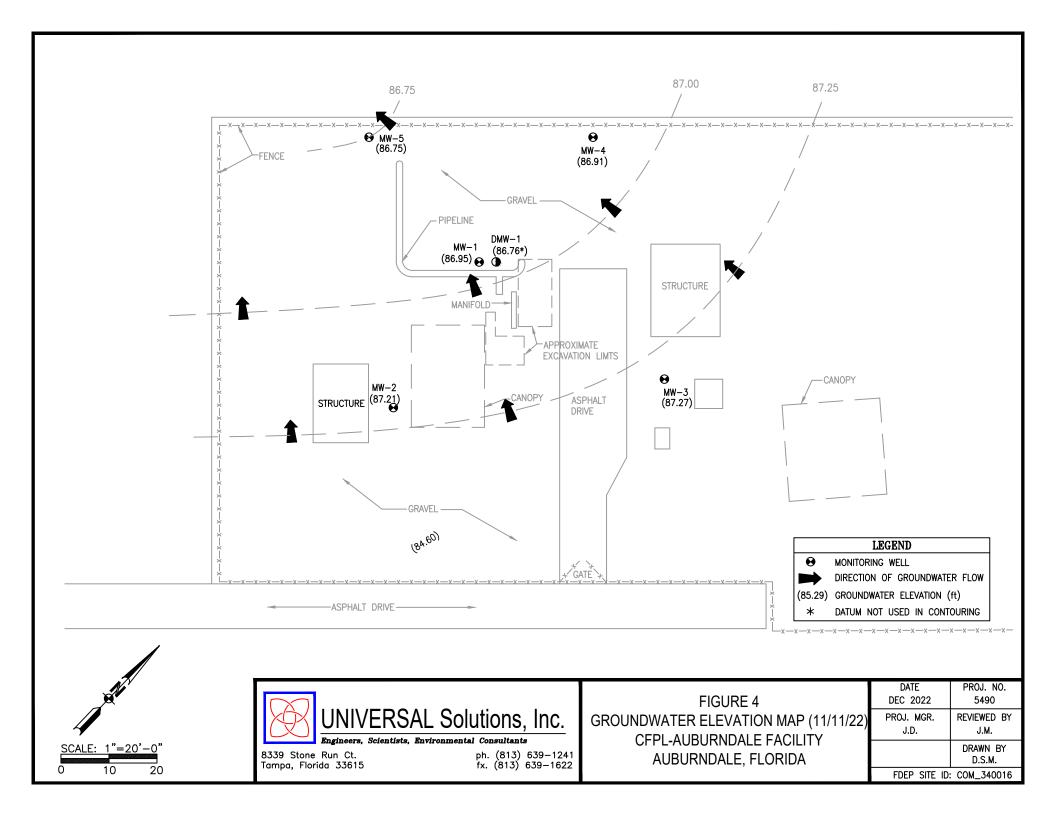


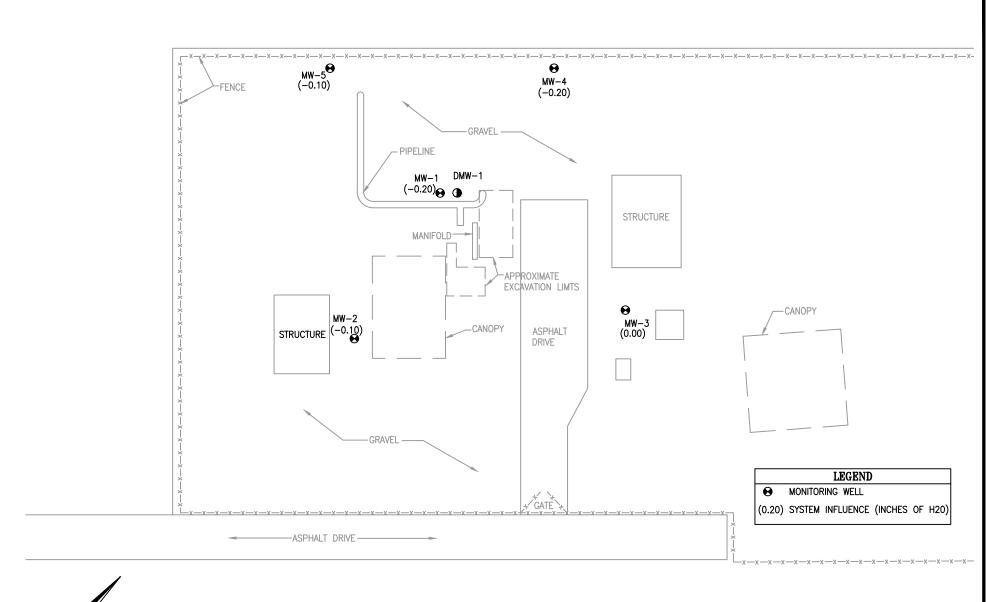


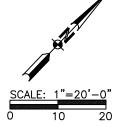
8339 Stone Run Ct. Tampa, Florida 33615 ph. (813) 639-1241 fx. (813) 639-1622 FIGURE 2 REMEDIATION SYSTEM LAYOUT CFPL-AUBURNDALE FACILITY AUBURNDALE, FLORIDA

	DATE	PROJ. NO.
ı	DEC 2022	5490
	PROJ. MGR.	REVIEWED BY
	J.D.	J.M.
	DRAWING NO.	DRAWN BY
		D.S.M.
ı	FDEP SITE ID:	COM_340016











8339 Stone Run Ct. Tampa, Florida 33615 ph. (813) 639-1241 fx. (813) 639-1622 FIGURE 5
REMEDIATION SYSTEM
INFLUENCE MAP (11/11/22)
CFPL-AUBURNDALE FACILITY
AUBURNDALE, FLORIDA

DATE	PROJ. NO.
DEC 2022	5490
PROJ. MGR.	REVIEWED BY
J.D.	J.M.
	DRAWN BY
	D.S.M.
FDEP SITE ID:	COM_340016

Old Dixie Trail PD&E Study FPID No: 435391-1-22-01 Contamination Screening Evaluation Report



Map ID 9: Universal Forest Products Eastern Division



Universal Forest Products, Inc.

September 12, 2008

Ms. Nell Tyner Bureau of Waste Cleanup Florida Department of Environmental Protection 13051 N. Telecom Parkway Temple Terrace, Fl. 33637 Dept. of Environmental Protection

SEP 18 2008

Southwest District

RE: S

Site Investigation Plan

Universal Forest Products Eastern Division, Inc., Auburndale, FL

EPA ID No.: FLD 984 181 487

Dear Ms. Tyner

Enclosed you will find two copies of a Site Investigation Plan for the property referenced above. The goal of the plan is to identify whether or not historical wood treating operations have caused arsenic detections in on-site monitoring wells. The Plan is intended to address the following two FDEP program areas:

- 1. Industrial Wastewater: FDEP has denied Universal Forest Products Eastern Division, Inc.'s (UFP) Industrial Wastewater Permit Application and proposed a Consent Order alleging that UFP has caused the groundwater contamination. UFP disputes that conclusion and has exercised its right to an administrative hearing, however there is general agreement that further investigation to determine the sources would be helpful in settlement of this dispute.
- 2. Waste Management: UFP currently operates a Subpart W Waste Management Unit for former chromated copper arsenate wood treating operations: Those operations ceased in October, 2003 and transitioned to a non-arsenical wood preservative. As a result, UFP plans to initiate the "phased closure" process outlined in the August 16, 2004 CCA Conversion Guidelines (attached). Part of that process is the Preliminary Contamination Assessment Plan (PCAP), which is intended to determine if contamination exists as a result of historical CCA operations. The goals of the PCAP appear to be similar enough to the Industrial Waste goals that this Site Investigation Plan should be sufficient to satisfy both programs.

Please be aware that this investigation is not meant to be comprehensive of the entire site. It is only intended to support historical data showing that there has not been a release to groundwater from the CCA treating operations. This will assist UFP in narrowing the scope of future investigations. UFP requests the Bureau's concurrence that the Site Investigation Plan along with historical groundwater data will be sufficient to determine

whether or not the arsenic levels in MW-D, MW-A and MW-E can be directly linked to an historical release from the CCA wood treatment plant. Upon receiving such concurrence, UFP will initiate the site investigation within 30 days.

If you have any questions or concerns please do not hesitate to contact me at 616/365-1569 or <u>jseufert@ufpi.com</u>.

Sincerely,

Jim Seufert, R.E.H.S.

Manager of Regulatory Compliance

Encls.

cc: Yanisa Angulo, Industrial Wastewater, FDEP

Dept. of Environmental Protection

SEP 18 2008

Southwest District

TO:

Directors of District Management

Waste Program Administrators

FROM:

Mike Sole, Director

Division of Waste Management

DATE:

August 16, 2004

SUBJECT: CCA Conversion Guidelines

Dept. of Environmental Protection

SEP 18 2008

Southwest District

On September 24, 2003, EPA published a memo entitled "Options for Drip Pads at Wood Treating Plants Converting from Chromated Copper Arsenate (CCA) Preservative to Preservatives that do not Generate Hazardous Waste." The EPA memo describes three options: (1) complete closure before converting; (2) continued operation under 40 CFR Part 265 Subpart W; and (3) phased closure.

The EPA guidance specifically does not address tanks and ancillary piping and equipment, or particulars of process equipment cleaning and/or replacement. The attached document addresses these issues; provides additional details concerning closure of hazardous waste drip pads under Subpart W; and includes guidance on demonstrating that waste managed on a drip pad is not F035 by virtue of the mixture rule [40 CFR 261.3(a)(2)(iv)].

Facilities that choose EPA's "closure" or "phased closure" option at conversion from use of CCA to other wood treating chemicals must show that they have completed activities outlined in the attached guidance document.

Many wood treating facilities in Florida have indicated their preferred option is to continue operating under Subpart W. As we all know, the State of Florida is particularly dependent on groundwater for all domestic, agricultural and industrial purposes. The karst nature of Florida's geologic environment means that our groundwater resources are exceptionally vulnerable to contamination. Historical waste management practices at wood preserving facilities have led to groundwater contamination. Therefore, the Department is conducting an extensive review of available information about practices and conditions at closed and currently operating wood treating facilities in Florida, and expects to focus resources to ensure that contamination at all such facilities is detected, controlled and ultimately remediated.

Compliance with these guidelines by a wood treating facility shall not affect remedial action requirements or obligations at any facility where environmental contamination is currently known or subsequently discovered, and shall not preclude the Department from commencing or continuing enforcement action based on environmental contamination or regulatory violations.

STATE OF FLORIDA GUIDELINES FOR CLOSING A DRIP PAD UNDER 40 CFR PART 265 SUBPART W

Facilities that choose EPA's "closure" or "phased closure" option at conversion from use of CCA to other wood treating chemicals must show that they have completed activities outlined in these guidelines. Alternative tasks, methods, procedures or time frames may be approved by the Department, based on site-specific justifications submitted to the Department in writing by a Florida registered professional engineer or geologist using sound professional judgment.

A wood treatment system generally consists of a drip pad, sumps(s), a treatment cylinder, pumps, piping, valves, fittings and storage tank(s). To close a wood treatment system, or to convert a wood treatment system from a process that produces hazardous waste to a process that does not produce hazardous waste, the facility must meet the closure performance standard at 40 CFR 265.445(a): "remove or decontaminate all waste residues, contaminated containment system components, (pads, liners, etc), contaminated sub soils, and structures and equipment contaminated with waste and leakage, and manage them as hazardous waste," using the following guidelines:

- 1. Remove all waste residues from the tanks, treatment cylinder and ancillary equipment including bottom sludge.
- 2. Scrub and de-scale the tanks to remove any scaling prior to rinsing, then rinse the tanks and flush the piping to remove the chemical residuals.
- 3. Decontamination of drip pad and associated collection systems: The drip pad should be thoroughly cleaned and re-sealed prior to monitoring of the treating chemical solution per item #5. Cleaning of the drip pad will include, at a minimum, high-pressure washing. For drip pads with long term usage a more aggressive cleaning technique may need to be employed; it is preferred that the drip pad surface be shot blasted (blast track machine) and then re-sealed.
- 4. The facility must collect, characterize, manage and dispose of all rinse water and/or shot blasted residues derived from the cleanup of the wood treatment system as F035 hazardous waste, in accordance with hazardous waste regulations, unless the Department, on a case-by-case basis, excludes debris in accordance with 40 CFR 261.3(f) and excludes contaminated environmental media in accordance with the Department's memo dated August 21, 2002. Non-hazardous rinse water or shot blast residue must be managed and disposed of in accordance with state and local requirements
- 5. F035 waste is described in part in 40 CFR 261.31 as: "Wastewater (except those that have not come into contact with process contaminants), process residuals, preservative dripping, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium." The Department has determined that a CCA treatment system would be cleaned sufficiently such that any liquids that come in contact with the pad would not be viewed as having been "mixed" with F035 waste under the mixture rule [40 CFR 261.3(a)(2)(iv)] if untreated wood treatment waste (i.e. waste "as generated") meets the Universal Treatment Standards (UTS) for F035 constituents set forth in 40 CFR 268.40 and 268.48:

W [milligran	Non-wastewaters (mg/L TCLP)			
Arsenic (As)	1.4	5.0		
Chromium Total (Cr)	2.77	0.60		

This determination also applies to wastes which are generated by use of non-CCA chemicals or makeup water that may contain arsenic or chromium as impurities. In other words, as-generated (i.e. untreated) wastes that do not exceed UTS for As and Cr do not meet the F035 listing description in Florida. The facility must notify the Department if it uses or intends to use groundwater from the site as makeup water for the wood treatment process.

The demonstration that the wood treatment waste meets UTS must be based on a technically adequate sampling program, with a minimum of one sample per 55 gallon drum of waste generated, for a sufficient period of time to generate data ensuring that concentrations of As and Or in the waste are regularly and consistently at or below UTS. The sampling program should continue until the Department agrees that the demonstration has been made. DURING AND AFTER THE DEMONSTRATION SAMPLING PERIOD, ALL NONWASTEWATERS THAT MEET THESE CRITERIA IF DISPOSED OF IN FLORIDA, MUST BE SENT TO A PERMITTED SOLID WASTE CLASS I LINED LANDFILL WITH A LEAK DETECTION SYSTEM. WASTEWATERS THAT MEET THESE CRITERIA MUST BE MANAGED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL WATER FACILITY PERMITTING, PRETREATMENT, REUSE AND/OR DISCHARGE REQUIREMENTS.

- Upon completion of this phase of closure [steps 1 through 5], the facility must submit to 6. the Department a phased closure report including certification, signed by a professional engineer registered in the State of Florida. The phased closure report must demonstrate proper disposal of residues and include all analytical results for steps 1 through 5. The facility must continue to comply with 40 CFR 265.441, 265.443, and 265.444 until certification of phased closure is accepted by the Department.
- Along with the phased closure report from step 6, the facility must submit a Preliminary 7. Contamination Assessment Plan (PCAP) designed to determine whether contamination from use of CCA or any other hazardous wood treatment chemical (such as boron, creosote or pentachlorophenol) is present at the facility. The facility may make this demonstration by sampling soil, sediment, surface water and groundwater in the areas of greatest expected contamination in the vicinity of the drip pad and other areas of the facility where treatment chemicals may have been released, and showing that such samples contain no contamination above protective levels established for unrestricted exposure. The attached document entitled "Subpart W Preliminary Contamination Assessment Guidelines" may be used as guidance in developing and completing the preliminary assessment.
- If the preliminary assessment establishes that contamination is present, the facility must implement either (1) a closure plan pursuant to an enforceable remediation order with compliance schedules, or (2) a perimeter monitoring program until the facility ceases wood treatment operations to ensure that contamination does not extend beyond the facility boundaries. The monitoring program shall be implemented pursuant to an enforceable remediation order with compliance schedules and provisions for corrective action, if needed. When the facility ceases wood treatment operations, all contamination at the facility must be addressed pursuant to an enforceable remediation order with compliance schedules. Perimeter Groundwater Monitoring Plan guidance is attached.

- 9. If the preliminary assessment demonstrates that contamination is not present above cleanup target levels (CTLs) established in Chapter 62-777, Florida Administrative Code (F.A.C.) for unrestricted exposure, and the facility successfully completes steps 1 through 7 of this guidance, closure of a hazardous waste drip pad under 40 CFR 265.445 will be deemed complete through issuance of a Department determination subject to public notice.
- 10. Continued use of the facility after conversion to a non-hazardous waste producing process, especially use of a drip pad, must be in accordance with applicable environmental requirements, including but not limited to the Department's industrial wastewater discharge and disposal regulations.

SUBPART W PRELIMINARY CONTAMINATION ASSESSMENT GUIDELINES

Facilities that choose EPA's "closure" or "phased closure" option at conversion from use of CCA to other wood treating chemicals must show that they have completed activities outlined in these guidelines. Alternative tasks, methods, procedures, or time frames may be approved by the Department, based on site-specific justifications presented to the Department in writing by a Florida registered professional engineer or geologist using sound professional judgment.

- 1. Environmental sampling and laboratory analysis shall comply with the quality assurance requirements of Chapter 62-160, Florida Administrative Code (F.A.C.)
- 2. Facilities shall prepare a Preliminary Contamination Assessment Plan (PCAP) which describes tasks to determine whether soil, groundwater, sediment, or surface water contamination exists as a result of Facility operations. Soil, groundwater and surface water contaminant concentrations shall be compared to cleanup target levels established in Chapter 62-777, F.A.C., and the Department's Sediment Quality Assessment Guidelines shall be used to evaluate potential sediment contamination. The PCAP shall include a time schedule for each task so that all tasks can be completed and a Preliminary Contamination Assessment Report (PCAR) can be submitted to the Department within 120 days of approval of the PCAP by the Department. Applicable portions of the PCAP shall be signed and sealed by a Professional Engineer or Professional Geologist pursuant to Section 403.0877, Florida Statutes (F.S.).
- 3. The PCAP shall include provisions for the installation and sampling of a minimum of four monitor wells to determine the groundwater quality and flow direction at the site. Proposal of fewer wells, an alternate well configuration, or alternate monitoring devices is subject to Department approval. Provision to sample surface waters, sediments, and/or soils shall be included as necessary.
- A. One of the wells shall be located in the area suspected of greatest contamination and one well shall be located down gradient of the area suspected of highest contamination.
 - B. One of the wells shall be an unaffected background well.
- C. Other wells shall be located as required to determine the direction of groundwater flow, and based on potential discharge locations and site specific conditions.
- D. If there are any production, process or other existing wells at the Facility, the PCAP shall include a provision to sample and analyze groundwater from such wells.
- 4. A. The analyses for contaminants in surface water, groundwater, soil, and sediment samples, as applicable, shall be performed using the appropriate analytical procedures referenced or listed in Chapter 62-160, F.A.C. The initial analyses of contaminants, including their reaction or degradation products, shall be based on the site history, if adequately known. Where the site history is not adequately known, the initial suite of contaminants shall be the following:
- (1) priority pollutant metals listed in 40 C.F.R. Part 122, Appendix D, Tables II through IV
- (2) priority pollutant volatile and semi volatile organic chemicals listed in 40 C.F.R. Part 122, Appendix D, Tables II through IV
 - B. The following analytical methods shall be used:
- (1) EPA methods 200.7/6010, 200.8/6020, and/or appropriate 200 series or 7000 series methods shall be used for metals;
- (2) EPA methods 624/8260B and 625/8270C shall be used for volatile and semi volatile organic chemicals. Additionally, for groundwater or surface water samples, all other

organic chemicals, including tentatively identified compounds, with peaks greater than 10 micrograms per liter (ug/l) detected using EPA methods 624/8260B or 625/8270C shall be reported.

- C. Proposal of alternate analytical methods is subject to Department approval.
- D. For each analytical method used, all the analytes which the method lists as detectable shall be reported, regardless of whether the analyte is included in the parameters listed above and regardless of whether the analyte is detected. All method detection limits must be equal to or less than the applicable cleanup target levels set forth in Chapter 62-777, F.A.C., or a justification must be provided.
- 5. The PCAP shall include provisions for investigation of the following conditions, as applicable, at the Facility. Investigation may include literature searches, including relevant information developed during environmental assessment and remediation of nearby properties.
 - A. The presence of soil and sediment contamination at potential discharge locations;
- B. The aquifers present beneath the site and their Chapter 62-520, F.A.C., groundwater classification;
- C. The presence of surface waters of the State within the property boundary and, if applicable, their Rule 62-302, F.A.C., classification; and
- D. The geology and hydrogeology of the site focusing on aquifers and confining units which are present, the potential for movement of contaminants both horizontally and vertically, zones that are likely to be affected, and actual and potential uses of the groundwater as a resource.
- 6. The PCAP shall contain the following site-specific information;
 - A. Proposed well installation, construction and development details;
 - B. Quality assurance information consistent with Chapter 62-160, F.A.C., such as
- (1) A description of methods and equipment to be used to quantify soil and sediment contamination;
- (2) A description of water sampling methods, including names of sampling personnel, procedures and equipment;
 - (3) Name of laboratory to be used for analytical work:
- (4) The parameters to be analyzed for, the analytical methods to be used and the detection limits of these analytical methods;
- C. Site map depicting monitoring well locations and other proposed sampling sites and justification for their selection;
- D. A brief site history including a summary of known spills or releases of materials which may be potential pollution sources; and
- E. A site map showing past and present treatment facility structures, lumber storage areas, buildings, surface water bodies, storm water drainage systems, and groundwater and surface water discharge locations.
- 7. The Department shall review the PCAP and provide the Facility with a written response to the proposal. The Facility may request a technical meeting with the Department's hazardous waste regulation section in Tallahassee, at which the details of the PCAP may be agreed upon, including the implementation schedule. The Department will prepare minutes of the meeting (MOM). If agreement is reached on all elements of the PCAP, the MOM along with all information submitted by the Facility in accordance with agreements reached at the meeting will serve as an approved PCAP. If all items are not agreed upon, the MOM will reflect those elements, if any, that are approved and can be implemented, and will identify elements that need further development and a schedule for completion.

- 8. Within 120 days of PCAP approval or an alternative time limit approved by the Department, the Facility shall submit a PCAR to the Department. Applicable portions of the PCAR shall be signed and sealed by a Professional Engineer or Professional Geologist pursuant to Section 403.0877, F.S. The PCAR shall:
 - A. Summarize and analyze all PCAP tasks;
 - B. Include, but not be limited to, the following tables and figures:
- (1) For monitoring wells, a table with well construction details, top of casing elevation, depth to water measurements, and water elevations;
- (2) A site map showing water elevations, water table contours and the groundwater flow direction for each aquifer monitored for each sampling period;
 - (3) A table with water quality information for all water monitoring devices;
- (4) Site maps showing contaminant concentrations and contours of the contaminants; and
- (5) If necessary to portray complex lithology, cross sections depicting the geology of the site at least to the top of the confining unit. When needed, there should be at least one north-to-south cross section and one east-to-west cross section sufficient to show the lithology in the contaminant plume downgradient and in lateral directions.
- C. Include copies of field notes pertaining to field procedures, particularly of data collection procedures;
- D. Specify results and conclusions regarding the objectives of the Preliminary Contamination Assessment;
- E. Provide the following quality assurance data along with the analytical data from all media:
- (1) dates of sample collection, sample preparation including extraction and sample analysis;
 - (2) the detection limits for these analyses;
- (3) the results from the analyses of field quality control samples; including field equipments, trip blanks and duplicates;
- (4) the results from reagent water blanks run on that day (5% of samples run, minimum);
 - (5) the spike and surrogate percent recoveries for the data set;
 - (6) the actual chromatograms, if requested by the Department; and
- (7) any other QA/QC information the Department deems necessary to evaluate the validity of the submitted data; and
- F. Identify, to the extent possible, the source(s), extent, and concentrations of contaminants, and the existence of any imminent hazards.
- 9. The Department shall review the PCAR and determine whether it is adequate to meet the objectives of the PCAP.
- 10. The Facility shall provide notification to the Department within (7) days but not less than 24 hours prior to the installation or sampling of any monitoring wells, and shall allow Department personnel the opportunity to observe installation and sampling and to take split samples. All necessary approvals must be obtained from the appropriate water management district before any wells are installed. If at any time, analyses show that contamination exists at the Facility, the Facility shall notify the Department in writing within 14 days of this finding.

PERIMETER GROUNDWATER MONITORING PLAN

Introduction:

- 1. This attachment has been prepared as guidance for implementing a Perimeter Groundwater Monitoring Plan (PGMP) at operating wood treating facilities with on-site contamination. The guidance applies to monitoring where groundwater flows through porous media. Adjustments to the guidance may be on a site specific basis where groundwater flow may occur predominately through fractured rock/karst terrain. Alternative tasks, methods, procedures, or time frames may be approved by the Department, based on site-specific justifications presented to the Department in writing by a Florida registered professional engineer or geologist using sound professional judgment.
- 2. The objectives of the PGMP are to establish that contaminated groundwater will not migrate beyond the Facility boundary. Monitoring will be conducted at regularly scheduled intervals at wells located along the Facility boundary. Monitoring wells must be constructed to monitor potential pathways of contaminant migration.

Location of Wells Relative to the Property Line:

- 3. The compliance monitoring wells may be located adjacent to the Facility boundary but monitoring wells located within the property and offset by a buffer zone are recommended by the Department. If a buffer zone is not provided, the monitor wells must be sampled on a quarterly basis. The monitor wells must be screened in the transmissive zone(s) where the migration pathway(s) are most likely to occur. Where physical obstructions exist, the monitoring wells should be installed at the most practicable locations down gradient from the source area(s).
- 4. In addition to the perimeter monitoring wells, the facility must include sufficient onsite monitoring wells in the PGMP such that the groundwater flow direction in the transmissive zone(s) during each sampling event can be determined. If groundwater flow direction has not or cannot be determined, monitoring wells will be required around the entire Facility boundary.

Number of Wells:

- 5. The number of monitor wells installed and the screened intervals required to monitor contaminant migration near the Facility boundary should be based upon sound professional judgment, considering the following:
 - A. The concentration of contaminants in the source area(s);
 - B. The approximate areal and vertical extent of the existing groundwater plume(s);
 - C. Site specific geological conditions including heterogeneous lithologies and hydraulic conductivities:
 - D. Groundwater flow directions and rates;
 - E. Estimated longitudinal and transverse dispersivity rates:
 - F. Proximity to or presence of sensitive environments or groundwater users;

- G. Steep or variable hydraulic gradient;
- H. Buried pipes, trenches, tanks or other preferential flow pathways.

No less than two perimeter monitor well locations will be required for each contaminant plume in addition to the wells required to determine groundwater flow direction.

Alternate Groundwater Monitoring Locations:

6. Alternate locations may be used initially for the PGMP within the interior of the facility property. For example, existing assessment wells may be used along the down gradient edge of stable or slowly migrating plume(s) if the contaminant concentrations do not yet exceed the groundwater cleanup target levels (GCTLs) at that location. GCTLs are found in Chapter 62-777, F.A.C. After the GCTL is exceeded, the monitoring well location may then be moved adjacent to the Facility boundary.

Monitor Well Construction:

Guidance for monitoring well construction is given in the reference documents.

Contaminants to be Monitored, Frequency of Sampling and Quality Assurance Requirements:

7. The facility must sample and analyze for all COCs identified at concentrations above the GCTL in the assessment phase. All sampling and analysis shall be conducted in accordance with Chapter 62-160, F.A.C. If not sampled quarterly, the monitor well sampling frequency should be selected such that the groundwater contaminants would not migrate from the monitor well location past the property line in the time interval between sampling events. However, the time period between sampling events may not exceed one year.

PGMP Submittal Requirements:

- 8. The PGMP shall either include the following or provide a reference to a source in a document previously submitted to the Department:
- A. A site history including a summary of known spills or releases of materials which may be potential or actual pollution source(s) and all of the soil, sediment and groundwater contamination areas delineated during the assessment phase.
- B. The aquifers present beneath the site and their Chapter 62-520, F.A.C., groundwater classification.
- C. Cross sections depicting the geology of the site at least to the top of the first confining unit. In general there should be at least two geologic cross sections which intersect at approximately 90 degrees.
- D. A site map depicting on-site potential sources of contamination, perimeter monitoring well locations or other proposed sampling sites, justification for their selection, monitoring frequency with justification and schedule for installation.

- E. Provisions for installation and sampling of perimeter monitor wells to determine migration of contaminated groundwater beyond the Facility boundary, including proposed well construction details, well installation depths, screened intervals and well development procedures.
- F. Contaminants (parameters) to be sampled and analyzed, the analytical methods to be used (see requirements in Appendix 1). Proposal of alternate analytical methods is subject to Department approval. For each analytical method used, all the analytes which the method lists as detectable shall be reported, regardless of whether the analyte is included in the contaminant list and regardless of whether the analyte is detected. All method detection limits must be equal to or less than the applicable cleanup target levels set forth in Chapter 62-777, F.A.C., or a justification must be provided.
 - H. Name of laboratory to be used for analytical work. It must be NELAC accredited.
- I. Applicable portions of the PGMP shall be signed and sealed by a Professional Engineer or Professional Geologist pursuant to Section 403.0877, F.S.
- 9. The Department shall review and approve the PGMP after comments, if any, are adequately addressed.
- 10. The Facility shall provide notification to the Department within (7) days but not less than (24) hours prior to the installation or sampling of any monitoring wells, and shall allow Department personnel the opportunity to observe installation and sampling procedures and to take split samples. All necessary approvals must be obtained from the appropriate water management district before any wells are installed.

Perimeter Groundwater Monitoring Reports:

- 11. The facility must submit a Perimeter Compliance Groundwater Monitoring Report (PGMR) to the Department within 60 days after completion of each monitor well sampling event. The PGMR shall:
 - A. Include, but not be limited to, the following tables and figures:
 - (1) A table with well construction details; top of casing elevation, depth to water measurements, and water elevations:
 - (2) A site map showing well locations, water elevations, water table contours and the groundwater flow direction for each aquifer monitoring in each sampling event:
 - (3) A table with water quality information for all monitor wells.
- B. Include copies of field notes pertaining to field procedures, particularly of data collection procedures;
- C. Specify results and conclusions regarding detection of contaminants at the facility perimeter, and recommendations for future activities.
- D. Provide the following quality assurance data along with the analytical data from all media:

- (1) Dates of sample collection, sample preparation including extraction and sample analysis;
- (2) Detection limits for these analyses;
- (3) Results from the analyses of field quality control samples; including field equipments, trip blanks and duplicates;
- (4) Results from reagent water blanks run on that day (5% of samples run, minimum);
- (5) The spike and surrogate percent recoveries for the data set;
- (6) The actual chromatograms, if requested by the Department; and
- (7) Any other QA/QC information the Department deems necessary to evaluate validity of the submitted data.

Applicable portions of the PGMR shall be signed and sealed by a Professional Engineer or Professional Geologist pursuant to Section 403.0877, F.S. The initial PGMR must include the location of each well, in degrees, minutes and seconds of latitude and longitude. The elevation of the top of the well casing must be determined by a registered Florida land surveyor. Guidance for monitor well construction is contained in the reference documents.

12. The Department shall review the PGMR and determine whether it is adequate to meet the objectives of the PGMP and continues to demonstrate that the contaminant plume(s) does not extend beyond the Facility boundary.

References:

- 1. Handbook of Suggested Practices for the Design and Installation of Groundwater Monitoring Wells, EPA/600/4-89/034, March 1991.
- 2. <u>RCRA Groundwater Monitoring: Draft Technical Guidance</u>, EPA/530-R-93-001, November 1992.
- 3. <u>Standard Practice for Design and Installation of Ground Water Monitoring Wells in</u> Aquifers, ASTM D 5092-90.

SITE INVESTIGATION PLAN

Dept. of Environmental Protection

SEP 18 2008

Southwest District

UNIVERSAL FOREST PRODUCTS, INC. AUBURNDALE, FLORIDA



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September 2008

optimizing resources - water, air, earth



SITE INVESTIGATION PLAN

PREPARED FOR:

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September 2008

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1. INTRODUCTION

AquAeTer, Inc. (AquAeTer) will direct the installation of two wells and conduct groundwater sampling for arsenic, chromium and copper at the Universal Forest Products -Eastern Division, Inc. (UFP) property located in Auburndale, Florida, in accordance with Florida Department of Environmental Protection procedures. The purpose of this work is to determine if there is groundwater contamination originating from historical operations at the site. This work represents another step in a phased Risk Based Corrective Action (RBCA) Site Assessment as described in F.A.C. 62-780.600, and will be used to determine if further sampling is required. There is ongoing Florida Department of Environmental Protection (FDEP) oversight of this investigation.

BACKGROUND 1.1.

The Auburndale property is a wood treating plant that historically used Chromated Copper Arsenate (CCA) as a wood preservative for many years. A plant schematic is presented in Figure 1-1 and a site aerial is presented in Figure 1-2. On October 6, 2003, the plant ceased use of CCA and converted to a quaternary ammonia copper preservative. Due to the conversion, there has been no source of arsenic on the site for almost five years. However, since the conversion, arsenic levels in monitoring wells MW-D and MW-A have occasionally spiked above baseline levels. Potentially CCA-related copper and chromium have not been detected at elevated levels, however. Monitoring well MW-C is located downgradient from the Drip Pad, and upgradient from the storm water pond and MW-D, located downgradient from the pond. No elevated levels of arsenic have been detected in groundwater samples collected from MW-C even when elevated levels of arsenic were detected in groundwater samples collected from MW-D, as presented in Figure 1-3. Due to the consistently low arsenic levels in MW-C, monitoring was stopped in 2002.

SUMMARY OF PREVIOUS SITE INVESTIGATION ACTIVITIES 1.2.

During the week of September 11, 2006, four piezometers were installed at the site, soil samples were taken in the retention pond and several background locations, and low-flow sampling was performed in wells MW-D, MW-2, and MW-A. Groundwater elevations were determined at the piezometers and existing site wells. The elevations indicate that the general groundwater flow direction at the site is from the south to the north. Therefore, wells MW-D and MW-A are located such that each is down-gradient from the retention pond. The observed arsenic concentration at MW-D has increased during some sampling events, while the arsenic concentration at well MW-A has remained low.

The September 2006 groundwater sampling results showed arsenic levels in MW-D and MW-A that were consistent with historical baseline arsenic concentrations observed in each of the wells. Soil sampling was performed in the retention pond located on the northern section of the property in 12-inch increments to a depth of 2-feet using a 6-inch stainless steel hand auger. Four background samples were taken in four locations: 1) directly east of MW-A, 2) near the railroad track to the north of the property, 3) adjacent to an orange tree in an orchard north of the property, and 4) to the far east of the property. Three of the background samples were reported as non-detect for arsenic, and the other two had estimated arsenic concentrations between the laboratory method detection limit (MDL) and the practical quantitation limit (PQL). The soils near well MW-A were also reported as non-detect for arsenic at a method detection limit of 1.27 mg/kg. The soils inside the retention pond had low detections of arsenic which range from 2.15 mg/kg to 14.5 mg/kg, with the southern end of the pond exhibiting slightly higher arsenic concentrations than the northern end.

The leachable metal concentrations for each soil sample were also determined by placing ten grams of soil into 100 milliliters of water, and then lowering the pH of the mixture to 4.8. Due to the low levels of arsenic in the background soils, the soluble arsenic concentrations present in those soils were less than the MDL. There was limited soluble copper and chromium in the sample taken in the orchard. All of the soils from within the pond showed detectable leachable levels of soluble copper and chromium, while only one pond sample resulted in leachable arsenic 1.31 mg/kg.

Based on the results of this investigation and previous work, AquAeTer concluded that the historical measurements of elevated arsenic levels in MW-D and MW-A were localized anomalies and not representative of contamination due to site manufacturing operations. This conclusion is supported by the following facts:

- 1. The copper and chromium concentrations in wells MW-A and MW-D have never been elevated at the same time that arsenic concentrations have been high, either prior to or after conversion from CCA treatment;
- 2. Pond soils tested showed a higher potential to leach copper than arsenic or chromium, yet no elevated copper or chromium concentrations have been observed in these wells. Pond discharge was measured in September of 2004. Arsenic, copper, and chromium concentrations were measured in the outfall during both events. The copper concentrations in the stormwater were much higher than the arsenic and chromium concentrations. These results are consistent with the fact that the facility converted to a quaternary ammonia copper preservative on October 6, 2003. The active ingredients in the new formulation are didecyl dimethyl ammonium carbonate (DDACarbonate), and copper in the form of basic cupric carbonate. Due to the conversion, there has been no source of arsenic from the plant for almost five years. The arsenic and chromium concentrations in the discharge were below the MCLs. However, groundwater collected in MW-A and MW-D at that time and more recently has had high concentrations of arsenic, but not correspondingly high concentrations of copper which would be expected if plant operations were the source;
- 3. Wells MW-A and MW-D, the wells that have exhibited anomalous arsenic concentrations, were installed at different times and with different materials and methods than other site wells, as shown in Table 1-1;

- 4. Samples at MW-A and MW-D have consistently been described as "whitish and turbid" and efforts to eliminate this condition by redeveloping these wells have been unsuccessful;
- 5. On two occasions, a whitish/grey slimy material was recovered from MW-D that is indicative that the well is compromised. The slimy material is likely a bacterial population. Bacterial populations are known to concentrate metals;
- 6. There are various other potential sources of arsenic in the vicinity of the site that are unrelated to UFP operations.

Based on these conclusions, an additional well was installed approximately 10 feet downgradient from MW-E during the week of July 23, 2007. In addition, soil samples were taken during drilling for the installation of MW-E. Low-flow sampling was performed in wells MW-E, MW-D, MW-2, and MW-A. The goals of the MW-E installation were to sample and test soil from near the site boundary northwest of MW-D and to sample and test groundwater taken down-gradient from well MW-D. The soil testing was performed to determine if a source of arsenic existed in the soil that could be associated with concentrations observed in groundwater samples collected from MW-D. The groundwater testing was done to determine if the arsenic concentrations observed in groundwater at well MW-D are representative of a wide-spread condition, or if that arsenic occurrence is an anomaly.

The soil samples collected from MW-E had concentrations of arsenic, copper and chromium below the Florida residential cleanup levels. These concentrations are consistent with expected background conditions, and are not indicative of a source of arsenic, copper, or chromium in the soil represented by these samples.

The 2007 groundwater sample from MW-D had elevated concentrations of arsenic (124 μ g/L total arsenic, 115 μ g/L soluble arsenic), while the sample from MW-E taken at the same time had an arsenic concentration of 3.99 μ g/L. These wells are within 10 feet of each other, and are screened within the same water-bearing zone. Further, well MW-E is directly down-gradient and closer to the property boundary than well MW-D and the stormwater impoundment. Groundwater samples from well MW-E are representative of shallow groundwater at the point that water moves down-gradient from the UFP property to the adjoining property. Groundwater at about 2 ft from the UFP property boundary (well MW-E) exhibits arsenic, copper, and chromium concentrations that are consistent with background conditions. Groundwater in MW-D, which is 10 ft from MW-E and about 12 ft from the property boundary, had anomalously high arsenic concentrations on the same day that MW-E had low arsenic concentrations that were compliant with the groundwater quality standards for arsenic.

Quarterly groundwater sample results since the installation of MW-E are presented in Table 1-2. Only three data points are available for comparison of MW-E and MW-D. The initial result was deemed unusable by the State since MW-E was sampled within 24 hours of development. These other two results are inconsistent, with MW-E having a higher concentration than MW-D during one sampling event and a lower concentration during the other.

1.3. SITE INVESTIGATION GOALS

The activities in this scope of work are designed to re-evaluate arsenic levels near the process areas to determine if groundwater contamination is present at the site that may be resultant from production activities when CCA was being used on-site. This type of plume could affect arsenic results in MW-A and MW-D without impacting the soils in the stormwater pond. Although the historical data in MW-C would dispute this theory, a more detailed investigation is being performed to ensure that any potential groundwater impact due to historical manufacturing activities on the site is determined. These results will be evaluated as part of the phased RBCA assessment being conducted by UFP with FDEP oversight.

2. SCOPE

2.1. MONITORING WELL INSTALLATION

Two 2-inch monitoring wells will be installed on the property at the approximate locations shown in Figure 2-1. Well locations were chosen to minimize destructive impact of vehicular traffic near the wells. Proposed well MW-F will be located downgradient from the drip pad and processing areas and upgradient from MW-D. MW-G will be located as close to the northeastern property line as possible and is intended to represent the groundwater moving onto the site from the east.

The wells will be installed utilizing hollow-stem auger methods. These monitoring wells will be installed to an approximate depth of 18 feet (depth of MW-D), and will be screened from approximately eight to 18 feet. Vertical characterization of soils (e.g., soil type, color, moisture) will be performed while the monitoring wells are installed. Once installed, the groundwater in the monitoring wells will be allowed to stabilize for 24 hours and will then be developed utilizing pump and surge methods. The detailed procedures for the drilling and development of the monitoring wells are presented in Section 3.

2.2. GROUNDWATER SAMPLING

AquAeTer will perform groundwater sampling of existing wells MW-1, MW-2, MW-A, MW-D, MW-E and the newly installed wells (MW-F and MW-G) using low-flow purging and sampling techniques. A peristaltic pump, in conjunction with a Hydro-Lab Quanta unit with a flow-through cell, will be used to take water quality measurements and analytical samples from the wells. The detailed procedures for the sampling are presented in Section 5. Sample handling methods are presented in Section 6.

The samples will be sent to Benchmark EnviroAnalytical, Inc. for the analytes listed in Table 2-1.

TABLE 2-1 - GROUNDWATER SAMPLING ANALYSES

ANALYSIS	EPA SW-846 METHOD
Total Dissolved Solids	160.1
Total and Soluble Copper	200.7
Total and Soluble Chromium	200.7
Total and Soluble Arsenic	200.7

2.3. REPORT PREPARATION

Upon completion of the data gathering tasks, **AquAeTer** will issue a summary report of our findings at the site for submittal to the FDEP. This report will include potentiometric surface contours of the site, an assessment of the presence of groundwater contamination from the site, and an evaluation of further data requirements as per F.A.C. 62-780.600. This report will be completed within 30 days of the receipt of analytical data.

3. WELL INSTALLATION METHODS

3.1. WELL REGISTRATION

Upon completion of well installation, an as-built diagram and a boring log, completed by a Florida P.E., will be submitted for the well to FDEP in a final report. A permit will be completed by the driller as per the Southwest Florida Water Management District Chapter 40D-3 and FDEP Chapter 62-532.

3.2. DRILLING

Hollow-stem auger drilling methods will be used to advance a nominal 8.25-inch borehole to an elevation of approximately 18 feet below ground surface (bgs). The 8.25-inch borehole will allow for a 2-inch annular space around the casing to allow the filter pack, bentonite pellet seal, and the annular grout to be placed at an acceptable thickness. During borehole drilling, continuous sampling using 2-foot split-spoon samplers will be conducted to provide a detailed geologic description of the subsurface. A soil boring record is presented in Attachment 1. Drilling specifications are provided in Table 3-1.

DRILLING TYPE
Hollow Stem Auger

ID: 2"

SOIL SAMPLING
Split Spoons

WELL DIAMETER
VELL MATERIAL
PVC

WELL DEPTH
18" (estimated—exact depth to be determined in the field)

10" (8" to 18" bgs)

Pump and Surge

TABLE 3-1 – SPECIFICATIONS FOR DRILLING

Concrete pad, Vented well cap, Steel protective casing

To be containerized in an existing 55-gallon drum on-site.

Site is accessible with a truck mounted-rig during dry conditions.

3.3. WELL INSTALLATION

Well installation will be conducted inside the hollow stem augers. This method is best suited in soils that have a tendency to collapse when disturbed. Prior to placing the well materials, a minimum of 6 inches of the filter pack material will be placed under the bottom of the well screen to provide a firm footing and unrestricted flow under the screened area. The filter pack material will consist of USC 40 sieve sand, a fine-grained, well-sorted sand. The well will consist of a 2-inch diameter, 10-foot long slotted PVC screen (0.010-inch factory slotted) meeting NSF Standard 14 (NSF WC) with 2-inch diameter solid PVC riser extending no less than 2.5 feet above the surface. The filter pack will extend a minimum of 2-feet above the top of the well screen. Removal of the hollow-stem augers will be conducted in stages, allowing the filter pack material to settle in the annular space before the bentonite seal is placed. Augers will

SCREENED INTERVAL

COMPLETION

ACCESSIBILITY

DEVELOPMENT

CUTTINGS

be extracted without being rotated. To ensure that the sand has been placed to the proper elevation, the sand will be tamped, while measuring is being conducted.

Once the filter pack is placed to the desired vertical height, a seal will be placed on top of the filter pack. The bentonite seal will be placed above the filter pack to a minimum of 2 feet in vertical thickness. The actual depths to the top of the filter pack and the top of the bentonite seal will be documented by measuring and not estimating. Once the bentonite seal is at the desired height, the bentonite pellets will be hydrated using potable water, if the bentonite seal is above the potentiometric surface. The annular space between the well casing and the borehole wall will then be filled with either a 30% solids bentonite grout, or a cement/bentonite grout. The grout will be placed into the borehole by the tremie method from the top of the bentonite seal to within 2-feet of the ground surface.

The outer protective casing will be installed into the borehole after the annular grout has cured. The outer protective casing will be of steel construction with a hinged, locking cap. The protective casings will have a minimum of two weep holes for drainage. These weep holes will be a minimum 1/4-inch in diameter and drilled into the protective casings just above the top of the concrete surface pads to prevent water from standing inside the protective casings. The protective casing is installed by pouring concrete into the borehole a minimum of 2 feet. The protective casings will extend a minimum of 3 feet above the ground surface or to a height so that the cap of the inner well casing is exposed when the protective casing is opened.

A concrete surface pad will be installed around each well at the same time as the outer protective casing is being installed. Concrete will be placed into the formed pad and into the borehole in one operation making a contiguous unit. The pad will be approximately 2 feet x 2 feet x 6 inches, with a minimum of 1 inch of the finished pad below grade or ground elevation to prevent washing and undermining by soil erosion. The finished pad will be sloped so that drainage will flow away from the protective casing and off the pad.

The field engineer/geologist/scientist will observe installation activities and keep a detailed log of the installation activities. The location of the well shall be shown on a site diagram prepared as part of the well completion record. A well completion record is included in Attachment 2.

3.4. WELL MATERIALS

The well shall consist of a 2-inch diameter, 10-foot long slotted polyvinyl chloride (PVC) screen (0.010-inch factory slotted), and a 2-inch diameter solid PVC riser meeting ANSI-ASTM F480-81 for Schedule 40. The 2-inch diameter PVC riser shall extend approximately 2-3 feet above the surface. All well casing sections are to be flush threaded and no chemical solvents, primers, or glues shall be used to join casing sections. The casing shall be chemically resistant to all contaminants which may be encountered. Watertight casing made from plastics shall be made of virgin material and must be manufactured expressly for well casing.

3.5. SCREEN TYPE

The selected screen material shall conform to an appropriate standard such as ANSI-ASTM F480-81 for Schedule 40 PVC. The screen shall be of continuous slot, wire-wound design or of commercially-slotted material. At the bottom of the screen shall be a dense phase sampling cup of PVC (screw-on well cap), at least 0.5 feet in length. End fittings provided with the screen shall be fabricated of the same material as the screen body and shall be selected based on the well design parameters. Screen sections shall be threaded.

3.6. MANAGEMENT OF INVESTIGATION-DERIVED WASTE (IDW)

All investigation-derived waste (i.e., soil cuttings, groundwater, decontamination fluids, etc.) generated during the drilling will be collected and containerized in an existing 55-gallon drum onsite. Upon completion of the drilling, a waste determination will be performed by taking a sample from the drum of like materials (soil or water). The samples will be analyzed for Total Arsenic and Total Chromium per the methods outlined in Section 4. The values will be compared to 20 times the Toxicity Characteristic Leaching Procedure values. If above the limits, the material will be disposed of at a regulated hazardous material facility. Otherwise, the material can be disposed of in a landfill or reapplied on-site.

3.7. SURVEYING

After the well is completed, a survey shall be conducted by a professional surveyor licensed in the State of Florida to accurately determine the locations of the new wells. Ground surface elevation and top of well casing elevation data shall be recorded and referenced to an appropriate National Geodetic Vertical Datum (NGVD) benchmark. The survey shall be accurate to the tenth of a foot in the horizontal direction, and a hundredth of a foot in the vertical direction. A groove will be made in the top of the PVC on the north side of new and existing wells to represent a reference point for surveying and future water level measurements.

3.8. WELL COMPLETION RECORDS

A soil boring log and well completion record shall be prepared for the well. Information recorded includes the following:

- date and time of construction;
- drilling method and fluid used;
- well location to nearest 0.01 foot NGVD;
- borehole diameter and well casing diameter;
- well depth to nearest 0.1 foot NGVD;
- drilling and lithologic logs;
- depth to first saturated zone;
- casing materials;

- screen materials, slot size, length, and depth to the nearest 0.1 foot;
- casing and screen joint type;
- filter pack material and gradation;
- sealant materials;
- surface seal;
- type of protective well cap; and
- ground surface elevation to the nearest 0.1 foot NGVD (to be added upon completion).

4. WELL DEVELOPMENT

4.1. GENERAL

The newly installed wells shall not be developed for at least 24 hours after the surface pad and outer protective casing are installed. This shall allow sufficient time for the well materials to cure before development procedures are initiated. Either a pump or surge technique may be used to develop the filter pack within the new wells. This process shall continue until the column of water in the well is free of visible sediment, and the pH, temperature, turbidity, and specific conductivity have stabilized. Continuous flushing over a period of several days may be necessary to complete the well development and remove any additional sediment.

The well shall be developed using air-lift, bailer, pump, surge block, or other acceptable means for removing water and sediment. Water shall be removed until at least three times the volume of water in the well, or water introduced by drilling and well installation, whichever volume is greater, is removed, and the pH, temperature, specific conductivity, and visible turbidity of development water stabilizes. The field engineer/geologist/scientist shall determine when additional development is not necessary.

Water and sediment produced during development shall be contained for proper disposal. Development fluids and solid residues shall be placed in containers for proper disposal.

Well development by air-lift, pumping and bailing is described in the following sections. Both low and high yielding wells may be encountered due to the geology at the site. Well development records also are addressed.

4.2. DEVELOPMENT OF HIGH-YIELDING WELLS

High-yielding monitoring wells, capable of sustained withdrawal rates of several gallons per minute, usually are screened in coarse-grained materials. This development procedure shall be used for monitoring wells screened in predominantly sandy or gravelly materials.

4.2.1. Equipment

The equipment necessary for well development by surging includes the following:

- Rod, or pipe—Of sufficient length to lower surge block to bottom of well;
- <u>Close-fitting surge block</u>—Design described by EPA in "Handbook of Suggested Practices for the Design and Installation of Ground-Water Monitoring Wells," EPA 600/4-89/034; and
- Other items—Tools, measuring tapes, buckets or other containers, etc.

The equipment necessary for air-lift development includes the following:

• <u>Air compressor</u>—For small diameter wells (2") in which the water level is about 25 feet or less below ground surface, a small, portable compressor (10 cubic feet per

minute (cfm) or greater) is probably sufficient. For larger diameter wells or where groundwater is deep, a larger compressor is required (usually about 100 cfm);

- <u>Hydrocarbon filter</u>—An in-line hydrocarbon filter is important to keep compressor oils out of the well;
- <u>Air hose and valve</u>—A flexible air hose with an in-line shut-off valve shall run from the compressor to the down-hole development tubing. A suitable connector shall be available to attach the air hose to the development tubing;
- Development Pipe—A 1" to 1.5" outer diameter pipe made of PVC, Teflon or Polyethylene, ball-type, check valve at the bottom is optional;
- <u>Development tubing—A 0.5"</u> to 1" pipe or flexible tubing of sufficient length to reach the bottom of development pipe. Tubing must discharge air upward (toward the ground surface) inside the development pipe to prevent the introduction of air in to the water-bearing stratum;
- <u>Cleaning materials</u>—Buckets, distilled water, detergent, etc., to clean development apparatus between use in different wells; and
- Tools—Pliers, wrench, screw driver, etc. necessary to make and break connections.

The equipment necessary for pump development includes:

- <u>Down-hole pump</u>—Typically a small-diameter bladder pump and controller, or a small-diameter centrifugal (impeller) pump;
- <u>Tubing</u>—Bladder-type pumps require air line and flow line tubing, centrifugal pumps require electrical line and flow line;
- <u>Electricity source</u>—For pump controller or pump power, appropriate circuit breakers or ground-fault interrupts will be used; and
- Other items—Tools, measuring tapes, buckets or other containers, etc.

4.2.2. Development

The development procedure is described below:

- Clean apparatus to be used down-hole; and
- Prior to development, use a cleaned water-level probe to measure and record the depth to groundwater and total depth of the well.

4.2.2.1. Surging

The initial step in development of high-yielding monitoring wells is surging. Surging induces flow into and out of the filter sand and native materials in the screened interval. Surging is accomplished by lowering the surge block into, or just above, the screened interval and repeatedly raising and lowering the surge block rod.

4.2.2.2.Water Removal

Water and accumulated sediment are removed from the well by placing the air-lift apparatus or pump intake at the base of the screened interval and operating the air-lift apparatus or pump. The process is continued until pH, temperature, and specific conductivity of development water stabilizes. During the process, the air-lift apparatus or pump intake shall be raised and lowered in the well screen so that water is drawn into the well from all portions of the well screen.

On completion of this process:

- Disconnect and remove the development apparatus from the well for cleaning before use in another well; and
- Measure and record the post-development depth to groundwater and the total depth of the well.

4.3. DEVELOPMENT OF LOW-YIELDING WELLS

Low-yielding monitoring wells, capable of sustained withdrawal rates of one gallon per minute or less, usually are screened in fine-grained materials. This development procedure shall be used for monitoring wells screened in predominantly clayey or silty materials.

4.3.1. Equipment

The equipment necessary for development of low-yielding monitoring wells by bailer is listed below.

- <u>Bailer</u>—A 1" to 1.5" outer diameter bailer made of PVC, Teflon, or polyethylene with a single, ball-type, check valve on the bottom;
- <u>Polypropylene rope</u>—Small diameter (3/8" or 1/2") rope to use as lifting line for the bailer;
- <u>Cleaning materials</u>—Buckets, distilled water, detergent, etc., to clean development apparatus between use in different wells; and
- Other items—Tools, water-level probe, measuring tapes, buckets or other containers, etc.

4.3.2. Development

The bailer-development procedure is described below.

- Clean apparatus to be used down-hole; this includes the bailer and lifting line. Use disposable bailer and lifting line, or clean using the decontamination procedures for groundwater sampling equipment described in another procedure in this document;
- Prior to development, use a cleaned water-level probe to measure and record the depth to groundwater and total depth of the well;
- Prior to development, the area around the well shall be cleared of foreign materials such as brush, rocks, and debris. A clean (new) disposable plastic sheet is laid flat on the

ground, and the well projects through the sheet. For projecting protective well casings, a clean (new) plastic trash bag shall be placed around the projecting casing or protector pipe and secured (with tape) to the casing so that only the interior well casing is visible;

- Attach lifting line to the bailer. It is good practice to tie the lifting line to a surface feature so that the bailer and liner cannot be lost down the well;
- Lower the bailer down the well and begin removing water from the well. Do not allow the lifting line to contact the ground surface beyond the plastic sheeting;
- Pour water from the bailer into a 55-gallon drum or into a temporary storage container for proper management or disposal;
- Repeat this process until at least three times the volume of water in the well, or water introduced by drilling and well installation, whichever is the greater volume, is removed, and the pH, temperature, specific conductivity, and visible turbidity of development water stabilizes;
- Record the development time, the estimated volume of water produced during development, and the color of water at the beginning and end of development;
- Disconnect and remove the development apparatus from the well for cleaning before use in another well; and
- Measure and record the post-development depth to groundwater and total depth of the well.

4.4. WELL DEVELOPMENT RECORDS

A well development log is provided in Attachment 3. Well development records shall include:

- Well number;
- Date and time of development;
- Development method;
- Depth of development tubing or pump intake (if used);
- Rate and duration of water withdrawal;
- Volume of water produced;
- Disposition of water removed;
- pH, temperature, specific conductivity, and visible turbidity of water, description of water produced at several times during development;
- Post-development water level and well depth; and
- Person(s) involved.

4.5. WELL ABANDONMENT

All abandoned wells, borings and piezometers shall be plugged in accordance with Rule 62 532.500(4), F.A.C., by filling them from bottom to top with neat cement grout or bentonite and capped with a minimum of one foot of neat cement grout.

5. GROUNDWATER SAMPLING METHODS

Methods specified in the United States Environmental Protection Agency (USEPA), Environmental Investigations Standard Operating Procedures and Quality Assurance Manual (EISOPQAM) (November 2001) and the USEPA Low Flow (Minimal Drawdown) Groundwater Sampling Procedures (April 1996) will be implemented to obtain the groundwater samples and prepare the samples for analysis. No measurements shall be taken until a minimum stabilization period of 24 hours after well installation. The following sections outline these procedures.

The following steps are required when taking a groundwater sample:

- 1. Prepare site;
- 2. Open monitoring well;
- 3. Allow monitoring well time to equilibrate;
- 4. Measure water level in monitoring well;
- 5. Purge monitoring well (simultaneously take water quality readings);
- 6. Sample monitoring well;
- 7. Measure total depth in monitoring well; and
- 8. Close and secure monitoring well.

Form FD 9000-24, "Groundwater Sampling Log," is presented in Attachment 4. This data sheet shall be filled out at each well during the sampling process and submitted to the DEP upon completion of the sampling event.

5.1. SITE PREPARATION

Prior to sampling, new plastic sheeting shall be placed on the ground surface around the well to prevent contamination of the pumps, hoses, rope, tubing, etc. It is preferable that hoses used in the purging that come into contact with the groundwater be kept on a spool, contained in a plastic lined tub, or within plastic bags, both during transport and during field use, to further minimize contamination from the transport vehicle or ground surface.

Once the plastic sheeting has been placed around the monitoring well, the monitoring well vault shall be opened and the well cap (if present) removed. Due to pressure build up, a few minutes (~10 to 15 minutes) shall be allowed for the groundwater level to equilibrate after removing the well cap.

5.2. PURGING

The pump shall be lowered into the well in the middle of the screened area. The water level in the well shall be monitored during purging to ensure minimal draw-down during the purging. The in-line water quality indicator parameters shall be continuously monitored during purging. The water quality indicator parameters monitored will include temperature, pH, specific conductivity at 25 °C (conductivity), dissolved oxygen (DO) and turbidity. Three consecutive readings of the five parameters shall be within the stated limits. The measurements evaluated

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must be the last three consecutive readings taken before purging is stopped. The range between the highest and lowest values for the last three measurements of temperature, pH and conductivity cannot exceed the stated limits. The last three consecutive measurements of DO and turbidity must be at or below the listed thresholds.

Temperature: ±0.2°C
 pH: ±0.2 Standard Units
 Conductivity ±5% of reading
 DO ≤20% saturation
 Turbidity ≤20 NTU

If the criteria above cannot be met, then three consecutive measurements of the five parameters listed below must be the last three consecutive measurements taken before purging is stopped and they cannot exceed the stated limits.

Temperature: ±0.2°C
 pH: ±0.2 Standard Units
 Conductivity ±5% of reading
 DO ± 0.2 mg/L or 10% whichever is greater
 Turbidity ± 5 NTUs or 10% whichever is greater

5.3. SAMPLE HANDLING

The sample will be collected directly from the pump discharge. During sampling events, the sampling team will wear clean, unpowdered, disposable nitrile gloves to prevent cross contamination of the samples. Between each sampling location personnel who will directly handle the samples will change gloves.

Upon collection of the sample, the GW sampling sheet will be completed identifying the following items:

- 1. Sample Identification Number;
- 2. Northing using the GPS;
- 3. Easting using the GPS;
- 4. Date Sample Collected; and
- 5. Time Sample Collected.

5.4. SAMPLE NUMBERING SYSTEM

The samples shall be designated with sample codes in the following format: WELL# – DATE-TIME. For example, well MW-2 sampled at 1:30 pm on 6/14/05 should be labeled: MW2-061405-1330

A duplicate sample taken at this location (at 1:32) should have a "9" added to the end of the well name:

MW29-061405-1332

5.5. EQUIPMENT DECONTAMINATION

Separate tubing will be used at each well. The following procedures are to be used for all sampling equipment prior to the initial use and between each well:

- 1. Clean with tap water and soap (e.g., Liquinox) using a brush if necessary to remove particulate matter and surface films;
- 2. Rinse thoroughly with tap water;
- 3. Rinse thoroughly with deionized water;
- 4. Rinse thoroughly with solvent (isopropyl alcohol). Do not solvent rinse PVC or plastic items; and
- 5. Rinse thoroughly with deionized water.

6. SAMPLE HANDLING PROCEDURES

6.1. SHIPPING

Four sampling containers will be collected per sampling location for the different depth increments. Samples will be identified using laboratory-provided sample labels on the exterior and the sample identification number marked on the top of the sample jar using an indelible marking pen. Clear packing tape will be used to adhere the sample labels to the exterior of the sample container and black electrical tape will be used to secure the top of the sample container. The samples placed into an insulated cooler and kept at 4° Celsius using double-bagged wet ice.

At the completion of the sampling day, the melt water from the ice within the cooler will be removed and new ice placed into the insulated cooler. Within the cooler a completed chain-of-custody (COC) record will be kept in a watertight plastic bag and taped securely to the underside of the cooler lid. The cooler will then be taped shut and shipped to their respective laboratories via an overnight courier for morning delivery. Samples will be submitted to:

Benchmark EnviroAnalytical, Inc. 1711 Twelfth Street East Palmetto, Florida 34221 (941) 723-9986 (941) 723-6061 fax Contact: Bob Sullivan

Following performance of on-site sampling, all QA/QC documentation, field notes, and laboratory data will be available in the **AquAeTer** office located in Brentwood, Tennessee.

6.2. SAMPLE CUSTODY AND DOCUMENTATION

Field Logbook

Field notes shall be maintained in a bound book, except for chain of custody information. **AquAeTer** shall document all field activities, location of all materials, and field observations. The field notes shall include at a minimum, the applicable items for the activity to be noted:

GENERAL INFORMATION

- 1. Date, Start and finish times of the work, Weather Conditions;
- 2. Name and Signature of Person making Entry;
- 3. Names of personnel present;
- 4. PPE worn; and
- 5. Names of visitors.

SAMPLE INFORMATION

- 1. Brief Description of the Sampling Location;
- 2. Sample Type (composite, grab); and
- 3. Sample Analysis type.

A copy of each day's field notes shall be faxed to **AquAeTer's** Brentwood office at the end of the day. A copy of the original field notes shall be submitted as part of the final field report.

Information recorded in other site documents, e.g., sampling logs, will not be repeated in logbooks except in summary form to avoid transcription errors. Any corrections to the logbook or this project's other written documentation will be initialed and dated. All corrections will be shown as a single line through the original. As a minimum, the logbook will contain the date and names of sampling personnel present, a reference to sampling logs, etc., a log of photographs taken, and an indication of the sampling sequence (times). The unused bottom portion of each page will be lined-out, initialed and dated.

6.3. SAMPLE DOCUMENTATION

Each sample will be documented in the permanent record. The record retention is discussed in the following sections.

Sample Labels

Sample label information is verified by the laboratory at the time of receipt and all discrepancies with the COC form will be resolved with the project manager. Labels are discarded with the sample container after analysis.

Chain-of-Custody Records

The COC forms follow the samples. The COC becomes a complete record when signed by the laboratory staff at time of receipt of samples. The completed document with laboratory signatures will be attached to the analytical report, which is submitted to the COR with Summary Chemical Data Quality Reports and becomes part of the permanent project record.

6.4. SAMPLE HANDLING, PRESERVATION, SHIPPING

Sample Labeling and Handling for Shipment

All samples will be placed immediately in appropriate containers with labels, sealed tight, surface-wiped, and cooled on ice or placed in a refrigerator. Samples will be labeled with the following information:

1. Unique identifying number assigned to the sample for laboratory analysis;

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- 2. Date and time of collection;
- 3. Site address and location of sample;
- 4. Name of person taking sample;
- 5. Project name;
- 6. Analysis requested; and
- 7. Preservation method.

The sample handling procedures are as follows:

- I. Fill out the sample jar label completely and place onto jar. Tape label to jar with clear tape;
 - i. For soil, insert the sample into the jar with a decontaminated stainless steel spoon, filling approximately three-quarters full. The jar threads should be clean prior to placing lid onto the jar in order to ensure a good seal;
- II. Place each labeled sample jar in a sealable plastic bag;
- III. Place each sample in packing material (which will not disintegrate if it becomes wet);
- IV. Place each individual sample into the correct composite bag;
- V. Place bag in cooler with ice at 4 degrees Celsius;
- VI. Fill out chain-of-custody form and place in sealable plastic bag taped to inside of cooler lid; and
- VII. Check the ice in the cooler occasionally. Drain water and/or replace ice as needed. Maintain strict custody and seal with custody seals when left unattended.

6.5. CHAIN-OF-CUSTODY

Chain-of-custody documentation is maintained in order to be able to support in a court of law the identity and integrity of the samples. Custody is defined as having the samples in the responsible person's sight, in a controlled area, or in a locked or custody-sealed compartment/container. A chain-of-custody form will be filled out and completed for all samples submitted for analyses. This form will be maintained from the time the sample is collected to the time it is submitted to the laboratory. The chain-of-custody form will be completed in the field and will included sampler's name(s); sample container type and number; date and time of collection; sample collection location(s); analyses to be performed; dates and signatures of those releasing and receiving the samples; date and time samples were received by the laboratory; and the total number of samples received.

The chain-of-custody handling procedures are as follows:

1. To provide the laboratory sufficient preparatory time a copy of the COC will be faxed to the laboratory the evening prior to shipping;

Fax Number: (941) 723-6061

The completed COC document will be shipped to the respective laboratory with the samples on the COC;

2. Sample custody seals will be used when samples are shipped to the laboratory, when they are delivered to the laboratory after working hours, or when a cooler is left

unattended (for example, in the field laboratory trailer). These seals will be signed and dated by the sampler and will be affixed to the sample cooler in a way that would necessitate breaking the seal in order to open the cooler;

- 3. When using an express shipping service, the chain-of-custody form will be left inside the cooler. Do not have the shipper sign the form;
- 4. Samples for analysis are tracked with the Sampling Log sheets, each of which has a place to document transfer of samples from the field to the field laboratory staff. Samples kept in storage in the field laboratory trailer will be locked in refrigerators except when in use by the field laboratory staff; and
- 5. The laboratory receiving the samples should perform the following tasks:
 - a) Check the information on the chain-of-custody forms.
 - b) Check the integrity of the sample custody seals, if applicable.
 - c) Test the temperature of the water blank enclosed in the cooler to determine the temperature of the samples.
 - d) Fill out a Cooler Receipt form which will indicate the quality of sample collection, documentation, preservation, and shipping.

6.6. COOLER PREPARATION FOR SAMPLE SHIPMENT

The cooler preparation procedures after the samples have been packed are as follows:

- 1. Check that all samples are wrapped and secure and not directly contacting the packages of ice;
- 2. Check the ice in the cooler one last time. Drain water and/or replace ice as needed. Fill cooler with extra packing material to prevent movement of sample jars relative to cooler and tape drain shut;
- 3. Place small container (one or two ounces) of water in the cooler, which will be used as a temperature check when the samples are received by the laboratory. Label temperature blank as such;
- 4. Close lid and tape in two places, encircling the cooler and lid. Use strong (strapping or similar) tape to prevent accidental opening; and
- 5. Place custody seals as per instructions in the previous section.

7. PROFESSIONAL CERTIFICATION

Michael R. Com

Michael R. Corn, PE Florida P.E. #50442 Exp: February 28, 2009 Florida COA #F05000000514 Exp. May 1, 2009

President

AquAeTer, Inc.215 Jamestown Park, Suite 100
Brentwood, Tennessee 37027

INTERIM SOURCE REMOVAL STATUS REPORT – YEAR 4 UFP AUBURNDALE LLC FDEP Site #COM_315623 / Project # 335741

January 2022

Prepared for:

UFP AUBURNDALE LLC AUBURNDALE, FLORIDA

INTERIM SOURCE REMOVAL STATUS REPORT – YEAR 4 UFP AUBURNDALE LLC FDEP Site #COM_315623 / Project # 335741

January 2022

Prepared for:

UFP AUBURNDALE LLC AUBURNDALE, FLORIDA

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LIST OF ACRONYMS AND ABBREVIATIONS

ACQ Alkaline Copper Quaternary

ARM Arsenic Removal Media

BLS Below land surface

CCA Chromated Copper Arsenate

COC Contaminate of Concern

Cu Yd Cubic Yards

EPA Environmental Protection Agency

FAC Florida Administrative Code

FDEP Florida Department of Environmental Protection

GCTL Groundwater Cleanup Target Levels

GPM Gallons Per Minute

GPR Ground Penetrating Radar

GWTS Groundwater Treatment System
ISRP Interim Source Removal Proposal
MCQ Micronized Copper Quaternary

NADC Natural Attenuation Default Concentrations

NGVD National Geodetic Vertical Datum

O&M Operation & Maintenance

P&ID Process and Instrumentation Diagram

PLC Programmable Logic Controller
PSIG Pounds per square inch gauge

RCRA Resource Conservation and Recovery Act SCADA Supervisory Control and Data Acquisition

SAR Site Assessment Report

SARA Site Assessment Report Addendum

SAS Surficial Aquifer System

Sch Schedule

SCTL Soil Cleanup Target Level

SS-SCTL Site Specific-Soil Cleanup Target Level

LSSA L.S. Sims & Associates, Inc.

TCLP Toxicity Characteristic Leaching Procedure UFPED Universal Forest Products Eastern Division

μg/L Micrograms Per Liter

UST Underground Storage Tank



1.0 INTRODUCTION

The following Interim Source Removal Status Report (ISRSR) was prepared on behalf of UFP Auburndale LLC (UFP) for the Universal Forest Products Auburndale facility (site) located at 105 Progress Road in Auburndale, Florida (**Figure 1**). The ISRSR contains a summary of the groundwater remediation system performance and the analytical results from the fourth year of active remediation.

Groundwater is extracted via a recovery well and arsenic is removed from the recovered groundwater using arsenic removal media (ARM). The treated groundwater is then discharged on site via an infiltration gallery and stormwater effluent line to onsite surface water system. The major components of the remedial system include:

- A groundwater recovery well
- A groundwater treatment system (GWTS) to remove arsenic lead, iron, and aluminum.
- A recharge infiltration gallery to dispose of the treated groundwater
- A stormwater effluent line diverting overflow of the infiltration gallery to onsite surface water system.

Data collection schedule:

- Total volume of groundwater recovered, treated and discharged (quarterly).
- Concentrations of total arsenic, lead, iron, and aluminum in the influent and effluent samples from the GWTS (quarterly through 2021 and semiannually thereafter).
- Water-level data collected from all site monitor wells, each time monitoring wells are sampled (water-level measurements are made within a 24-hour period).
- System run time and arsenic removal efficiency.
- Site inspection logs.

The following wells are sampled for total arsenic quarterly:



MW-A	MW-GR	MW-8D
MW-D	MW-5	MW-14
MW-E	MW-6	MW-15D

The following wells are sampled for total arsenic semi-annually in addition to the wells sampled quarterly:

MW-BR	MW-2	MW-15
MW-C	MW-7	MW-16
MW-F	MW-9D	MW-17
MW-H	MW-11	MW-18
MW-I	MW-12	
MW-1R	MW-13	

2.0 SITE INFORMATION

2.1 Facility Location and Area Land Use

The UFP Auburndale facility (UFP site) is located in Polk County, Florida, within Section 2, Township 28S, Range 24E (Figure 1). The UFP site fronts Progress Road between State Highway 92 to the north and Main Street to the south. The site is bound to the north by CSX Railroad tracks. The area land use is industrial and commercial. A site map of the facility is included in Figure 2.

2.2 Site Description and Background

The original 6.2-acre site was previously occupied by a company manufacturing corrugated paper. In 1972, the site was purchased by UFPED (formally known as Florida Component Products). In 1992, UFPED acquired four (4) additional acres on the northern portion of the site. This 4-acre parcel was formerly citrus groves (oranges and grapefruit) before UFP ownership.



3.0 2021 DATA

3.1 Water-level Measurements

Groundwater elevations were measured during quarterly groundwater sampling events on March 2, June 15, September 14, and November 30, 2021, with an interface probe that is capable of measuring liquid levels to the nearest 0.01-feet. A summary of the water level measurements and elevations are included in **Table 1**.

Water-level contour maps for the water level measurements collected during June and December semi-annual sampling events are illustrated on **Figures 3 and 3a, 3b and 3c.** The groundwater flow direction is generally northward.

3.2 Groundwater Sampling

Quarterly groundwater sampling was conducted in March, June, September, and December 2021 for total arsenic analysis (EPA Test Method 6010B). Groundwater samples were collected from the following site monitor wells:

MW-A	MW-GR	MW-8D
MW-D	MW-5	MW-14
MW-E	MW-6	MW-15D

Semi-annual groundwater sampling was conducted in June and December 2021 for total arsenic analysis (EPA Test Method 6010B). Groundwater samples were collected from the following site monitor wells in addition to the monitoring wells sampled during the June and December quarterly events:

MW-BR	MW-2	MW-15
MW-C	MW-7	MW-16
MW-F	MW-9D	MW-17
MW-H	MW-11	MW-18
MW-I	MW-12	
MW-1R	MW-13	

Monitoring well analytical results are provided in **Table 2**. A summary of the total arsenic concentrations detected in each well is included on **Figure 4**. The March, June, September, and December 2021 total arsenic isopleths are shown on **Figures 5 and 5a, 5b and 5c, 5d and 5e, 5f and 5g** respectively.



Total arsenic concentrations in the samples collected during the most recent (December 2021) sampling event were at or above the Groundwater Cleanup Target Level (GCTL) of $10 \mu g/L$ from the following monitor wells:

MW-BR	MW-I	MW-17
MW-E	MW-1R	MW-18
MW-F	MW-11	
MW-H	MW-16	

Arsenic concentrations have shown decreased fluctuation and exhibited stabilizing trends in the area surrounding the recovery well RW-1 throughout the fourth year of the GWTS operation (January 2021 – December 2021). The concentrations in samples from MW-16 maintained a range of 154 to 174 μ g/L from June to December despite a historical trend of sharply decreasing in June and increasing in December. MW-F maintained a concentration of 65.6 μ g/L in June and 66.5 μ g/L in December. MW-H maintained historically low concentrations of 25.8 μ g/L in June and 16.6 μ g/L in December. The most notable changes in the central portion of the site occurred in MW-18 with a previous concentration of 500 μ g/L in December 2020 decreasing by approximately 50% to 254 μ g/L in December 2021 and in RW-1 with recovered groundwater concentration of 320 μ g/L in December 2021, an increase of 467% from December 2020.

In the northern portion of the site, the concentrations in samples from well MW-A decreased from 30.2 $\mu g/L$ in December 2020 to below GCTL in March 2021 (5.8 $\mu g/L$) and maintained low concentration to 6.1 $\mu g/L$ in December 2021. A similar decrease in concentrations below GCTL was observed in samples from MW-GR, MW-E, MW-6, and MW-5. The concentrations in all monitoring wells of this area have decreased since December 2020 with the exception of an increase in MW-D from 23.7 $\mu g/L$ in December 2020 to 54.7 $\mu g/L$ in December 2021.

The concentrations observed from deep zone monitoring well MW-8D decreased from 60.2 μ g/L to 49.5 μ g/L and MW-9D decreased from 86.5 μ g/L to 55.7 μ g/L from December 2020 to December 2021. MW-15D increased from 70.7 μ g/L to 85.4 μ g/L from December 2020 to December 2021.

The stabilizing trend of the groundwater concentrations in the central area and the decreasing trend in the northern area supported by the dramatic increase in concentration of recovered groundwater in RW-1 is a result of increased mass removal, greater capture of the groundwater in the intermediate zone and increased efficiency of the GWTS. The decrease in MW-8D concentrations in the northern area and increase in MW-15D



concentrations in the central area indicates the area of influence of RW-1 includes the deep zone site-wide.

4.0 SYSTEM PERFORMANCE DATA

4.1 Groundwater Recovery Volume

The system was placed in operation on February 21, 2018. The total influent flow volumes are summarized on **Table 3**. As of the end of December 2021, approximately 8,666,021 gallons of groundwater have been recovered and treated, removing 14.88 lbs. of Arsenic, a 238% increase in mass removal from December 2020.

4.2 Water Quality

Quarterly total arsenic samples were collected from the treatment system influent and effluent in March, June, September, and December 2021. Samples were analyzed by Pace Analytical (Pace) in accordance with FDEP SOP guidelines. Total arsenic concentrations in the effluent remained below laboratory method detection limits (0.50 μ g/L) during all four (4) quarterly sampling events throughout 2021.

Additional contaminants of concern (COCs) Iron, Lead, and Aluminum were added to the GWTS quarterly sampling schedule in June 2020 to monitor the effectiveness of the treatment system in treating the groundwater to site-specific surface water cleanup target levels (SSLs)

Throughout the fourth year of operation, the treatment system continued effectively removing arsenic to levels below the GCTL of 10 μ g/L and Lead, Iron, and Aluminum to levels below SSLs and GCTLs with the exception of Aluminum which exceeded GCTL in the Effluent sample collected during the December semi-annual sampling event. The result of this sample (358.0 μ g/L) exceeded the GCTL (200 μ g/L) and increased from the corresponding Influent sample at 335 μ g/L. The increase in Aluminum concentration from the Influent sample may indicate the addition of Aluminum from processing through the GWTS and saturation of the ARM.

A summary of the treatment system influent and effluent Total Arsenic, Iron, Lead, and Aluminum is included on **Table 4**. Laboratory test reports are included in **Appendix A**. Field sampling logs and notes are included in **Appendix B**.



5.0 OPERATIONS AND MAINTENANCE

5.1 Routine Operation & Maintenance

LSSA performed monthly routine operation and maintenance inspections of the GWTS to ensure the system was performing properly. Based on verbal reports of the systems' operations from UFP personnel, additional inspections were performed on an as-needed basis. During the routine inspections the bag filters are checked, the recovery well vault and wellhead is inspected, the pumps and motors are inspected, and the infiltration gallery is inspected. Records are kept of system total groundwater recovery, run time, flow rate, and other information that is essential to proper operation of the system.

5.2 Non-Routine System Repairs

UFP personnel monitor the system daily and alert LSSA of any alarm conditions that exist. Typically, LSSA personnel conduct site inspections to investigate the alarm within 24 to 48 hours of receiving the notification. The recovery well flow rate was maintained at an average flow rate of 17-gallons per minute (GPM) to maximize effectiveness and manage the capacity of the GWTS.

No significant issues or interruptions to the operation of the GWTS occurred during this reporting period. Field notes from operation and maintenance activities are included in **Appendix B**.

5.3 ARM Replacement

The GWTS filters recovered groundwater through a proprietary blend of activated alumina enhanced with iron oxide "CSEC-AS" to remove target analytes Arsenic, Aluminum, Iron, and Lead below respective SSLs and GCTLs. The most recent ARM change out was performed in May 2020. Breakthrough of Aluminum concentrations observed in the December 2021 Effluent sample may be indicative of spent media. Effluent results will continue to be monitored for breakthrough of target analytes and ARM will be replaced in 2022 if breakthrough can not be mitigated through other operational maintenance.



6.0 SUMMARY AND RECOMMENDATIONS

6.1 Summary

The Interim Source Removal has been successfully implemented at the site. The groundwater recovery system is operating as designed and is effectively recovering total arsenic from the groundwater. Over 8,666,021 gallons of groundwater have been recovered and treated since startup on February 21, 2018, removing 14.88 lbs. of arsenic. The groundwater treatment system is successfully reducing total arsenic to levels below the discharge limits for release into the infiltration gallery.

Site-wide groundwater concentrations of total arsenic remained below the Natural Attenuation Default Concentration (NADC) and Irrigation Water Screening Level (IWSL) Industrial Criteria of $100~\mu g/L$ through 2021 in all monitoring wells with the exception of MW-16 and MW-18 (**Figure 4**).

6.2 Recommendations

Operation of the system should continue with routine inspections on a monthly basis and non-routine inspections as required. Monitoring and sampling should continue as follows:

- Monitoring of the total volume of groundwater recovered and treated by the GWTS and discharged to the onsite infiltration gallery and surface water system during each month of the operating period.
- Recovery well flow rates and Total Arsenic mass removal will be maintained at a maximized level with the diversion of treated effluent into the onsite surface water system to supplement the discharge to infiltration gallery.
- Concentrations of Total Arsenic, Iron, Lead, and Aluminum will be monitored based on analyses performed on the influent and effluent from the GWTS quarterly.
- Water-level data collected from all site monitor wells, each time monitoring wells are sampled (water-level measurements shall be made within a 24-hour period).
- The following select site monitor wells and recovery wells will be sampled for total arsenic quarterly:

MW-A	MW-5	MW-14
MW-D	MW-6	MW-15D
MW-E	MW-8D	
MW-GR	MW-9D	



• The following select site monitor wells and recovery wells will be sampled for total arsenic semi-annually in addition to the quarterly monitoring wells:

MW-1R	MW-13	MW-BR
MW-2	MW-15	MW-C
MW-7	MW-16	MW-F
MW-11	MW-17	MW-H
MW-12	MW-18	MW-I

 Percentage of system operation time and the treatment efficiency for all operating treatment systems, including the dates when the site was visited and whether the system was operating upon arrival at the site and upon departure from the site will be recorded.

An Interim Source Removal Status Report for the fifth year of system operation will be prepared and submitted to FDEP by January 31, 2023. The report will include water-level contour maps, laboratory test reports, plume maps, a summary of maintenance activities completed, and system performance data (total volume treated and mass removal). The proposed Sampling and Reporting Schedule for calendar year 2023 will also be included.



TABLES



Table 1: Groundwater Elevation Summary UFP Auburndale LLC, Auburndale, Florida.

Monitor Wells, 0 to 30 Ft.	Top-of- Casing	6/18	/2012	8/1/	/2012	4/26	/2013	7/16/2013	
	Elevation	DTW	Elev.	DTW	Elev.	DTW	Elev.	DTW	Elev.
MW-1	Abandoned								
MW-1R	152.80	6.25	146.55	3.57	149.23	7.96	144.84	3.37	149.43
MW-2	155.34	NM		NM		9.88	145.46	5.52	149.82
MW-5	153.95	9.22	144.73	6.25	147.70	11.33	142.62	5.60	148.35
MW-6	157.51	13.03	144.48	9.31	148.20	15.06	142.45	8.64	148.87
MW-7	151.02	7.56	143.46	NM		9.29	141.73	NM	
MW-8D	153.32	9.0	144.32	NM		11.06	142.26	5.62	147.70
MW-9D	155.18	9.51	145.67	NM		12.03	143.15	6.34	148.84
MW-10	151.89	5.45	146.44	NM		7.01	144.88	2.50	149.39
MW-11	153.16	6.91	146.25	NM		8.21	144.95	3.95	149.21
MW-12	153.98	NM		NM		9.41	144.57	4.59	149.39
MW-13	153.49	NM		NM		10.84	142.65	5.85	147.64
MW-14	154.78								
MW-15	154.95								
MW-15D	155.91								
MW-16	155.17								
MW-17	154.66								
MW-18	153.88								
MW-A	157.14	13.35	143.79	13.35	143.79	15.25	141.89	9.59	147.55
MW-BR	155.14	8.30	146.84	8.30	146.84	10.87	144.27	5.64	149.50
MW-C	154.83	9.39	145.44	9.39	145.44	11.51	143.32	6.05	148.78
MW-D	155.83	11.34	144.49	11.34	144.49	13.61	142.22	8.30	147.53
MW-E	156.65	11.09	145.56	11.09	145.56	14.49	142.16	7.77	148.88
MW-F	152.87	6.61	146.26	6.61	146.26	8.09	144.78	3.52	149.35
MW-G	Abandoned								
MW-GR	156.31	11.64	144.67	11.64	144.67	13.75	142.56	7.72	148.59
MW-H	154.82	NM		NM		10.87	143.95	5.93	148.89
MVV-I	154.94	8.89	146.05	8.89	146.05	10.16	144.78	5.68	149.26

NM= Not Measured DTW - Depth to Water

Elev. - Elevation (feet)



Table 1: Groundwater Elevation Summary UFP Auburndale LLC, Auburndale, Florida.

Monitor Wells, 0	10/2	2/2013	1/27/2014		4/15	4/15/2014		7/29/2014		10/14/2014)/2015	4/7	//2015
	DTW	Elev.	DTW	Elev.	DTW	Elev.	DTW	Elev.	DTW	Elev.	DTW	Elev.	DTW	Elev.
MW-1														
MW-1R	3.36	149.44	5.32	147.48	4.45	148.35	3.49	149.31	2.87	149.93	3.61	149.19	3.98	148.82
MW-2	5.55	149.79	7.49	147.85	6.71	148.63	5.53	149.81	4.98	150.36	5.82	149.52	6.17	149.17
MW-5	6.79	147.16	8.32	145.63	7.60	146.35	6.48	147.47	5.88	148.07	6.88	147.07	7.37	146.58
MW-6	10.50	147.01	12.64	144.87	10.99	146.52	9.58	147.93	9.47	148.04	10.15	147.36	11.08	146.43
MW-7	5.36	145.66	7.09	143.93	5.97	145.05	5.06	145.96	4.38	146.64	5.21	145.81	5.85	145.17
MW-8D	6.58	146.74	8.65	144.67	7.31	146.01	6.34	146.98	5.61	147.71	6.61	146.71	7.12	146.20
MW-9D	6.13	149.05	6.56	148.62	10.25	144.93	6.84	148.34	6.40	148.78	6.88	148.30	7.39	147.79
MW-10	2.52	149.37	4.40	147.49	3.71	148.18	2.57	149.32	1.86	150.03	2.83	149.06	3.10	148.79
MW-11	3.80	149.36	5.80	147.36	4.93	148.23	3.95	149.21	3.13	150.03	4.10	149.06	4.39	148.77
MW-12	4.55	149.43	6.74	147.24	5.96	148.02	4.65	147.65	4.07	149.91	4.69	149.29	5.13	148.85
MW-13	6.58	146.91	8.12	145.37	7.35	146.14	6.33	143.07	5.92	147.57	6.70	146.79	7.31	146.18
MW-14														
MW-15														
MW-15D														
MW-16														
MW-17														
MW-18														
MW-A	10.46	146.68	12.89	144.25	11.24	145.90	10.42	146.72	9.35	147.79	10.50	146.64	11.12	146.02
MW-BR	6.17	148.97	7.05	148.09	7.27	147.87	6.27	148.87	5.50	149.64	6.35	148.79	6.79	148.35
MW-C	6.58	148.25	NM		7.72	147.11	6.61	148.22	6.42	148.41	6.75	148.08	7.12	147.71
MW-D	9.19	146.64	11.03	144.80	9.78	146.05	9.01	146.82	8.52	147.31	9.14	146.69	10.12	145.71
MW-E	9.96	146.69	12.02	144.63	10.47	146.18	9.02	147.63	8.89	147.76	9.66	146.99	10.40	146.25
MW-F	3.59	149.28	5.65	147.22	4.75	148.12	3.67	149.20	2.89	149.98	3.90	148.97	4.21	148.66
MW-G														
MW-GR	9.83	146.48	11.21	145.10	9.75	146.56	8.72	147.59	7.78	148.53	8.45	147.86	9.42	146.89
MW-H	6.24	148.58	8.33	146.49	7.31	147.51	6.27	148.55	5.52	149.30	6.48	148.34	6.80	148.02
MW-I	5.71	149.23	7.72	147.22	6.93	148.01	5.92	149.02	5.09	149.85	6.19	148.75	6.41	148.53

NM= Not Measured

Elev. - Elevation (feet)

DTW - Depth to Water



Table 1: Groundwater Elevation Summary UFP Auburndale LLC, Auburndale, Florida.

Monitor Wells, 0	7/16	6/2015	12/1/2015		12/1/2015 5/25/2016		12/1	12/15/2016		3/26/2018		3/2018	9/25	5/2018
	DTW	Elev.	DTW	Elev.	DTW	Elev.	DTW	Elev.	DTW	Elev.	DTW	Elev.	DTW	Elev.
MW-1														
MW-1R	2.66	150.14	3.60	149.20	3.78	149.02	4.63	148.17	5.50	147.30	3.51	149.29	1.54	151.26
MW-2	4.77	150.57	5.71	149.63	5.85	149.49	6.71	148.63	6.52	148.82	4.68	150.66	2.72	152.62
MW-5	4.97	148.98	6.78	147.17	6.68	147.27	7.94	146.01	9.14	144.81	6.36	147.59	3.66	150.29
MW-6	8.19	149.32	10.09	147.42	9.59	147.92	11.73	145.78	12.76	144.75	9.12	148.39	6.67	150.84
MW-7	4.12	146.90	5.05	145.97	5.19	145.83	6.37	144.65	7.19	143.83	5.03	145.99	3.00	148.02
MW-8D	5.02	148.30	6.61	146.71	6.90	146.42	7.23	146.09	8.83	144.49	6.19	147.13	3.78	149.54
MW-9D	6.19	148.99	10.56	144.62	7.40	147.78	7.86	147.32	8.90	146.28	6.93	148.25	6.65	148.53
MW-10	1.86	150.03	2.62	149.27	2.81	149.08	3.71	148.18						
MW-11	3.10	150.06	3.76	149.40	4.09	149.07	4.80	148.36	5.85	147.31	4.21	148.95	1.97	151.19
MW-12	3.79	150.19	4.76	149.22	5.01	148.97	5.83	148.15	6.78	147.20	4.99	148.99	2.85	151.13
MW-13	5.51	147.98	5.91	147.58	6.71	146.78	7.27	146.22	8.56	144.93	7.34	146.15	4.62	148.87
MW-14			8.86	145.92	8.30	146.48	9.52	145.26	10.55	144.23	8.13	146.65	5.55	149.23
MW-15			7.20	147.75	7.21	147.74	8.33	146.62	9.36	145.59	7.15	147.80	4.75	150.20
MW-15D			7.56	148.35	7.62	148.29	8.70	147.21	9.73	146.18	7.64	148.27	5.33	150.58
MW-16			6.65	148.52	6.82	148.35	7.69	147.48	8.78	146.39	6.98	148.19	4.49	150.68
MW-17			5.80	148.86	5.96	148.70	6.83	147.83	7.91	146.75	6.00	148.66	3.70	150.96
MW-18			5.00	148.88	5.20	148.68	6.06	147.82	7.14	146.74	5.26	148.62	2.92	150.96
MW-A	9.20	147.94	10.62	146.52	10.60	146.54	11.93	145.21	12.74	144.40	10.35	146.79	7.61	149.53
MW-BR	5.28	149.86	6.47	148.67	6.48	148.66	7.48	147.66	8.46	146.68	6.12	149.02	3.88	151.26
MW-C	5.96	148.87	6.51	148.32	6.73	148.10	7.15	147.68	8.85	145.98	6.64	148.19	4.19	150.64
MW-D	7.73	148.10	8.95	146.88	8.84	146.99	10.33	145.50	11.20	144.63	8.25	147.58	6.28	149.55
MW-E	7.44	149.21	9.34	147.31	9.23	147.42	11.02	145.63	12.13	144.52	8.34	148.31	6.12	150.53
MW-F	2.82	150.05	3.70	149.17	3.89	148.98	4.77	148.10	5.76	147.11	3.88	148.99	1.65	151.22
MW-G														
MW-GR	7.17	149.14	8.94	147.37	8.87	147.44	10.25	146.06	11.18	145.13	8.45	147.86	5.44	150.87
MW-H	5.31	149.51	6.31	148.51	6.45	148.37	7.44	147.38	8.44	146.38	6.73	148.09	4.13	150.69
MW-I	5.03	149.91	5.79	149.15	6.06	148.88	6.79	148.15	7.94	147.00	6.23	148.71	3.88	151.06

NM= Not Measured DTW - Depth to Water

Elev. - Elevation (feet)



Table 1: Groundwater Elevation Summary UFP Auburndale LLC, Auburndale, Florida.

Monitor Wells, 0 to 30 Ft.	12/3	/2018	3/27/2019		6/10/2019		9/12/2019		12/18/2019		3/4/2020		6/1/2020		9/8/	9/8/2020	
	DTW	Elev.	DTW	Elev.	DTW	Elev.	DTW	Elev.	DTW	Elev.	DTW	Elev.	DTW	Elev.	DTW	Elev.	
MW-1																	
MW-1R	3.76	149.04	NM		3.98	148.82	NM		2.52	150.28			5.80	147.00	2.89	149.91	
MW-2	4.78	150.56	NM		5.42	149.92	NM		3.91	151.43			6.86	148.48	4.02	151.32	
MW-5	7.06	146.89	7.04	146.91	6.30	147.65	3.54	150.41	5.75	148.20	7.47	146.48	9.21	144.74	5.83	148.12	
MW-6	10.92	146.59	10.62	146.89	9.19	148.32	6.77	150.74	9.92	147.59	11.29	146.22	13.06	144.45	8.20	149.31	
MW-7	5.58	145.44	NM		5.99	145.03	2.89	148.13	4.53	146.49	5.77	145.25	7.37	143.65	4.12	146.90	
MW-8D	6.85	146.47	6.92	146.40	6.73	146.59	3.76	149.56	5.84	147.48	7.28	146.04	8.80	144.52	5.18	148.14	
MW-9D	7.00	148.18	NM		7.95	147.23	NM		6.27	148.91	NM		9.20	145.98	6.23	148.95	
MW-10																	
MW-11	3.94	149.22	NM		5.15	148.01	NM		3.10	150.06	NM		6.09	147.07	3.41	149.75	
MW-12	4.93	149.05	NM		6.25	147.73	NM		3.90	150.08	NM		6.80	147.18	4.16	149.82	
MW-13	6.77	146.72	NM		7.52	145.97	4.58	148.91	5.61	147.88	6.82	146.67	8.82	144.67	5.68	147.81	
MW-14	8.62	146.16	8.63	146.15	9.80	144.98	4.57	150.21	7.70	147.08	9.06	145.72	10.86	143.92	7.31	147.47	
MW-15	7.58	147.37	NM		8.35	146.60	4.69	150.26	6.67	148.28	NM		9.66	145.29	6.34	148.61	
MW-15D	7.95	147.96	NM		8.64	147.27	NM		7.09	148.82	8.33	147.58	10.02	145.89	7.06	148.85	
MW-16	6.86	148.31	NM		8.43	146.74	NM		6.13	149.04	NM		9.06	146.11	6.23	148.94	
MW-17	5.99	148.67	NM		7.47	147.19	NM		5.17	149.49	NM		8.18	146.48	5.31	149.35	
MW-18	5.20	148.68	NM		6.42	147.46	NM		4.38	149.50	NM		7.41	146.47	4.45	149.43	
MW-A	12.74	144.40	10.86	146.28	11.49	145.65	7.42	149.72	9.55	147.59	11.06	146.08	13.08	144.06	9.20	147.94	
MW-BR	6.53	148.61	NM		4.68	150.46	NM		5.62	149.52	NM		8.27	146.87	5.15	149.99	
MW-C	6.90	147.93	NM		8.26	146.57	Pa	aved	5.81	***	NM		9.13	***	7.00	***	
MW-D	9.59	146.24	9.38	146.45	9.73	146.10	6.11	149.72	8.43	147.40	9.85	145.98	11.61	144.22	NS	155.83	
MW-E	10.41	146.24	10.19	146.46	9.28	147.37	6.35	150.30	9.25	147.40	10.75	145.90	12.45	144.20	7.60	149.05	
MW-F	3.90	148.97	NM		4.79	148.08	NM		2.98	149.89	NM		6.06	146.81	3.09	149.78	
MW-G																	
MW-GR	9.09	147.22	9.10	147.21	7.79	148.52	5.49	150.82	7.99	148.32	9.52	146.79	11.50	144.81	7.25	149.06	
MW-H	6.55	148.27	NM		7.55	147.27	NM		5.95	148.87	NM		8.73	146.09	5.63	149.19	
MW-I	6.06	148.88	NM		7.52	147.42	NM		5.32	149.62	NM		8.21	146.73	5.52	149.42	

NM= Not Measured

Elev. - Elevation (feet)

DTW - Depth to Water



Table 1: Groundwater Elevation Summary UFP Auburndale LLC, Auburndale, Florida.

Monitor Wells, 0 to 30 Ft.	12/8/2020		3/3/2021		6/15	3/2021	9/14	/2021	11/30	11/30/2021	
	DTW	Elev.	DTW	Elev.	DTW	Elev.	DTW	Elev.	DTW	Elev.	
MW-1											
MW-1R	2.85	149.95	3.46	149.34	4.90	147.90	3.64	149.16	4.98	147.82	
MW-2	4.35	150.99	4.68	150.66	6.45	148.89	5.02	150.32	6.04	149.30	
MW-5	6.33	147.62	6.28	147.67	7.94	146.01	5.78	148.17	8.02	145.93	
MW-6	10.22	147.29	9.83	147.68	12.14	145.37	9.52	147.99	11.54	145.97	
MW-7	4.88	146.14	4.69	146.33	6.58	144.44	7.70	143.32	6.18	144.84	
MW-8D	6.09	147.23	5.95	147.37	8.03	145.29	6.09	147.23	8.79	144.53	
MW-9D	6.29	148.89	6.69	148.49	8.90	146.28	7.38	147.80	8.20	146.98	
MW-10											
MW-11	3.53	149.63	4.18	148.98	5.88	147.28	4.41	148.75	4.84	148.32	
MW-12	4.41	149.57	4.51	149.47	6.71	147.27	5.11	148.87	6.00	147.98	
MW-13	6.11	147.38	6.17	147.32	8.26	145.23	6.65	146.84	7.42	146.07	
MW-14	8.13	146.65	8.17	146.61	10.23	144.55	8.73	146.05	9.63	145.15	
MW-15	7.01	147.94	7.06	147.89	8.93	146.02	7.62	147.33	8.49	146.46	
MW-15D	7.41	148.50	7.58	148.33	9.40	146.51	7.95	147.96	8.90	147.01	
MW-16	6.01	149.16	6.75	148.42	8.84	146.33	7.05	148.12	8.12	147.05	
MW-17	5.79	148.87	5.85	148.81	7.98	146.68	6.20	148.46	7.25	147.41	
MW-18	4.81	149.07	5.13	148.75	7.08	146.80	5.43	148.45	6.56	147.32	
MW-A	9.94	147.20	9.74	147.40	12.25	144.89	10.38	146.76	11.74	145.40	
MW-BR	5.21	149.93	5.37	149.77	6.62	148.52	6.66	148.48	7.48	147.66	
MW-C	5.75	***	6.54	***	8.50	***	7.06	***	7.80	***	
MW-D	8.82	147.01	8.61	147.22	10.72	145.11	8.69	147.14	10.49	145.34	
MW-E	9.60	147.05	9.21	147.44	11.49	145.16	8.67	147.98	11.13	145.52	
MW-F	3.41	149.46	5.81	147.06	5.64	147.23	3.81	149.06	5.16	147.71	
MW-G											
MW-GR	8.33	147.98	8.38	147.93	10.36	145.95	8.59	147.72	10.24	146.07	
MW-H	6.12	148.70	6.56	148.26	8.49	146.33	6.96	147.86	7.88	146.94	
MW-I	5.89	149.05	6.03	148.91	8.09	146.85	7.38	147.56	7.34	147.60	

*** - New TOC Needed NM= Not Measured DTW - Depth to Water



Location	Date of Sample		I Recoverable g/L)	Turbidity (NTU)	Specific Cond. (umhos/cm)	pH (Std. Units)	Temp. (°C)	ORP (m.V) Field	Water Level (feet)
			10 μg/l			MCL = 6.5-			
		Total	Dissolved			8.5			
MW-1	40 Maii 00	00.4	40.4	0.50	T 05	1 4 70	00.44	407	7.00
	12-Mar-09		19.1	0.59	85	4.79	23.14	137	7.33
	16-Jul-09 2-Dec-09		52	1.13	0.053	3.93	26.71	-46	5.65
	2-Dec-09 2-Feb-10		40						
MW-1R	Z-1 6D-10] 30	70						
	20-Jun-12	37		8.76	281	6.73	27.47		6.25
	1-Nov-12								
	25-Apr-13			4.15	362	6.61	26.59	-31.3	7.96
	19-Jul-13			3.13	396	6.89	29.45	173.4	3.37
	24-Oct-13	10		1.07	415	6.75	26.22	33.4	
	11-Feb-14			1.44	262	6.69	23.69	21.8	5.54
	17-Apr-14			1.31	331	6.66	24.46	141.6	4.49
	31-Jul-14			0.51	366	6.57	30.92	41.5	3.49
	16-Oct-14			2.14	388	6.65	27.99	57	2.76
	27-Jan-15			0.71	357	6.59	23.62	93.6	3.42
	16-Apr-15			1.32	373	6.89	27.29	-50.1	4.02
	22-Jul-15 7-Dec-15			0.65 1.97	388 384	6.69 6.79	31.58 23.89	5.8 17.6	2.73 3.65
	2-Jun-16			4.21	309	6.43	28.1	15.7	3.84
	15-Dec-16			1.52	337	6.39	26.54	-16.3	4.84
	27-Mar-18			0.79	265	6.79	26.77	30.6	5.93
	19-Jun-18			3.08	408	6.86	34.39	55.6	3.17
	26-Sep-18			0.7	374	6.68	32.39	17.2	1.60
	4-Dec-18			1.31	340	6.84	24.87	43.3	3.30
	11-Jun-19			1.98	290	6.63	28.18	56.2	3.79
	20-Dec-19			1.49	283	6.85	20.38	13.5	2.69
	3-Jun-20	27.9		0.7	199	6.63	28.22	-150.0	4.91
	8-Dec-20			0.29	438.2	7.06	21.10	-161.2	3.08
	15-Jun-21	15		0.23	319.8	6.70	28.30	-200.8	5.18
	3-Dec-21	16.7		0.83	315.4	6.77	23.80	- 194.0	4.96
MW-2	20.11		,		1 00	1		, ,	
	26-May-94			6	38	5.51			9.26
	25-Aug-94			15 5	53 46	5.00			5.11
	12-Dec-94 22-Mar-95			6	40	5.19 4.70			5.54 6.22
	16-Jun-95			6	40	4.70			7.27
	27-Sep-95			1	70	4.01		 	4.82
	28-Sep-95			2	80	4.58			6.19
	3-Apr-96			27	40	5.18			5.29
	20-Jun-96			85	28	5.25			6.10
	20-Sep-96	1.0-U		30	32	5.11			4.57
	13-Dec-96			22	33	4.90			4.78
	24-Mar-97			2.6	28	4.82			6.74
	19-Jun-97			33	29	4.92			5.74
	19-Dec-97			44.6	64	5.09			5.09
	19-Sep-97			65	43	5.18			3.63
	18-Mar-98			28.8	32.3	5.10			3.65
	11-Jun-98			12.7	37	5.16			6.53
	22-Sep-98 30-Dec-98			3.9 0.63	34.9 45	4.92			4.05 6.50
	30-Dec-98 1-Mar-99			0.63	45	4.58 4.64			7.75



		(μί	g/L)	(NTU)	(umhos/cm)	(Std. Units)	Temp. (°C)	ORP (m.V) Field	Water Level (feet)
		MCL =	10 μg/l			MCL = 6.5-			
		Total	Dissolved			8.5			
IW-2 (cont.d)					•	•		•	
(00114101)	13-Apr-99	10.0-U		1.2	73	4.60			8.67
	16-Aug-99			0.74	40	4.57			7.08
	23-Nov-99		5-U	1.9	103	4.73			7.30
	25-Feb-00	5-U	5-U	44	50	4.70			8.31
	17-May-00		1-U	31.6	53.1	4.43			9.85
	12-Sep-00	1-U	1-U	9.83	61.7	4.41			6.19
	6-Dec-00	1-U	1-U	68.8	53.8	4.67			8.50
	21-Feb-01	1-U	1-U	17.4	43.4	4.50			9.74
	15-May-01	1-U	1-U	14.7	38	4.97			9.64
	12-Sep-01	1-U	1-U	19.2	36.5	4.61			5.77
	12-Dec-01	1-U	1-U	12.8	35.1	4.95	27.8		6.87
	20-Feb-02	1-U	1-U	14.2	33.6	4.47	24.8		8.32
	15-May-02	1-U	1-U	18.5	37.9	4.54	26.8		9.65
	25-Sep-02	1-U	1-U	14.1	41.5	4.59	27.6		5.55
	11-Dec-02	1-U	1-U	6.66	44.8	5.06	23.9		4.55
	7-May-03	1-U	1-U	7.45	50.1	6.09	28.60		5.52
	11-Sep-03		1-U	13.3	69.5	5.75	29.70		4.29
	9-Oct-03	3	2	(ACQ Conversi	· · · · · · · · · · · · · · · · · · ·	F 40	00.40		7.04
	10-Dec-03		1	32.9	45.2	5.18	23.40		7.24
	11-Feb-04	1	'	32.5	43.7	4.33	23.50		6.81
	20-May-04 23-Sep-04	1-U 1	1-U 1-U	15.9 10.6	44.5 41.6	4.57 4.79	27.40 28.40		8.10 3.88
	16-Dec-04	1-U	1-U	22.8	41.6	4.79	23.00		5.69
	3-Feb-05	1-U	1-U	31.3	47.1	5.01	21.30		5.09
	5-May-05		1-U	29.1	40.1	5.04	24.20		5.98
	15-Sep-05		1-U	8.65	65.4	5.02	29.50		5.70
	8-Dec-05		1-U	23.3	73.7	4.72	23.80		6.62
	2-Feb-06		1-U	17.2	52	4.90	24.90		7.69
	27-Apr-06		1-U	15.7	46.1	4.67	25.90		8.63
	13-Sep-06			13.8	0.041	5.57	29.95		6.50
	6-Dec-06			5.5	44	4.20	26.20		8.34
	22-Mar-07	1.32-U		0.2	52	4.30	25.70		8.71
	24-May-07	1.32-U		4.4	54	4.10	25.90		10.18
	24-Jul-07	1.59		2.96	42	5.44	28.92		8.31
	7-Sep-07	1.57		0.2	65	4.30	27.50		7.14
	4-Oct-07	1.32-U		0.1	67	4.30	27.50		6.74
	1-Feb-08			0.1	60	4.20	26.50		8.60
	8-May-08	1.32-U		0.3	57	4.60	26.40		7.34
	14-Jul-08			0.9	54	4.40	27.00		6.94
	18-Nov-08			0.6	39	4.70	27.20		7.12
	5-Feb-09								
	12-Mar-09		2.74-I	47.1	78	5.59	24.24	-66	8.55
	12-May-09			0.8	51	5.10	26.20		9.68
	16-Jul-09			2.04	0.038	4.71	28.71	-51	6.94
	2-Dec-09		0.689-U						<u> </u>
	1-Feb-10								
	5-May-10			1.5	73	5.7	26.2		<u> </u>
	26-Aug-10			0.7	49	5.7	27.5		<u> </u>
	18-Nov-10 15-Feb-11			2.2 0.8	34 40	5.5 5.2	27.2 25.5		<u> </u>



Location	Date of Sample	Arsenic, Total Recove (μg/L)	rable	Turbidity (NTU)	Specific Cond. (umhos/cm)	pH (Std. Units)	Temp. (°C)	ORP (m.V) Field	Water Level (feet)
		MCL = 10 μg/l				MCL = 6.5-			
		Total Dissolv	ved			8.5			
MW-2 (cont.d)									
	17-May-11	0.689-U		0.6	35	5.1	25.6		
	22-Aug-11	0.689-U		1.2	29	5.2	27		
	11-Nov-11	0.689-U		0.9	29	5.7	27		
	24-Jan-12	0.689-U		8.0	43	6	26		
	20-Jun-12	4-U		1.69	47	5.40	26.9		
	23-Apr-13	4-U		3.31	30	4.75	26.71	-11.8	9.88
	18-Jul-13	· · · · · · · · · · · · · · · · · · ·		1.95	23	4.48	26.81	118.4	5.52
	22-Oct-13			1.07	21	4.32	28.09	15	5.55
	29-Jan-14	4-U		3.92	26	5.01	23.47	44.6	7.53
	17-Apr-14	4-U		1.50	30	4.90	25.46	131.9	6.65
	29-Jul-14	4-U 4-U		5.16	57 35	5.30	28.84	-39.6	5.53 5.08
	14-Oct-14 22-Jan-15			2.42 1.05	45	4.96 5.06	28.54 26.16	-64.8 56.2	5.08 5.56
	16-Apr-15			1.48	77	6.14	28.85	-144.4	6.25
	22-Jul-15			2.86	40	5.19	28.5	4.8	4.96
	4-Dec-15	· · · · · · · · · · · · · · · · · · ·		0.71	38	5.65	24.59	-20.5	5.73
	1-Jun-16	2-I		3.76	55	5.19	28.4	75.5	5.86
	15-Dec-16			1.53	75	5.73	27.44	-23.6	6.84
	27-Mar-18			2.85	64	6.01	26.79	42.5	6.80
	28-Jun-18			5.62	55	5.68	28.69	11.3	4.81
	26-Sep-18	1-I		3.68	68	5.63	29.85	-9.6	2.78
	4-Dec-18	0.59-I		1.91	55	5.82	27.25	22.4	4.61
	11-Jun-19	1.1		6.95	117	6.08	27.18	-52.0	5.30
	18-Dec-19	0.60-I		3.18	108	6.86	25.52	-53.0	3.75
	3-Jun-20			1.86	171	6.40	27.00	-134.7	6.88
	10-Dec-20			1.36	87.5	6.10	26.00	-229.8	4.55
	17-Jun-21	· · · · · · · · · · · · · · · · · · ·		1.43	42.7	6.53	28.80	-148.1	6.47
	3-Dec-21	0.50 - U		0.93	53.4	6.19	25.90	-100.3	6.05
MW-5						1			
	19-Jun-12			8.32	636	6.44	27.93	00.5	9.22
	24-Apr-13			4.33	747	6.43	25.85	-62.5	11.33
	17-Jul-13 24-Oct-13			4.87 4.35	486 877	6.96 6.70	28.7 26.42	2.9 -62.1	5.60
	28-Jan-14			3.05	672	6.41	24.15	79.1	8.85
	16-Apr-14			4.68	679	6.68	23.95	91.3	7.37
	30-Jul-14	· · · · · · · · · · · · · · · · · · ·		4.74	569	6.43	30.2	-17.9	6.48
	15-Oct-14			2.67	415	6.39	28.86	-19.5	5.09
	28-Jan-15			3.58	453	6.78	21.5	9.7	6.75
	10-Apr-15			2.32	696	6.82	24.43	-59	7.48
	17-Jul-15			1.65	489	6.79	31.12	90.8	5.76
	3-Dec-16			2.42	573	6.83	23.17	-108.4	6.90
	27-May-16	18		1.40	469	6.57	28.75	-39.1	8.09
	20-Dec-16			6.21	668	6.40	24.83	-60.1	8.74
	28-Mar-18			2.64	734	6.65	25.35	-57.1	9.30
	20-Jun-18			1.90	444	6.74	29.05	-8.7	7.38
	26-Sep-18			1.53	211	6.86	28.86	-37.2	4.34
	5-Dec-18			3.19	617	6.52	21.33	-5.3	6.51
	27-Mar-19			4.51	616	6.81	23.76	-101.4	7.58
	12-Jun-19			2.89	210	6.45	27.97	11.0	7.12
	12-Sep-19	39.8		3.59	157	6.52	33.35	48.9	3.54



Location	Date of Sample	•	al Recoverable ıg/L)	Turbidity (NTU)	Specific Cond. (umhos/cm)	pH (Std. Units)	Temp. (°C)	ORP (m.V) Field	Water Leve (feet)
		MCL :	= 10 µg/l			MCL = 6.5-			
		Total	Dissolved			8.5			
MW-5 (cont.d)					•			•	
, ,	9-Jan-20	34.1		7.24	591	6.50	24.44	-34.9	7.59
	5-Mar-20	10.8		6.58	845	6.63	25.07	-111.5	7.47
	4-Jun-20	4.4		4.14	117	8.94	24.47	-26.9	6.13
	9-Sep-20			4.28	282	6.96	29.87	61.9	5.84
	9-Dec-20			11.6	535	6.84	23.70	32.6	6.53
	3-Mar-21	32		19	398.9	6.91	23.10	-89.3	6.28
	18-Jun-21	14.2		0.38	533	6.65	27.30	3.9	4.63
	16-Sep-21	15.3		1.89	362.1	6.65	30.60	-132.5	5.75
NAVA C	2-Dec-21	7.9		0.52	659	6.85	23.90	-59.4	8.04
MW-6	19-Jun-12	5-I	 	8.11	153	6.31	27.70	 	13.03
	23-Apr-13		+ +	1.74	126	5.86	25.23	-21.9	15.03
	17-Jul-13		+ +	3.23	127	6.25	27.93	130.3	8.64
	23-Oct-13		+	1.37	182	6.07	28.12	31.1	10.57
	11-Feb-14	44	+ +	1.37	142	5.60	25.75	55.2	12.78
	17-Apr-14	5-I	1	5.13	73	5.82	24.03	129	11.11
	31-Jul-14	6-I		1.2	112	5.84	34.66	35.5	9.58
	6-Oct-14	36		0.95	131	5.91	27.75	50.1	9.17
	27-Jan-15	4-I		8.62	61	5.67	22.4	100.1	9.83
	11-Apr-15	11		8.63	136	6.11	25.93	39.9	11.22
	17-Jul-15			0.87	107	6.03	31.25	-67.1	8.95
	4-Dec-15			1.33	133	6.37	23.76	-84.7	10.37
	26-May-16			1.20	76	5.38	27.99	79.4	10.05
	20-Dec-16			1.13	126	5.73	25.17	4.1	12.26
	28-Mar-18			2.35	178	6.24	27.3	16.3	13.11
	20-Jun-18			4.62	141	6.07	27.94	25	9.89
	26-Sep-18			1.37	101	6.03	28.98	33.7	7.65
	5-Dec-18			1.76 2.85	197 201	5.93	21.03	59.5 -86.6	10.86
	27-Mar-19 12-Jun-19			4.59	56	6.51 5.82	23.85 26.19	103.6	10.83 8.52
	12-Sun-19			2.93	107	6.00	32.25	73.5	6.77
	19-Dec-19			4.37	140	5.78	24.78	40.3	9.31
	5-Mar-20			3.77	297	6.06	27.82	-56.0	11.29
	4-Jun-20			2.16	186	8.63	24.86	67.9	12.38
	9-Sep-20			4.36	148	6.30	28.44	96.2	8.19
	9-Dec-20		1	1.4	490.9	6.63	24.70	-45.0	10.35
	3-Mar-21	15.2	<u> </u>	7.13	96.3	6.29	23.70	-87.2	9.83
	18-Jun-21	10.6		0.48	185.3	6.05	25.70	-198.1	8.75
	15-Sep-21	4.1		0.47	210.7	5.91	28.40	-96.5	9.45
	1-Dec-21	3.9	1 1	2.47	119.1	6.02	25.20	-106.5	11.55
MW-7	20.1.1.1		 				00.55	, 	
	20-Jun-12		1	1.66	87	5.42	26.22	4.7	7.56
	22-Apr-13			2.63	114	5.79	24.42	1.7	9.29
	18-Jul-13 22-Oct-13		+	2.78 4.86	241 164	6.02 6.31	27.28 27.70	506.1 46.1	5.36
	22-Oct-13 27-Jan-14	4-U 4-U	+ +	3.89	147	6.17	24.41	167.3	7.09
	15-Apr-14		+ +	4.18	146	5.49	24.41	217.3	5.97
	29-Jul-14		+	5.74	169	5.81	27.97	96.8	5.06
	14-Oct-14		+ +	3.34	238	5.67	27.72	177.1	4.65
	22-Jan-15		+ +	10.1	154	6.08	23.51	146.1	4.71
	10-Apr-15		1	2.3	167	6.18	24.75	42.6	5.94
	17-Jul-15		1	5.69	196	5.94	27.92	96.9	4.27
	4-Dec-15		†	1.52	268	6.44	23.05	121.3	5.32
	25-May-16			2.81	164	5.99	26.86	144.2	6.6
	15-Dec-16			1.3	159	6.11	26.03	32.3	7.59



Location	Date of Sample		I Recoverable g/L)	Turbidity (NTU)	Specific Cond. (umhos/cm)	pH (Std. Units)	Temp. (°C)	ORP (m.V) Field	Water Level (feet)
		MCL =	10 µg/l			MCL = 6.5-			
		Total	Dissolved			8.5			
MW-7 (cont.d)		rotar	Biocontoa		l	0.0			
	27-Mar-18	2-IV		1.05	179	6.58	24.72	245.6	7.47
	28-Jun-18	1-U		2.15	184	6.36	27.06	93.5	5.50
	26-Sep-18	1.0-U		1.32	176	6.17	28.83	38.6	3.02
	3-Dec-18	0.50-U		1.7	177	6.33	27.93	31.1	5.58
	13-Jun-19	1.2		1.51	155	6.13	26.76	24.7	7.10
	17-Dec-19	0.50-U		1.83	183	6.31	24.95	NA	4.54
	2-Jun-20	1.2		0.75	167	6.32	26.44	-70.8	7.38
	9-Sep-20	0.50-U		2.95	195	6.53	29.79	88.1	4.03
	7-Dec-20	0.50-U	 	0.37	277.7	4.97	23.40	51.4	4.88
	15-Jun-21	1.3		0.67	177.2	6.27	27.40	-193.8	6.58
MW-8D	30-Nov-21	0.50-U		0.42	168.4	6.34	26.60	71.5	6.21
INI AA-0D	19-Jun-12	9-I	 	8.73	169	5.99	26.67	-2.2	
	24-Apr-13	9-I 4-I	+	2.33	100	5.89	25.84	-2.2 -2.2	
	17-Jul-13	4-I 4-I		4.60	131	6.0	26.94	158.1	5.62
	23-Oct-13	4-1		4.35	92	5.72	27.50	85	0.02
	28-Jan-14	4-U		3.44	78	5.10	27.31	130.9	8.68
	16-Apr-14	4-U		4.40	79	5.42	24.98	161.5	7.14
	30-Jul-14	5-I		0.99	86	5.13	27.37	75.7	6.34
	15-Oct-14	4-U		1.74	85	5.46	27.23	91.8	5.21
	29-Jan-15	4-U		3.94	76	5.79	24.25	133.5	6.48
	9-Apr-15	4 - U		1.56	75	5.62	26.14	205	7.20
	16-Jul-15	4-I		1.41	88	6.02	27.48	88.1	5.40
	3-Dec-15	4-U		0.53	82	6.03	24.44	55.9	6.70
	26-May-16	22		0.53	85	5.13	25.82	144.6	23.65
	20-Dec-16			1.05	77	5.28	26.03	103.2	8.50
	28-Mar-18	67		1.50	84	6.01	26.75	204.1	9.14
	20-Jun-18			0.94	94	5.72	27.71	61.4	6.90
	26-Sep-18	94		1.8	93	5.57	28.58	97.0	4.40
	6-Dec-18	102		1.15	71	5.62	26.86	112.2	6.66
	28-Mar-19 12-Jun-19			3.66 2.3	89 96	5.89	24.45	129.6	7.50
	12-Jun-19 13-Sep-19		 	2.94	90	5.59 5.99	28.06 29.05	110.9 168.6	7.15 3.76
	19-Dec-19		+	1.71	62	5.53	25.58	123.0	5.48
	6-Mar-20	67.5	+	4.61	70	5.47	24.01	114.3	7.28
	5-Jun-20	67		1.07	80	7.10	25.21	-57.6	6.89
	10-Sep-20	100		1.22	130	5.82	29.02	98.2	5.19
	9-Dec-20	60.2		0.84	72.1	5.90	26.00	85.3	6.28
	3-Mar-21	51.8		0.51	72.1	5.89	24.90	92.5	5.95
	17-Jun-21	75.7		1.71	84.2	5.49	26.80	-146.2	4.52
	16-Sep-21	70.8		0.78	126.7	6.00	30.50	126.7	6.06
	1-Dec-21	49.5		0.19	113.5	5.85	26.00	-112.6	8.78
MW-9D						T = = : '	• • • •		
	20-Jun-12			1.39	86	5.04	29.27	24.1	9.51
	23-Apr-13			1.44	61	4.36	30.11	-21.1	12.03
	19-Jul-13			3.14	58	4.58	28.01	129.7	6.34
	25-Oct-13			2.11	51	4.47	29.19	34.6	0.67
	29-Jan-14 18-Apr-14	28 33		5.59 4.38	57 56	3.95 4.01	23.85 26.91	104.2 121.2	8.67 8.33
	18-Apr-14 1-Aug-14	28	 	4.38 3.46	48	3.88	29.24	121.2	6.84
	17-Oct-14		+	5.27	53	4.02	29.24	8.6	6.24
	27-Jan-15			5.78	61	4.02	26.46	53.6	6.41



Location	Date of Sample	Arsenic, Total Recoverable (μg/L)	Turbidity (NTU)	Specific Cond. (umhos/cm)	pH (Std. Units)	Temp. (°C)	ORP (m.V) Field	Water Level (feet)
		MCL = 10 μg/l			MCL = 6.5-			
	1	Total Dissolved			8.5			
MW-9D (cont.d)	1			I			·	
, , , , , , , , , , , , , , , , , , , ,	16-Apr-15	71	7.4	55	4.57	28.3	-92	7.41
	23-Jul-15		1.46	50	4.5	30.04	-16.3	6.15
	10-Dec-15		3.5	45	4.38	25.9	5.5	9.62
	3-Jun-16		13.6	47	3.64	28.50	104.6	18.01
	28-Dec-16		2.52	56	4.38	28.57	18.3	8.59
	4-Apr-18		2.52	56	4.38	28.57	18.3	8.59
	22-Jun-18		1.77	54	4.36	29.91	60.8	7.30
	26-Sep-18 5-Dec-18		10.6 1.61	44 47	4.52 4.34	31.21 28.50	56.9 136.4	4.97 6.86
	13-Jun-19		1.55	34	4.34	29.79	100.3	7.97
	20-Dec-19		1.56	39	4.32	27.23	140.1	6.05
	3-Jun-20		2.21	52	4.16	28.11	-3.3	9.77
	10-Dec-20		0.27	43.5	4.42	27.70	-187.9	6.95
	16-Jun-21	81.7	8.0	57.5	4.20	28.50	-76.2	8.79
	2-Dec-21	55.7	0.1	83.5	4.13	28.70	449.0	8.22
/IW-10	Ţ				· ·			
	20-Jun-12		9.7	55	4.7	29.51	22.4	5.45
	25-Apr-13		0.53	48	4.33	27.60	-66.4	7.01
	19-Jul-13		3.44	99	4.88	30.05	163.9	2.50
	24-Oct-13	68 43	5.26	141 75	5.80	29.27	-45.1	4 40
	30-Jan-14 17-Apr-14		13.3 3.2	65	4.96 4.98	24.94 26.58	34.6 21.1	4.40 3.59
	31-Jan-14		0.7	48	4.53	30.4	-33.5	2.57
	16-Oct-14	79	5.33	142	5.25	31.51	-50.1	1.76
	22-Jan-15		1.36	91	4.51	27.07	46.8	2.50
	16-Apr-15		2.4	179	5.55	28.96	-177.7	3.15
	22-Jul-15		1.22	43	4.28	31.43	7.4	1.81
	7-Dec-15		1.36	57	4.73	27	18.7	2.71
	2-Jun-16		1.53	71	4.54	30.91	86.4	2.99
	15-Dec-16	40	1.56	85	4.75	28.47	-19.3	3.73
MW-11	2 1 10			T	·		·	
	21-Jun-12		0.70	440	5.00	07.70		0.04
	23-Apr-13 18-Jul-13		3.72 4.76	412 357	5.62 5.98	27.73 28.64	8 141.3	8.21 3.95
	22-Oct-13		0.63	536	6.0	30.09	70.5	3.8
	31-Jan-14		5.21	631	6.04	22.28	90.3	5.76
	17-Apr-14		1.66	413	6.02	25.91	160.5	5.45
	1-Aug-14		0.67	425	6.08	31.12	25.4	3.95
	14-Oct-14	4-U	0.66	558	5.87	31.54	63.9	3.13
	27-Jan-15		0.77	462	5.92	25.36	117.3	3.92
	16-Apr-15		1.12	438	6.15	28.32	24.5	4.48
	23-Jul-15		0.38	448	5.91	31.94	48.0	3.17
	7-Dec-15		1.75	367	5.99	25.46	97.8	3.93
	2-Jun-16		0.67	371	5.61	31.5	113.4	4.15
	15-Dec-16		1.32	289	6.03	28.36	88.5	5.05
	30-Mar-18 21-Jun-18		1.78 1.24	337 313	6.09 6.08	27.07 31.30	276.0 96.6	6.22 4.38
	26-Sep-18		1.05	312	5.97	32.57	65.0	1.95
	21-Dec-18		2.24	440	5.95	28.87	92.4	3.87
	11-Jun-19		1.69	281	6.00	32.64	129.9	4.90



Location	Date of Sample	Arsenic, Total Recoverable (μg/L)	Turbidity (NTU)	Specific Cond. (umhos/cm)	pH (Std. Units)	Temp. (°C)	ORP (m.V) Field	Water Level (feet)
		MOL = 40 · · · ·/			MOL 0.5			
		MCL = 10 μg/l Total Dissolved			MCL = 6.5- 8.5			
MW-11 (cont.d)		Total Dissolved			0.5			
WW-11 (Cont.d)	9-Jan-20	20.8	5.43	516	6.24	26.13	85.0	3.30
	3-Jun-20		1.91	320	6.09	29.94	127.2	6.24
	8-Dec-20		0.26	637	6.19	26.80	-43.7	3.79
	16-Jun-21	7.0	0.69	379.7	6.16	32.10	-11.0	5.82
	2-Dec-21	11.2	8.49	402.3	6.16	27.70	92.6	4.81
MW-12								
	23-Apr-13		10.2	622	6.36	26.62	-68.7	9.41
	16-Jul-13		3.75	824	6.42	30.14	4852.5	4.59
	22-Oct-13		4.38	1318	6.09	30.46	109.3	4.55 6.74
	27-Jan-14 16-Apr-14	4-I 4-I	10.1 3.27	950 662	6.07 5.94	25.86 25.59	182.2 249	5.96
	29-Jul-14	4-I 4-U	2.75	565	5.74	32.31	65.5	4.65
	14-Oct-14	4-U	0.66	612	5.74	30.40	165	4.03
	22-Jan-15		0.95	498	5.31	26.42	133.2	4.73
	10-Apr-15		1.65	466	5.66	29.25	204.2	5.48
	22-Jul-15	<u> </u>	0.71	416	5.88	30.46	96	4.09
	4-Dec-15		0.53	459	5.86	25.15	135.3	4.85
	1-Jun-16		1.26	470	5.49	29.15	78.9	5.45
	15-Dec-16		4.18	463	5.54	26.82	88.2	6.15
	27-Mar-18		6.31	475	6.01	27.06	266.3	7.22
	28-Jun-18		7.87	452	5.62	29.60	119.1	5.26
	26-Sep-18	1.0-U	2.6	461	5.53	31.57	56.8	2.91
	1-Jun-20		15.9	500	5.74	31.73	219.3	6.80
	7-Dec-20	0.50-U	5.84	521	5.98	26.50	130.7	4.41
	15-Jun-21		0.49	566	5.74	30.90	106.4	6.72
	30-Nov-21	0.50-U	1.54	429.2	6.05	26.80	167.2	5.99
MW-13	00.4.40		2.0	1 00	1 44	05.55	0.4	40.04
	26-Apr-13	<u> </u>	8.2	38	4.4	25.55	-34 452.7	10.84
	16-Jul-13 22-Oct-13		4.14 5.01	125 98	5.89 5.83	29.66 28.31	453.7 -22.6	5.85 6.58
	27-Jan-14		19.1	69	5.67	23.93	168.5	8.12
	15-Apr-14		9.82	65	5.25	24.79	238.1	7.35
	29-Jul-14	10	5.25	69	5.25	28.4	44.7	6.33
	14-Oct-14	21	3.02	78	5.0	27.81	169.1	5.92
	22-Jan-15	10	7.13	63	5.4	24.25	122.9	6.38
	10-Apr-15		6.47	45	5.4	26.73	183.3	7.31
	17-Jul-15		4.68	54	5.3	28.17	117.1	5.59
	4-Dec-15		6.79	54	6.01	22.84	-4.7	6.26
	25-May-16		2.89	55	5.17	28.39	129.4	6.81
	15-Dec-16		5.39	56 67	5.40	25.34	46	7.66
	27-Mar-18 28-Jun-18		3.83 3.02	67 55	5.96 5.72	24.68 26.97	228.9 70.8	9.00 5.85
	26-Sep-18		1.42	75	5.72	29.06	32.6	4.61
	7-Dec-18		3.03	55	5.76	24.80	49.7	6.74
	13-Jun-19		4.07	45	5.62	27.92	116.9	7.49
	17-Dec-19		3.03	69	5.84	24.92	NA	5.67
	1-Jun-20		7.66	50	5.57	28.16	197.0	8.82
	7-Dec-20	16.5	1.99	91	5.97	23.60	-70.3	6.11
	15-Jun-21	0.50-U	3.57	57.5	5.65	28.00	45.4	8.27
	30-Nov-21	7.9	1.69	69	5.58	24.40	94.6	7.41



Location	Date of Sample	i i	al Recoverable g/L)	Turbidity (NTU)	Specific Cond. (umhos/cm)	pH (Std. Units)	Temp. (°C)	ORP (m.V) Field	Water Level (feet)
		MCL =	= 10 μg/l			MCL = 6.5-			
		Total	Dissolved			8.5			
MW-14					•				
	8-Dec-15	4-U		3.49	658	6.01	23.49	111.9	7.62
	27-May-16	3-I		3.77	482	5.78	28.48	126	10.28
	21-Dec-16	2-I		3.98	422	5.66	25.03	146.7	11.82
	4-Apr-18	1-IV		4.33	523	6.20	26.24	238.3	11.50
	22-Jun-18	1-IV		6.78	264	6.55	28.89	99.8	8.95
	26-Sep-18			1.24	289	7.06	30.94	47.3	5.78
	7-Dec-18	0.50-U		2.29	374	6.18	21.94	102.2	8.47
	27-Mar-19	0.50-U		15.2	385	6.54	24.31	127.0	9.79
	11-Jun-19	0.50-U		3.35	494	6.16	28.32	151.4	10.81
	12-Sep-19 9-Jan-20	0.50-U 0.50-U	+	1.88 2.73	306 303	6.67 6.45	34.39 24.79	202.2 143.5	4.57 7.79
	9-Jan-20 5-Mar-20	0.50-U 0.50-U	+	4.31	461	6.44	25.12	93.1	9.10
	2-Jun-20	0.50-U		0.84	406	6.05	27.98	104.2	11.03
	8-Sep-20	0.50-U		1.14	284	7.05	30.73	67.9	7.31
	9-Dec-20	0.50-U		1.78	262.8	6.64	24.80	116.6	8.18
	4-Mar-21	0.50-U		2.1	295.6	6.65	23.10	99.9	8.17
	16-Jun-21	0.50-U		0.34	454.9	6.10	30.60	15.8	10.21
	15-Sep-21	0.50-U		0.81	210.3	6.85	31.00	95.0	8.50
	1-Dec-21	0.50-U		1.16	315.9	6.32	25.70	97.8	9.66
MW-15									
	4-Dec-15			2.59	22.8	6.44	25.93	73.7	7.33
	27-May-16	2-I		3.75	235	6.12	30.99	139.2	7.65
	21-Dec-16	2 - U		10.4	221	6.35	26.7	94.8	8.92
	4-Apr-18			6.03	246	6.63	27.08	280.4	9.45
	21-Jun-18	1-U		5.28	274	6.45	29.31	76.6	7.67
	26-Sep-18			0.77	334	6.53	32.57	58.0	4.90
	2-Jun-20			6.83	279	6.27	29.01	131.6	9.71
	8-Dec-20 16-Jun-21	0.50-U 0.50-U		1.53 0.36	476.5 279.9	6.49 6.43	26.20 31.70	0.4 26.3	7.14 8.97
	30-Nov-21	0.50-U		0.36	265.1	6.49	28.20	104.6	8.50
MW-15D	30-1107-21	0.50-0		0.70	200.1	0.43	20.20	104.0	0.50
	8-Dec-15	64		9.02	283	6.17	25.73	-107.6	7.87
	1-Jun-16		 	8.34	160	5.21	28.75	53	7.62
	21-Dec-16		 	12.60	148	5.34	27.39	-13	8.98
	4-Apr-18			8.82	156	5.53	27.77	109.9	9.12
	21-Jun-18	76		8.57	183	5.59	28.04	65.1	7.94
	26-Sep-18	61		15.6	149	5.55	29.88	40.7	5.46
	7-Dec-18	81.3	 	13.7	132	5.46	26.30	13.7	7.80
	11-Jun-19		 	5.57	159	5.65	27.96	10.0	8.52
	9-Jan-20	76.3	1	9.43	138	5.56	28.42	40.4	7.17
	5-Mar-20		 	32.6	174	5.41	28.09	41.1	8.43
	2-Jun-20			14.8	196	5.65	28.77	-93.4	10.20
	8-Sep-20	86.5		34.3	223	6.81	30.29	75.8	7.06
	8-Dec-20	70.7		13.6	352.7	5.73	26.80	-467.2	7.53
	4-Mar-21	75.4		19.6	197.3	5.67	25.30	-109.7	7.58
	16-Jun-21	81.9		3.89	207.8	5.58	29.40	-171.8	9.45
	15-Sep-21	80.8		30.8	178.3	5.70	29.50	-165.8	7.72
	30-Nov-21	85.4		5.39	198.5	5.59	28.00	-135.0	8.91



Location	Date of Sample		al Recoverable g/L)	Turbidity (NTU)	Specific Cond. (umhos/cm)	pH (Std. Units)	Temp. (°C)	ORP (m.V) Field	Water Level (feet)
		MCL :	= 10 µg/l			MCL = 6.5-			
		Total	Dissolved			8.5			
MW-16			2.000.1.00						
	10-Dec-15	41		5.77	626	6.31	27.53	-71.4	6.89
	1-Jun-16			4.23	623	6.22	31.07	-39.70	7.09
	21-Dec-16			5.15	699	6.63	29.45	-115	8.01
	4-Apr-18			7.33	620	6.43	28.4	-57.4	8.83
	21-Jun-18			6.82	556	6.21	29.39	-3.1	7.18
	26-Sep-18			4.29	607	6.35	32.61	53.4	4.60
	4-Dec-18		+	2.82	550	6.23	29.13	101.7	6.86
	11-Jun-19		+	7.48	528	6.33	29.85	-83.6	8.32
	9-Jan-20		+	3.18	601	6.17	27.96	13.0	6.20
	2-Jun-20			10.8	733	6.35	29.16	0.3	9.17
	8-Dec-20		+ +	1.56	808	6.30	28.10	-117.5	6.67
	16-Jun-21	154		0.89	678	6.41	30.10	-116.1	8.79
	2-Dec-21	174		1.21	627	6.51	26.80	-63.2	8.10
MW-17	2 000 21	1 17-7		1.21	021	0.01	20.00	00.2	0.10
	8-Dec-15	14		13.5	121	6.23	27.49	-29.1	6.0
	1-Jun-16			12.4	138.0	5.73	31.9	123	6.22
	22-Dec-16			10.5	122	6.20	28.39	5	7.20
	30-Mar-18			5.44	135	6.16	27.39	252	8.29
	21-Jun-18			11.3	127	6.04	31.17	103.2	6.18
	26-Sep-18			2.49	280	6.28	34.85	52.8	3.79
	4-Dec-18			4.25	165	6.13	29.97	110.0	5.96
	11-Jun-19			8.88	141	6.01	32.12	69.8	7.40
	9-Jan-20			6.52	170	6.16	27.74	59.4	5.33
	2-Jun-20			30	166	5.99	30.48	-4.3	8.23
	8-Dec-20			3.04	297.1	6.24	27.90	-56.8	5.78
	17-Jun-21			2.78	154.5	6.11	31.40	-112.6	7.89
	2-Dec-21	10.9	+ +	2.19	210	6.10	29.60	-29.6	7.26
MW-18	2 200 21		1			5.10			
	10-Dec-15	428		6.8	501	6.12	27.55	-104.2	5.28
	3-Jun-16		+	1.18	468	6	32	4.2	5.28
	22-Dec-16		+	6.50	364	5.68	28.83	-36.1	6.65
	5-Apr-18		+	4.40	354	5.82	26.6	42.2	7.35
	22-Jun-18		+ +	1.86	567	6.00	31.55	6.6	5.96
	26-Sep-18		+ +	2.08	523	6.06	32.71	6.4	3.05
	5-Dec-18		+	1.44	566	5.72	28.18	91.3	5.03
	13-Jun-19		+ +	2.27	328	5.64	31.21	-23.2	6.71
	20-Dec-19			2.87	489	5.89	27.04	57.0	4.29
	4-Jun-20		+ +	3.56	234	5.36	28.11	-46.5	7.74
	10-Dec-20		+ +	1.42	484.9	6.09	27.50	-195.3	5.18
	17-Jun-21	195	+	0.61	216.3	5.69	31.60	-192.1	7.10
	2-Dec-21		+	0.84	278.9	5.82	28.00	-157.3	6.58



Location	Date of Sample		il Recoverable g/L)	Turbidity (NTU)	Specific Cond. (umhos/cm)	pH (Std. Units)	Temp. (°C)	ORP (m.V) Field	Water Level (feet)
		MCL =	: 10 µg/l			MCL = 6.5-			
		Total	Dissolved			8.5			
MW-A		. • • • •	2.00000						
	26-May-94	1.0-U		1	88	4.63			14.44
	25-Aug-94			69	75	5.10			9.68
	12-Dec-94			2	93	4.96			10.22
	22-Mar-95			108	124	4.58			10.75
	16-Jun-95			6	135	4.24			12.43
	27-Sep-95			76	75	5.68			8.53
	14-Dec-95			32	90	5.67			10.48
	15-Mar-96			2	84	4.88			10.12
	20-Jun-96			84	123	5.29			10.71
	20-Sep-96	4		54	79	5.38			9.07
	13-Dec-96	1.0-U		28	61	5.60			8.95
	24-Mar-97	10.0-U		0.4	98	4.99			11.49
	19-Jun-97	6		135	68	5.45			9.73
	18-Sep-97	40		105	72	5.69			9.67
	19-Dec-97	10.0-U		151	54	6.01			6.91
	18-Mar-98	10.0-U		50.3	60	5.98			6.94
	11-Jun-98	70		35.9	81	6.07			6.94
	23-Sep-98	10.0-U		9.6	81	6.15			7.65
	1-Mar-99	10.0-U		10	82	5.26			12.62
	13-Apr-99	10.0-U		13	111	5.18			12.75
	16-Aug-99			3.7	75	5.23			12.25
	23-Nov-99		5-U	3.8	135	5.20			12.20
	25-Feb-00		9	17.6	74	5.10			13.23
	17-May-00		1-U	21.1	116.4	4.97			14.62
	12-Sep-00		1-U	15.2	153.1	5.28			6.92
	6-Dec-00		1	34.3	97.3	5.39			13.35
	21-Feb-01	2	1	16.2	83.5	5.13			14.71
	15-May-01	5-U	1	28.9	87.3	5.01			14.55
	12-Sep-01		3	19.5	75.2	5.33			10.36
	12-Dec-01	10	5	455	96.6	6.04	26.3		11.79
	20-Feb-02		3	225	82	5.79	26.4		13.67
	15-May-02		2	74.3	85	5.59	26.4		14.96
	25-Sep-02		2	260	116.3	6.26	27.2		10.56
	11-Dec-02		1-U	63.7	87.2	6.19	23.4		9.23
	19-Feb-03		3	141	106.4	6.36	26.3		9.47
	7-May-03		2	15.4	94.5	6.09	26.80		10.15
	11-Sep-03		5	10.5	99.5	6.13	29.10		8.81
	9-Oct-03		3	(ACQ Conversi		5.76	24.40		10.20
	10-Dec-03		3	164	94 78.7	5.76	24.10		12.30
	11-Feb-04		2	32.9	76.6	5.60	26.30 26.10		12.46 13.92
	20-May-04		554			5.48			
	23-Sep-04			6.18	154 147.2	6.05	26.80 23.20		7.46
	16-Dec-04 3-Feb-05		25.3 6.04	73.3 188	147.2	5.94 5.69	23.20	 	10.19 10.60



Location	Date of Sample	· ·	al Recoverable g/L)	Turbidity (NTU)	Specific Cond. (umhos/cm)	pH (Std. Units)	Temp. (°C)	ORP (m.V) Field	Water Level (feet)
		MCL =	= 10 µg/l			MCL = 6.5-			
		Total	Dissolved			8.5			
/IW-A (cont.d)		rotar	Biocontoa			0.0			
iiii A (ooniia)	5-May-05	29.1	19.1	94.7	106.5	5.63	23.20		10.97
	15-Sep-05		8.3	48.2	123.4	6.01	26.30		11.09
	8-Dec-05		7.87	280	86.2	5.33	23.50		12.13
	2-Feb-06		7.6	289	86.3	4.93	23.60		13.34
	27-Apr-06		6.27	135	81.3	5.37	23.80		14.51
	13-Sep-06			100	0.065	5.88	29.10		11.96
	6-Dec-06	1.32-U		4.6	73	5.10	26.00		14.82
	22-Mar-07	1.32-U		2.9	74	5.10	24.60		14.24
	24-May-07	4.19		2.8	77	4.80	24.90		16.37
	24-Jul-07	3.13		32.4	77	5.59	26.53		13.20
	7-Sep-07	3.55		4.8	65	6.10	27.00		11.81
	4-Oct-07	1.33		2.6	67	5.50	26.90		12.15
	1-Feb-08	1.32-U		1.5	66	5.20	25.20		14.18
	8-May-08	3.92		15.6	61	6.0	25.10		12.09
	14-Jul-08	3.09		9.1	9.1	5.6	25.70		11.70
	18-Nov-08	12.1		7	77	6	26.00		12.29
	5-Feb-09	6.80		4.2	76	5.9	24.10		12.99
	12-Mar-09	5.08-I	4.81-I	12.7	84	5.85	26.39	145	13.84
	12-May-09	4.28-I		2.2	71	5.7	24.60		15.28
	14-Jul-09	8.94		5.49	0.086	6.02	27.73	9	11.72
	3-Dec-09		4.53						
	1-Feb-10								
	5-May-10			18.9	6.7	6.4	24.4		
	26-Aug-10			17	65	6.4	27.1		
	18-Nov-10			7	76	6.2	26.1		
	15-Feb-11			17.2	72	5.9	24.3		
	17-May-11	3.17		18.1	71	6.1	24.3		
	22-Aug-11	3.11		36.1	76	5.9	27		
	11-Nov-11	3.63		12	81	6.2	25.6		
	24-Jan-12			2.8	74	6.2	25.3		40.05
	19-Jun-12			15.5	71	5.62	26.87		13.35
	22-Apr-13			3.38	87	5.79	25.62	-11.2	15.25
	17-Jul-13		1	5.29	94	5.90	26.21	216.2	9.55
	23-Oct-13			10.6	65	5.98	25.95	84.5	40.0
	28-Jan-14	5-I		2.55	89	5.96	24.32	100.3	12.9
	16-Apr-14	4-1		5.07	81	5.58	23.08	208	11.1
	30-Jul-14		+	5.76	98 99	5.06	27.83	55.4 70.6	10.42
	15-Oct-14 29-Jan-15		+	26.1 117	50	5.32 6.07	28.75 21.89	70.6 127.1	9.23 10.63
	29-Jan-15 9-Apr-15		1	24.6	80	5.76	28.87	200.1	11.05
	16-Jul-15		+	24.6	85	5.76	28.35	93.8	9.34
	3-Dec-15			25.4	61	6.04	23.3	157	10.71
	26-May-16			29	54	5.02	26.53	205.3	10.71
	20-May-16 20-Dec-16			3.32	71	5.02	25.12	83.6	12.26
	28-Mar-18			4.32	82	6.14	24.25	160.1	13.14
	20-Jun-18			34.5	53	5.76	25.93	74.5	10.71
	26-Sep-18		+	2.6	58	5.70	28.22	73.8	8.20
	6-Dec-18			28	50	5.81	25.94	78.2	10.67
	28-Mar-19		+	28	57	5.89	25.34	137.7	11.05



Location	Date of Sample	Arsenic, Total (μg		Turbidity (NTU)	Specific Cond. (umhos/cm)	pH (Std. Units)	Temp. (°C)	ORP (m.V) Field	Water Level (feet)
		MCL =	10 μg/l			MCL = 6.5-			
		Total	Dissolved			8.5			
MW-A (cont.d)									
	12-Jun-19			2.34	71	5.64	25.58	131.8	11.60
	12-Sep-19			4.8	73	5.77	28.72	61.9	7.42
	19-Dec-19			4.58	69	5.83	24.44	85.0	9.46
	6-Mar-20			8.73	69	5.64	26.92	98.9	11.13
	4-Jun-20 9-Sep-20			5.74 25.5	73 59	5.48 6.11	23.54	-23.8 116.0	13.36 9.21
	9-Sep-20 9-Dec-20			5.73	68.2	6.05	24.50	30.6	10.01
	3-Mar-21	5.8		43	63.3	5.93	23.60	76.6	9.74
	17-Jun-21	7.4		0.93	71.1	5.67	26.10	-89.9	9.42
	15-Sep-21	3.0		5.49	61.5	5.13	29.70	91.2	10.36
	1-Dec-21	6.1		4.99	88.6	5.75	25.60	136.2	11.76
MW-BR					•				
	21-Jun-12			10.0	178	6.77	28.79		8.30
	23-Apr-13			8.30	304	6.82	26.99	21.1	10.87
	18-Jul-13			4.89	240	6.86	29.14	189.2	5.64
	22-Oct-13			2.85	292	6.85	30.45	-38.2	6.17
	29-Jan-14	45		3.42	230	6.84	18.17	11.2	7.94
	18-Apr-14 31-Jul-14	12 17		5.58 2.12	236 254	6.78 6.69	27.07 31.47	119.8 34.4	7.06 6.27
	16-Oct-14	17		4.81	225	6.45	28.61	2.6	5.13
	27-Jan-15			1.87	188	6.68	21.2	77.7	6.10
	16-Apr-15			3.71	242	7.01	30.87	-33.7	6.58
	22-Jul-15			2.55	252	6.7	30.03	23.3	5.15
	8-Dec-15			1.82	237	6.91	23.87	68.6	6.62
	2-Jun-16			4.02	227	6.48	31.3	-20.4	6.79
	21-Dec-16	18		3.93	362	6.67	23.69	6.81	7.83
	30-Mar-18			2.96	304	6.93	32.39	-80.2	11.20
	19-Jun-18	5-IV		3.26	191	6.69	33.04	50.1	6.77
	26-Sep-18			7.28	335	6.68	31.60	-52.0	4.63
	5-Dec-18			2.88	209	6.45	23.02	37.6	5.95
	13-Jun-19			16.9	168	6.50	29.83	-35.1	7.30
	19-Dec-19			8.73	69	5.64	26.92	98.9	11.13
	4-Jun-20			13.6	79	9.18	24.33	-34.9	4.00
	9-Dec-20	8.2 14		18.2 5.81	218.2 232	6.91 6.76	22.90 28.90	27.1 -152.9	6.03 3.34
	17-Jun-21 3-Dec-21	14.5		5.67	328.7	6.76	25.70	-152.9	7.51
MW-C	3-060-21	14.5		5.07	320.7	0.07	23.70	-19.9	7.51
	26-May-94	1.0-U		1	114	4.67			10.70
	25-Aug-94	1.0-U		156	209	5.00			5.95
	12-Dec-94	1.0-U		5	210	5.58			6.93
	22-Mar-95			102	180	5.21			7.02
	16-Jun-95			3	180	4.32			8.38
	27-Sep-95			24	174	6.08			4.98
	14-Dec-95			81	119	5.65			6.74
	15-Mar-96			11	109	5.14			6.59
	20-Jun-96 20-Sep-96			470 67	161 125	5.65 5.11			6.89 5.32
	20-Sep-96 13-Dec-96			28	119	5.11			5.32
	24-Mar-97	10.0-U		10	118	5.44		 	7.71
	19-Jun-97	1.0-U		253	108	5.51			6.33
	18-Sep-97	10.0-U		587	106	5.68			6.16
	19-Dec-97	10.0-U		768	110	5.46			3.86
	18-Mar-98			632	99	5.55			3.90
	11-Jun-98	10.0-U		280	102	5.95			6.07
	22-Sep-98			40	115	5.18			4.61
	1-Mar-99			78	120	5.39			8.58
	13-Apr-99			7.3	138	5.11			9.50
	23-Nov-99		5-U	9.4	180	5.02			8.40
	25-Feb-00	10	9	3318	122	5.30			9.23



Location	Date of Sample	Arsenic, Total Recoverable (µg/L)		Turbidity (NTU)	Specific Cond. (umhos/cm)	pH (Std. Units)	Temp. (°C)	ORP (m.V) Field	Water Level (feet)	
			: 10 μg/l			MCL = 6.5-				
		Total	Dissolved			8.5				
MW-C (cont.d)										
	17-May-00		1-U	119	120.3	5.10			10.75	
	12-Sep-00		1-U	59.5	81.5	5.52			10.55	
	6-Dec-00		1-U	166	97.3	5.82			9.44	
	21-Feb-01	1-U 8	1-U	34.9	124.3 123.2	4.97 5.02			11.10	
	15-May-01 12-Sep-01	1-U	1-U	28.9 163	127.5	5.02			10.87 6.61	
	12-Dec-01	1-U	1-U	99.9	87.6	5.73	28		8.00	
	20-Feb-02	1-U	1-U	74.1	106.8	5.21	25.6		9.68	
	12-Mar-09	1.32-U	1.32-U	69	52	4.75	25.73	221	10.11	
	15-Jul-09	1.32-U	1.02 0	180	0.118	4.68	31.97	198	7.97	
	2-Dec-09	0.689-U	0.689-U		1 35	1	2.1.01	1.55		
	21-Jun-12	10-U	1 1	11.9	127	5.54	27.22		9.39	
	23-Apr-13		†	4.68	109	4.95	26.48	48	11.51	
	18-Jul-13		†	3.96	143	7.35	28.21	143.1	6.05	
	24-Oct-13	4-U		3.54	170	7.47	27.77	-74.6		
	29-Jan-14	4-I		2.44	198	7.39	22.74	-40.04	8.81	
	17-Apr-14	4-U		5.10	316	6.66	25.16	-11.7	7.53	
	31-Jul-14	4-I		4.29	296	6.23	29.39	-17	6.61	
	16-Oct-14	4 - U		4.68	242	6.72	28.45	1.9	5.81	
	27-Jan-15			2.94	261	6.79	24.02	94.1	6.18	
	16-Apr-15			5.76	246	6.97	25.76	-59.9	7.32	
	22-Jul-15			5.70	239	6.58	29.95	-58.6	5.37	
	8-Dec-15			11.50	209	6.95	25.55	-49.6	6.79	
	2-Jun-16			3.36	265	6.41	28.49	29.1	8.04	
	21-Dec-16			5.32	287	6.83	26.44	12.6	9.40	
	30-Mar-18			1.71	263	6.83	26.92	177.1	10.80	
	21-Jun-18			2.92	220 187	6.63	28.12	33.2	8.32	
	26-Sep-18 2-Jun-20			3.06 2.32	195	6.86 6.49	30.10 27.55	-10.4 81.4	4.38 9.30	
	8-Dec-20			5.73	234.1	6.60	25.00	16.7	6.51	
	16-Jun-21	0.54-I		2.28	191.2	6.51	29.20	-38.9	8.50	
	2-Dec-21	0.50-U		1.21	198	6.55	25.00	90.0	7.81	
MW-D	2-000-21	0.00 0	<u> </u>	1.21	100	0.00	20.00	30.0	7.01	
	26-May-94	1.0-U		1	66	4.78			12.93	
	25-Aug-94			297	125	6.20			8.14	
	12-Dec-94		†	31	127	6.45			8.76	
	22-Mar-95			18	113	6.03			9.11	
	16-Jun-95			7	99	5.24			10.56	
	27-Sep-95			35	96	6.09			7.33	
	14-Dec-95			18	99	5.80			9.27	
	15-Mar-96			8	90	5.70			8.94	
	20-Jun-96			340	102	6.54			8.67	
	20-Sep-96		1	34	93	5.83		ļ	7.59	
	13-Dec-96			43	78	6.36			7.51	
	24-Mar-97	10.0-U	1	13.5	68	5.96		ļ	11.08	
	19-Jun-97	14		254	74	6.36		 	8.38	
	18-Sep-97	60		101	72	5.62			8.56	
	19-Dec-97	10.0-U		156	70	6.60		<u> </u>	5.77	
	18-Mar-98		 	36	76 59	6.30		 	6.04	
	11-Jun-98		+	53.6 14.2	58 70	5.43 6.36		-	6.00 6.14	
	23-Sep-98 30-Dec-98		+ +	14.2	68	5.56		 	9.75	
	1-Mar-99		+ +	2.8	74	5.86		 	12.00	
	13-Apr-99		+ +	6.2	97	5.40			11.92	
	2-Jun-99		71	0.2	31	J.70			11.34	
	2-Jun-99		69		+	+		1		



Location	Date of Sample	Arsenic, Total Recoverable (µg/L)		Turbidity (NTU)	Specific Cond. (umhos/cm)	pH (Std. Units)	Temp. (°C)	ORP (m.V) Field	Water Level (feet)
		MCL =	= 10 µg/l			MCL = 6.5-			
		Total	Dissolved			8.5			
MW-D (cont.d)			2.00000						
(00111101)	16-Aug-99	35	38	10	74	5.88			9.67
	23-Nov-99		25	1.8	120	5.60			11.02
	25-Feb-00	170	100	540	70	6.00			11.64
	16-Mar-00		8	1200	72	5.80			
	16-Mar-00		10-U	1200	72	5.80			
	17-May-00		4	27	51.1	5.03			13.87
	12-Sep-00		5	10.6	90.2	6.34			9.01
	6-Dec-00		5	65.2	58.9	5.45			11.86
	21-Feb-01	11 4	3	12.2 17.9	65.6 54.3	5.02 5.37		 	13.22 13.11
	15-May-01 15-Sep-01	8	4	28.8	73.3	6.37		 	8.40
	12-Dec-01	8	6	50.4	80.2	6.26	27.0	 	10.41
	20-Feb-02	14	11	84.7	73.4	5.55	25.8		12.08
	15-May-02	13	13	31.5	71.9	5.34	26.2		13.50
	25-Sep-02	40	40	11.5	74	6.21	28.0		9.09
	11-Dec-02	17	16	261	77.1	6.26	21.9		7.42
	19-Feb-03	61	61	33.7	60.9	6.08	23.70		8.49
	7-May-03	143	141	11.6	98.8	6.37	27.20		9.04
	11-Sep-03		297	8.95	94.3	6.36	29.80		7.31
	9-Oct-03	200	182		•	ersion - 10/6/			
	10-Dec-03	115	79	59	88.4	6.02	24.50		10.78
	11-Feb-04	22	5	33	79.5	6.36	25.20		10.80
	20-May-04	4	4	67.7	55	5.58	26.30		12.24
	23-Sep-04	444	247 42.4	11.6 142	110.6	6.16 5.27	28.30 23.90		6.30 9.13
	16-Dec-04 3-Feb-05	60.1 64.8	43.9	72.6	69.4 87.2	5.85	23.90		9.13
	5-May-05		24.7	7.38	92.9	6.30	23.2		9.45
	15-Sep-05		120	43.8	96.3	5.93	28.20		9.63
	8-Dec-05		20.9	73.8	70.5	5.56	23.40		10.55
	2-Feb-06		4	34.3	76.4	5.55	24.50		11.71
	27-Apr-06		11.6	31.3	75.8	5.60	23.70		12.81
	14-Sep-06	40.2		80.4	0.087	6.33	29.91		10.36
	6-Dec-06			0.3	103	5.70	27.00		13.10
	22-Mar-07	13.2		1.0	78	5.70	24.00		12.66
	24-May-07	32.6		0.8	165	5.80	24.40		14.63
	24-Jul-07	124		17.4	72	6.53	28.17		10.80
	7-Sep-07	50	1	1.7	76 67	5.90	28.00		10.30
	4-Oct-07	15.4	2.04	1.3	67	5.90	28.4		10.41
	12-Mar-08		3.01	26.8	44	5.70	24.4		12.68
	8-May-08		16.4	2.1 4.1	63 54	5.80	24.4 26.2	 	12.02 10.09
	14-Jul-08 18-Nov-08		10.4	0.5	71	5.80 5.70	27.4	 	10.09
	5-Feb-09		+ +	1.4	64	5.70	41.4	 	11.38
	12-Mar-09		8.5	12.3	50	5.49	26.02	3	12.43
	12-May-09		9.07	1.9	44	5.3	24.80	<u> </u>	13.75
	14-Jul-09		1 2	3.6	0.071	5.76	29.50		10.35
	3-Dec-09		1						
	1-Feb-09								
	5-May-09	13.7		12.3	72	6.2	23.40		
	26-Aug-09			1.7	65	6.3	28.30		
	18-Nov-09			0.9	101	6	27.90		
	15-Feb-09			3.6	67	6.2	23.50		
	17-May-11	7.72		0.5	141	6	24.90	ļ	
	22-Aug-11	9.13	 	2.3	60	6	28.10	ļ	
	11-Nov-11	33.1		1.7	62	6.2	26.50		



Location	Date of Sample	Arsenic, Total Recoverable (μg/L)		Turbidity (NTU)	Specific Cond. (umhos/cm)	pH (Std. Units)	Temp. (°C)	ORP (m.V) Field	Water Level (feet)	
		MCL :	= 10 µg/l			MCL = 6.5-				
		Total	Dissolved			8.5				
MW-D (cont.d)					•		'			
, ,	24-Jan-12	23.4		2	53	5.9	26.20			
	19-Jun-12			8.02	66	5.74	26.91		11.34	
	1-Aug-12									
	24-Apr-13			1.32	114	5.81	25.77	-4.1	13.61	
	17-Jul-13 23-Oct-13			4.18 1.07	66 99	5.59 5.89	28.04 27.53	109.5 36.4	8.03	
	28-Jan-14	16		4.22	75	5.36	25.78	82.3	11.18	
	16-Apr-14	44		1.48	72	5.69	23.67	117.3	9.67	
	30-Jul-14	19		1.32	75	5.2	27.3	18.2	9.01	
	15-Oct-14	28		0.51	93	5.36	27.69	-7.1	8.17	
	28-Jan-15			0.9	75	5.7	22.65	88.6	9.42	
	9-Apr-15			1.18	99	5.69	24.63	32	9.9	
	16-Jul-15			0.25	86	5.37	28.00	-4.5	7.82	
	3-Dec-15			0.91	104	6.19	24.37	-87.9	9.22	
	26-May-16 20-Dec-16		+	0.29 0.49	91 203	5.49 5.75	25.63 26.02	52.2 -81.9	9.81 11.10	
	20-Dec-16 28-Mar-18			0.49	119	6.24	25.76	-61.9 56.6	11.10	
	20-Jun-18			1.24	89	5.98	28.37	10.6	9.55	
	26-Sep-18			1.12	93	6.06	30.06	54.1	6.62	
	6-Dec-18			0.99	143	6.01	26.43	-34.3	9.12	
	27-Mar-19			5.31	113	6.32	23.51	-48.7	9.99	
	11-Jun-19			1.97	124	5.84	26.25	60.1	9.42	
	13-Sep-19			1.06	86	5.80	29.14	97.1	6.11	
	19-Dec-19			3.21	95	5.89	24.29	34.0	7.61	
	5-Mar-20			3.32	186	5.89	26.48	2.2	9.91	
	5-Jun-20 9-Dec-20			2,27 0.79	178 184.9	6.99 6.36	24.88 23.70	-38.8 21.2	8.46 8.70	
	3-Mar-21	17.5		1.65	117.9	6.26	23.70	-133.6	8.61	
	18-Jun-21	54.8		2.81	164	6.09	24.90	-196.3	7.99	
	16-Sep-21	23.3		1.64	148.7	5.93	29.10	-123.5	8.70	
	1-Dec-21	54.7		0.61	125.7	6.03	25.60	-28.1	10.49	
MW-E										
	24-Jul-07			3.02	57	6.30	28.43		11.80	
	1-Feb-08			9.1	53	5.80	25.4		13.62	
	8-May-08		44.4	3.4	56	6.00	24.7		11.74	
	14-Jul-08 18-Nov-08		11.1	2.7 2.1	49 56	5.90 5.90	27.1 27.2		11.03 16.80	
	5-Feb-09			2.1	53	5.90	24.7		12.31	
	12-Mar-09		20.3	3.5	64	5.65	26.99	163	13.29	
	12-May-09			0.8	75	5.60	24.8	.55	14.61	
	15-Jul-09			2.75	0.059	5.80	29.98	80	11.05	
	2-Dec-09	680	646							
	2-Feb-10		50.5							
	19-Jun-12		1	4.03	55	5.42	26.59		11.09	
	1-Aug-12			0.40	07	F 00	05.50	0.4	44.40	
	24-Apr-13		1	2.43	87	5.69 5.67	25.52	-24	14.49	
	17-Jul-13 23-Oct-13		+ +	5.45 0.76	65 96	5.67	28.39 26.96	89.0 47.6	7.77	
	28-Jan-14		+ +	3.41	90	5.01	25.69	109.1	12.07	
	16-Apr-14		+	1.83	64	5.39	23.07	168.3	10.48	
	30-Jul-14		1	1.34	58	5.01	27.94	83.9	9.02	
	15-Oct-14		†	0.41	85	5.6	26.94	17.5	8.68	
	28-Jan-15	16	<u> </u>	2.64	60	5.56	21.11	76.0	9.43	
	9-Apr-15			1.6	82	5.49	25.21	43.5	10.69	
	16-Jul-15	21		0.8	70	5.45	28.08	2.4	7.96	



Location	Date of Sample	Arsenic, Total Recoverable (μg/L)		Turbidity (NTU)	Specific Cond. (umhos/cm)	pH (Std. Units)	Temp. (°C)	ORP (m.V) Field	Water Level (feet)
		MOI	40 //			1401 0.5			
		Total	= 10 μg/l Dissolved			MCL = 6.5- 8.5			
MW-E (cont.d)		Total	Dissolved			0.0			
mir = (contra)	3-Dec-15	58		2.45	94	6.15	23.66	-74.7	9.7
	26-May-16			0.69	67	5.26	25.36	70.7	10.17
	20-Dec-16	21		1.45	104	5.49	25.6	-12.0	12.47
	28-Mar-18			1.91	89	6.01	25.40	87.0	12.73
	20-Jun-18			2.5	64	5.84	26.91	25.0	5.84
	26-Sep-18			1.36	79	5.98	29.86	70.0	7.05
	6-Dec-18			2.63	119	5.89	25.60	-7.9	9.73
	27-Mar-19 11-Jun-19			2.44 6.71	114 67	6.26 5.58	22.82 26.77	-29.5 127.5	10.79 8.44
	13-Sep-19		+	2.18	72	5.74	29.28	95.8	6.35
	19-Dec-19		1	2.50	73	5.78	24.24	53.9	8.30
	5-Mar-20			3.53	127	5.72	26.09	13.2	10.79
	5-Jun-20	1.3		2.95	138	7.30	24.67	-35.9	8.58
	9-Sep-20			3.48	72	6.03	28.11	125.4	7.60
	9-Dec-20			1.37	96.7	6.09	23.30	-17.3	9.34
	3-Mar-21	9.7		3.99	88.9	6.09	22.40	-81.0	9.21
	18-Jun-21	8.8		3.07	68	5.55 5.74	24.70	-53.7	8.80
	16-Sep-21 1-Dec-21	5.3 22.1		1.86 0.99	75.2 110.2	5.74 5.80	28.90 25.20	-58.0 -86.2	8.69 11.12
MW-F	1-060-21		<u> </u>	0.33	110.2	3.00	20.20	-00.2	11.12
	12-Mar-09	38.5	36.8	4.48	124	5.24	27.28	-101	6.99
	16-Jul-09			1.24	0.073	4.44	29.05	-73	5.10
	2-Dec-09	73	59						
	2-Feb-10		73						
	20-Jun-12			2.75	73	4.85	28.91		6.61
	25-Apr-13			0.43	64	4.45	27.9	-83.7	8.09
	19-Jul-13			2.54	67	4.50	30.02	162.2	3.52
	25-Oct-13 11-Feb-14			0.90 0.79	52	4.24	31.12	4.2 92.4	5.77
	17-Apr-14		-	0.79	59 54	4.44 4.59	26.87 26.92	100.1	4.68
	1-Aug-14			0.84	50	4.49	29.87	-38	3.67
	16-Oct-14			0.31	55	4.43	30.44	7.8	2.85
	23-Jan-15			0.67	63	4.40	27.27	68.2	3.69
	16-Apr-15			1.94	52	4.76	27.32	-125.2	4.39
	23-Jul-15	47		0.27	50	4.23	31.33	-45.9	2.84
	10-Dec-15			8.0	55	5.06	28.00	-10	3.99
	2-Jun-16			0.48	50	4.18	30.04	84.2	4.02
	22-Dec-16			1.2	59	4.76	29.62	45.8 71.6	5.12
	4-Apr-18 21-Jun-18			2.89 0.95	52 49	4.78 4.65	29.19 29.37	71.6 46.8	5.55 4.10
	26-Sep-18			0.95	49	4.65	31.58	-29.5	1.70
	4-Dec-18		+ +	0.64	47	4.71	29.65	39.9	3.70
	11-Jun-19			0.94	44	4.77	29.61	-25.7	4.69
	20-Dec-19			1.48	46	4.61	29.50	39.0	2.97
	3-Jun-20	60.3		0.58	55	4.61	29.02	-104.4	6.18
	8-Dec-20			0.49	95	4.60	27.80	-506.4	3.65
	16-Jun-21			0.18	69.4	4.49	29.90	-145.5	5.65
	2-Dec-21	66.5		0.82	79.9	4.38	29.70	-104.0	5.18
MW-G		1			•				
	12-Mar-09	1.32-U	1.32-U	7.01	92	4.77	26.53	211	11.71
	14-Jul-09	1.32-U		5.35	0.042	4.86	28.94	134	9.60
	2-Dec-09	0.689-U	0.689-U						
	2-Feb-10		1 11111						



Location	Date of Sample	Arsenic, Total Recoverable (μg/L)		Turbidity (NTU)	Specific Cond. (umhos/cm)	pH (Std. Units)	Temp. (°C)	ORP (m.V) Field	Water Level (feet)	
		MCL :	= 10 µg/l			MCL = 6.5-				
		Total	Dissolved			8.5				
MW-GR										
	19-Jun-12	4-U		0.98	82	5.74	27.85		11.64	
	22-Apr-13			5.17	46	5.30	26.01	-4	13.75	
	17-Jul-13			19.7	70	5.87	29.47	199.1	7.72	
	24-Oct-13			26	54	5.71	27.51	113.4	44.00	
	11-Feb-14	190		9.36	51	5.25	26.02	18.2	11.33	
	16-Apr-14 30-Jul-14	17 8-I	+	99.7 47.8	45 40	5.61 5.15	24.99 30	175.4 64.4	9.54 8.72	
	15-Oct-14	75	+	3.15	74	5.15	28.07	36.8	7.65	
	28-Jan-15			47.7	41	5.84	21.42	129.4	8.83	
	10-Apr-15		+	44.5	40	5.73	25.61	107.3	9.50	
	17-Jul-15		1	3.84	83	5.81	29.92	127.1	7.55	
	3-Dec-15			8.28	57	5.42	23.77	149.1	9.05	
	26-May-16	4-I		11.6	53	5.29	27.63	127.0	9.45	
	20-Dec-16	39		7.49	61	5.40	25.76	-6.0	10.84	
	28-Mar-18			16.4	63	6.00	23.89	41	11.99	
	20-Jun-18			16.2	45	5.93	28.4	89	9.23	
	26-Sep-18			2.1	97	6.23	29.88	21.3	6.32	
	6-Dec-18			25.3	57	5.92	24.46	24.5	8.81	
	28-Mar-19			19.5	53	5.95	25.01	-1.7	9.60	
	12-Jun-19	4.3 55.8		43.8 4.59	28 89	5.60 6.03	26.85 31.15	159.7	8.30 8.30	
	12-Sep-19 19-Dec-19	35	+ +	4.59 15.3	78	5.95	24.23	79.0 26.0	7.70	
	6-Mar-20	16.5		17.2	57	5.50	23.65	37.2	9.22	
	4-Jun-20			13.9	64	5.74	26.95	-107.2	11.64	
	10-Sep-20			11.1	68	6.09	28.35	122.0	7.26	
	9-Dec-20			11.4	60.7	5.78	24.30	60.1	8.46	
	3-Mar-21	9.3		71.4	50.7	5.90	23.30	-43.3	8.38	
	17-Jun-21	5.4		31.5	48.6	7.33	28.60	-122.0	6.73	
	15-Sep-21	5.0		5.39	61.1	5.96	30.50	-99.8	8.52	
	1-Dec-21	6.1		86.3	56	5.85	25.00	141.0	10.26	
MW-H					•					
	12-Mar-09	169	165	8.33	89	4.92	27.21	-112	9.74	
	15-Jul-09	7.29	400	2.460	0.383	3.80	32.530	334.000	7.610	
	2-Dec-09	237 262	199 180							
	2-Feb-10 20-Jun-12	186	100	0.72	70	4.35	28.27			
	24-Apr-13			1.20	106	4.62	27.94	10.7	10.87	
	19-Jul-13		+	1.07	81	4.46	29.39	159.9	5.93	
	25-Oct-13			1.49	218	4.70	30.15	152.6	3.33	
	29-Jan-14	131		0.78	163	4.90	25.85	70.4	8.36	
	18-Apr-14	64	1	0.65	125	4.36	27.07	142.9	7.28	
	1-Aug-14	196	<u> </u>	1.24	85	3.88	30.05	-0.7	6.27	
	17-Oct-14	217		1.90	108	4.56	30.11	-13.8	5.49	
	27-Jan-15			0.45	97	4.64	26.39	15	6.30	
	16-Apr-15			2.53	228	5.29	29.03	-75.9	6.97	
	23-Jul-15		1 1	2.09	94	4.43	30.04	-67.8	5.43	
	10-Dec-15		+	1.92	277	5.21	27.38	-15.7	6.68	
	3-Jun-16 28-Dec-16		+	1.09 3.26	92	4.16 5.51	29.35	67.1	6.50	
	28-Dec-16 4-Apr-18		+ +	4.54	259 124	5.51 5.35	29.35 27.72	-41.9 67.7	7.89 8.23	
	4-Apr-18 22-Jun-18		+ +	4.54 5.08	74	5.35 4.77	29.11	49.2	8.23 6.94	
	22-Jun-18 26-Sep-18		+ +	1.00	82	4.77	31.62	18.3	4.56	
	26-Sep-18 5-Dec-18		+	1.00	102	4.67	29.75	103.9	6.36	
	3-Jun-20		+ +	11.70	182	5.33	29.73	-63.3	9.61	
	10-Dec-20		+	1.02	206	4.89	28.10	165.8	6.70	
			+							
	17-Jun-21	25.8	l l	1.29	174.9	5.24	29.90	17.6	8.51	

UFP Auburndale LLC 105 Progress Road, Auburndale, Florida



Location	Date of Sample	Arsenic, Total Recoverable (µg/L)		Turbidity (NTU)	Specific Cond. (umhos/cm)	pH (Std. Units)	Temp. (°C)	ORP (m.V) Field	Water Level (feet)
		MCL =	: 10 μg/l			MCL = 6.5-			
		Total	Dissolved			8.5			
MW-I									
	12-Mar-09	7.44	7.32	28.7	45	5.54	27.71	-51	9.87
	16-Jul-09	7.77		18.9	0.110	5.53	30.7	151	7.24
	2-Dec-09	10	8						
	2-Feb-10	10	10						
	21-Jun-12	12		11.9	45	5.32	29.18		8.89
	24-Apr-13	8-I		85.4	51	5.26	29.37	8.0	10.16
	19-Jul-13	9-I		19.3	143	6.10	30.20	181.8	5.68
	25-Oct-13	9-I		13.5	105	5.92	29.57	59.5	
	11-Feb-14	9-I		10.7	100	5.63	25.95	96.4	7.85
	18-Apr-14	10		10.0	127	5.93	26.47	172.6	6.92
	1-Aug-14	12		5.7	102	5.84	31.31	37.6	5.92
	14-Oct-14	9-I		5.35	107	5.89	31.15	49.7	5.11
	27-Jan-15	9-I		6.69	104	5.86	26.52	91.9	6.05
	16-Apr-15	9-I		6.26	109	6.09	27.13	-35.7	6.60
	23-Jul-15	13		5.28	113	5.78	31.82	50.1	5.15
	7-Dec-15	13		2.21	132	6.13	25.92	75.3	5.95
	1-Jun-16	17		6.81	100	5.68	29.79	89.5	6.25
	22-Dec-16	16		1.48	123	6.01	27.24	39.2	7.08
	30-Mar-18	8-IV		3.48	128	6.17	26.46	265.7	8.24
	21-Jun-18	7-IV		8.18	124	6.03	29.90	102.9	6.26
	26-Sep-18			4.89	118	6.21	31.47	52.4	3.95
	4-Dec-18			4.89	118	6.21	31.47	52.4	3.95
	3-Jun-20			2.54	126	6.07	28.58	-9.8	8.29
	8-Dec-20			0.97	244.1	6.21	26.60	-8.1	5.89
	17-Jun-21			1.14	151.2	6.10	29.70	-63.7	8.01
	2-Dec-21			1.82	178	6.09	26.90	60.8	7.35

I=The reported Value is between the laboratory MDL and Practical Quantitation Limit (PQL)

V=The analyte was detected in both the sample and the associated method blank NA = Not Analyzed

TABLE 3: TREATMENT SYSTEM MASS REMOVAL

UFP Auburndale LLC 105 Progress Road, Auburndale, Florida



Date	Hour Meter Reading	Totalizer Readings (gallons)	Total As Influent (µg/L)	Total As Effluent (μg/L)	Estimated Groundwater Recovery Flow Rate (gpm)					
21-Feb-18	NR	NR	35	27	20					
22-Feb-18	NR	NR	32	1	20					
23-Feb-18	66	90,146	35	3	15					
2-Mar-18		NR	35	4	7.5					
9-Mar-18	491	NR	39	4	NR					
16-Mar-18	641	128,225	38	4	NR					
4-Apr-18	1137	166,303	35	9	7.5					
2-May-18	1343	198,395	25	4	7.5					
18-Jun-18	2292.9	411,654	33	3-I	7.5					
3-Aug-18	2878.2	603,773	31	6-IV	5.0					
29-Aug-18	3316.3	669,550	49*	8*	5.0					
28-Sep-18	4037.5	709,728	61	12	5.0					
30-Oct-18		System Shutdown								
30-Nov-18		Sys	tem Shutdowi	n						
21-Dec-18	4871.7	782,017	40	0.97	5.0					
10-Jan-19	NR	NR	NS	NS	7.5					
7-Mar-19	6003.4	1,083,147	30.1	0.92-I	7.5					
12-Jun-19	7410.4	1,720,847	29	0.50-U	7.5					
11-Sep-19	9116.4	2,117,226	173	0.51-I	8.2					
20-Dec-19	11327.4	2,845,642	90.3	14.8	7.5					
9-Jan-20	11464.5	2,890,607	104	5.7	7.8					
5-Mar-20	12727.9	3,301,904	67.7	0.50 - U	8.9					
5-Jun-20	14704.0	4,277,635	52	0.50 - U	8.9					
8-Sep-20	16403.7	4,885,622	138	0.50-U	7.3					
7-Dec-20	18386.9	5,270,529	68.5	0.50-U	9.5					
3-Mar-21	NR	6,226,403	73.7	0.50-U	14.3					
15-Jun-21	22199.7	7,348,510	62.8	0.50-U	19.5					
14-Sep-21	23330	7,845,998	64.5	0.50 - U	16.5					
30-Nov-21	24993.4	8,666,021	320	0.50 - U	16.4					

NOTES:

NR = Not Recorded

NS = Not Sampled

 μ g/L = micrograms per liter or parts per billion (ppb)

gpm = gallons per minute

lbs = pounds

lbs/day = ((gpm X 3.78541L/gal.) X (net As removed μ g/L)) X (1440 min/day) X (1 lb/453592333.35 μ g)

I = The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

V = Indicates that the analyte was detected in both the sample and the associated method blank.

^{* =} Laboratory results for Influent was 51-V and Effluent 10-V on 08/29/18. The results used in the data table reflect the subtraction of the result for the Method Blank (2-I)

TABLE 3: TREATMENT SYSTEM MASS REMOVAL

UFP Auburndale LLC 105 Progress Road, Auburndale, Florida



Month of Operation	Average Monthly Net As Concentration (µg/L) (Influent - Effluent)	Groundwater Treated (gallons)	Cumulative Groundwater Treated (gallons)	Monthly Average Groundwater Flow Rate (gpm)
Feb-2018	23.7	90,146	90,146	20.0
Mar-2018	33.3	38,079	128,225	7.5
Apr-2018	26.0	38,078	166,303	7.5
May-2018	21.0	32,092	198,395	7.5
Jun-2018	30.0	213,259	411,654	7.5
Jul-2018	25.0	192,119	603,773	5.0
Aug-2018	41.0	65,777	669,550	5.0
Sep-2018	49.0	40,178	709,728	5.0
Oct-2018	NS	0	709,728	0.0
Nov-2018	NS	0	709,728	0.0
Dec-2018	39.0	72,289	782,017	5.0
Mar-2019	29.2	301,130	1,083,147	7.5
Jun-2019	28.8	637,700	1,720,847	7.5
Sep-2019	172.5	396,379	2,117,226	8.2
Dec-2019	75.5	728,416	2,845,642	7.5
Jan-2020	98.3	44,966	2,890,607	7.8
Mar-2020	67.5	411,296	3,301,904	8.9
Jun-2020	51.8	975,731	4,277,635	8.9
Sep-2020	137.8	607,987	4,885,622	7.3
Dec-2020	68.3	384,908	5,270,529	9.5
Mar-2021	73.5	955,874	6,226,403	14.3
Jun-2021	62.6	1,122,107	7,348,510	19.5
Sep-2021	64.3	497,488	7,845,998	16.5
Nov-2021	319.8	820,023	8,666,021	16.4
NOTES:				

NOTES:

NS - Not Sampled

 μ g/L = micrograms per liter or parts per billion (ppb)

gpm = gallons per minute

lbs. = pounds

lbs/day = ((gpm X 3.78541L/gal.) X (net As removed μ g/L)) X (1440 min/day) X (1 lb/453592333.35 μ g)

TABLE 3: TREATMENT SYSTEM MASS REMOVAL

UFP Auburndale LLC 105 Progress Road, Auburndale, Florida



Month of Operation	Monthly Average Mass Removal Rate (lbs/day)	Average Period Mass Removed (lbs)	Estimated Cumulative Mass Removal (Ibs)
Feb-2018	0.00569	0.01138	0.01138
Mar-2018	0.00300	0.09312	0.10450
Apr-2018	0.00234	0.07029	0.17479
May-2018	0.00189	0.05867	0.23346
Jun-2018	0.00270	0.08111	0.31457
Jul-2018	0.00150	0.04656	0.36113
Aug-2018	0.00246	0.07636	0.43750
Sep-2018	0.00294	0.08832	0.52581
Oct-2018	0.00000	0.00000	0.52581
Nov-2018	0.00000	0.00000	0.52581
Dec-2018	0.00234	0.07269	0.59851
Mar-2019	0.00263	0.23667	0.83518
Jun-2019	0.00259	0.23578	1.07096
Sep-2019	0.01700	1.56361	2.63457
Dec-2019	0.00680	0.62598	3.26055
Jan-2020	0.00921	0.18426	3.44481
Mar-2020	0.00717	0.45906	3.90387
Jun-2020	0.00550	0.50079	4.40466
Sep-2020	0.01208	1.14789	5.55255
Dec-2020	0.00782	0.70340	6.25595
Mar-2021	0.01262	1.08540	7.34135
Jun-2021	0.01466	1.52426	8.86560
Sep-2021	0.01274	1.15921	10.02481
Nov-2021	0.06301	4.85185	14.87667
NOTES:			

NOTES:

NS - Not Sampled

 μ g/L = micrograms per liter or parts per billion (ppb)

gpm = gallons per minute

lbs. = pounds

TABLE 4: TREATMENT SYSTEM ANALYTICAL SUMMARY

UFP Auburndale LLC 105 Progress Road, Auburndale, Florida



Sample Location	Date of Sample	Aluminum		Total #	Total Arsenic		Total Lead		Total Iron	
		SSL	GCTL	SSL	GCTL	SSL	GCTL	SSL	GCTL	
		1500	200	50	10	0.5448	15	1000	300	6.0-8.5
Influent										
	5-Jun-20	4:	33	5	2	;	3	5	05	
	11-Jun-20	185		50.3		8.9		504		
	30-Sep-20	1150		138		3.2		1450		
	21-Dec-20	195		68	68.5		2.2		486	
	3-Mar-21	214		73	3.7	10).7	5	34	
	15-Jun-21	1:	84	62	62.8		3.9		451	
	14-Sep-21	1:	32	64.5		9.6		438		
	30-Nov-21	3	35	320		3.7		2550		
Effluent										
	5-Jun-20	1	63	0.5	0.50 - U		0.22-U		74	NR
	11-Jun-20	5	51	0.5	0-U	0.3	32-I	7:	5.5	6.5
	30-Sep-20	14	4.5	0.5	0 - U	0.2	2 - U	3	48	5.82
 	21-Dec-20		3.8		0-U	0.2	2 - U		1.6	5.4 6.2
[3-Mar-21		3.0		0-U		0.22-U		9.6-I	
	15-Jun-21		9.0		0-U	0.22-U		9.4 - I		4.69 5.13
	14-Sep-21		2.0		0-U		0.22-U 0.22-U		8.2-I	
	30-Nov-21	35	8.0	J 0.5	0-U	0.2	∠-∪	1	16	4.87

SSL - Site-Specific Surfacewater Cleanup Target Levels

GCTL - Groundwater Cleanup Target Levels

I- The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.



FLORIDA DEPARTMENT OF Environmental Protection

Ron DeSantis Governor

Jeanette Nuñez Lt. Governor

Shawn Hamilton Secretary

Southwest District Office 13051 North Telecom Parkway #101 Temple Terrace, Florida 33637-0926

February 15, 2022

VIA EMAIL ONLY: rdickens@ufpi.com

Mr. Robert Dickens Universal Forest Products Eastern Division, Inc. 2801 East Beltline NE Grand Rapids, Michigan 49525-9736

Re: Interim Source Removal Status Report Year 4
Universal Forest Products Eastern Division
105 Progress Road
Auburndale, Polk County, Florida, 33823
FDEP Site # ERIC 13441

Dear Mr. Dickens:

The Florida Department of Environmental Protection (Department) has reviewed the above referenced report, dated and received January 26, 2022, prepared and submitted by L.S. Sims & Associates, Inc. for the Universal Forest Products Eastern Division site located in Auburndale, Florida.

The following comments from the Department's previous review comments must be addressed.

- 1. Reported arsenic concentrations in the shallow aquifer at monitoring well MW-A appear to fluctuate seasonally. However, a down-gradient well is necessary to complete horizontal delineation of arsenic in the northern portion of the site. The new well should be installed northeast of MW-A.
- 2. A down-gradient well is necessary to complete horizontal delineation of arsenic in the deep aquifer north of well MW-8D. A location near MW-A or north of MW-A is acceptable.
- 3. Vertical delineation of the arsenic groundwater contaminant plume is incomplete. A deeper monitoring well should be installed near the well with the highest arsenic concentration (MW-8D) to complete assessment vertically.

The items above should be addressed, and groundwater sampling should proceed as proposed. An annual report should be submitted no later than January 31, 2023. If you find you are unable to submit the document by the specified date, please request a time extension in accordance with Rule 62-780.790, F.A.C., including a detailed explanation for the requirement for the time extension. The time extension request shall be received by

Universal Forest Products
Review Comments – Interim Source Removal Status Report
February 15, 2022
Page 2 of 2

the Department at least 20 days prior to the time the action is to be initiated. The failure of the Person Responsible for Site Rehabilitation to submit requested information or meet any time frame herein shall be a violation of Chapters 376 and 403, Florida Statute (F.S.), and shall be enforceable by the Department pursuant to Sections 376.303 and 403.121, F.S., unless otherwise addressed by a Cleanup Agreement Document

If you have any questions, please contact me by email at <u>Robert.sellers@floridadep.gov</u> or by phone at (813) 470-5761. In an effort to reduce costs and waste, the Department is requesting one signed and sealed electronic copy for all future submittals. Please reference the FDEP Site # ERIC_13441 on all your correspondence.

Sincerely,

Robert Sellers

Environmental Specialist III

Permitting and Waste Cleanup Programs

Robert Sollere

Southwest District

cc: Ramandeep Kaur, Environmental Manager, FDEP (<u>ramandeep.kaur@dep.state.fl.us</u>) Lawrence Sims, P.G., L.S. Sims & Associates, Inc. (<u>lsims@simsenv.com</u>) Bob Sellers, FDEP (<u>Robert.sellers@dep.state.fl.us</u>) Old Dixie Trail PD&E Study FPID No: 435391-1-22-01 Contamination Screening Evaluation Report



Map ID 11: FDOT Right-of-Way Pond SMF 400



Charlie Crist Governor

Ana M. Viamonte Ros, MD, MPH State Surgeon General

CLOSURE REPORT

TO: Marcia Haines

FROM: Marty Conover, Polk CHD – STI Program (Martha Conover@doh.state.fi.us)

DATE: November 17, 2009

Comments:

Facility name:

FDOT Right of Way-Pond SMF 400

Facility number:

53 9811700

Please divregard last email-partial Closure Thanks

LETTER OF TRANSMITTAL

WISS	WRS Infrastructure & Environment, Inc.			kτ		Ø	 Tampa Office: 221 Hobbs Street, Suite 108, Tampa Florida 33619 Phone (813) 684-4400 (24 Hour Service); Fax (813) 684-9177 						
 Miami Office: 10050 N.W. 116th Way, Suite 18, Miami, Florida 33178 Phone (305) 888-4090; Fax (305) 888-0140 			la 33178				ice: ake Drive, # 202, Tallahassee, Florida 32317 -9860; Fax (850) 531-9866						
Project :	Nan	ne:	UST	ΓÇlos	ure -	Pond SMF400			Dat	te: 11/16/09	Job No.: 31-44-080046		
Contrac Manage			And	dy Ho	орег,	P.E.	-		Atte	ention: Mr. Ray	mond Nottingham		
Phone/I	ax:		(813	3) 684	4400/	(813) 684-9177			Sul		ure Assessment		
		_		_							trict One ROW, Pond SMF 400		
		. Dennis				11111					N. Buena Vista 0.1 miles No of Haines		
		lk Count								Lake Alfre	ed, Polk County, Florida		
) North I			\venu	e, #404							
-	Lai	keland, I	4L 33	8801									
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2	\perp	11/16/	09	1	<u>!</u>	UST Closure As				_			
	+					FDOT District C					D1		
	+					Lake Alfred, Pol		na Vista 0.1 miles North of Haines Boulevard					
***************************************						Lake Allieu, Fo			are n	ot as noted kin	dly notify this office)		
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COPIE	S P	ROVID	ED I	FOR:	1	Mr. Dennis Newb	urg			SIGNED:	Scott Lehr		
										\dashv			

Please direct any questions to the Contract Manager at the WRS office indicated above.



UNDERGROUND STORAGE TANK **CLOSURE ASSESSMENT**

FDOT District One Right-Of-Way Pond SMF 400 West Side of North Buena Vista Drive 0.1 miles North of Haines Boulevard Lake Alfred, Polk County, Florida

> Facility ID No: 53-9811700 State Project No: 16020-XXXX Financial Project ID: 197593-1-C2-52 Contract No: BDC 57 WRS Project No: 31-44-080046

Submitted to:

Mr. Dennis Newburg **Polk County Health Department Environmental Engineering Division** Stationary Tanks Inspection Program 200 North Kentucky Avenue, Suite 404 Lakeland, Florida 33801

Submitted by:

WRS Infrastructure & Environment, Inc. d/b/a WRScompass 221 Hobbs Street, Suite 108 Tampa, Florida 33619 Telephone: (813) 684-4400 Facsimile: (813) 383-0323

November, 2009



UNDERGROUND STORAGE TANK CLOSURE ASSESSMENT

FDOT District One Right-Of-Way Pond SMF 400 West Side of North Buena Vista Drive 0.1 miles North of Haines Boulevard Lake Alfred, Polk County, Florida

> FAC. ID# 53-9811700 FDOT Contract No.: BDC-57 State Project No.: 16020-XXXX Financial Project No.: 197593-1-C2-52 WRS Project No. 31-44-080046

> Submitted to: Mr. Dennis Newburg **Polk County Health Department Environmental Engineering Division Stationary Tanks Inspection Program** 200 North Kentucky Avneue, Suite 404 Lakeland, Florida 33801

Submitted by: WRS Infrastructure and Environment, Inc. d/b/a WRScompass 221 Hobbs Street, Suite 108 Tampa, Florida 33619 Telephone: (813) 684-4400 Facsimile: (813) 684-9177

November 16, 2009

UNDERGROUND STORAGE TANK CLOSURE ASSESSMENT

FDOT District One Right-Of-Way Pond SMF 400 West Side of North Buena Vista Drive 0.1 miles North of Haines Boulevard Lake Alfred, Polk County, Florida

> FAC. ID# 53-9811700 Financial Project No.: 198018-1-C2-52 WRS Project No. 31-44-080046

Prepared by: Sarah Williams/ Staff Scientist	Date://-/6-09
Reviewed by: Scott A. Lehr Senior Scientist	Date: ///16/09
Reviewed by: Andrew J. Hooper, PE Florida P.E. No.: 51972	Date: 1/16/09

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1.0 INTRODUCTION

1.1 Purpose and Scope

WRS Infrastructure & Environment, Inc., d/b/a WRScompass (WRS) performed an underground storage tank (UST) system closure and prepared this Tank Closure Assessment Report (TCAR) documenting activities performed within the Florida Department of Transportation (FDOT) right-of-way (ROW), hereinafter referred to as "Subject Site". The Subject Site is located on the west side of North Buena Vista Drive, approximately 0.1 miles north of the intersection of Haines Boulevard, Lake Alfred, Polk County, Florida. A site vicinity map is included as Figure 1.

On September 15, 2009 during storm water pipe installation activities in the vicinity of the Subject Site, one (1) 1,750-gallon UST was discovered within the FDOT ROW, as seen in **Photograph 1**, by the general roadway contractor Kamminga & Roodvoets, Inc (K&R). FDOT authorized WRS to perform the removal and disposal of the UST, along with the preparation of a TCAR under existing Contract No. BDC-57.

The purpose of this report is to document the closure of the UST and to report subsurface soil and groundwater conditions in accordance with Chapters 489 and 376.303, Florida Statutes (FS) and Chapter 62-761.800(3), Florida Administrative Code (FAC). As required by Chapter 62-761.450(2), FAC, an Underground Storage System Installation and Removal Form for Certified Contractors, [Florida Department of Environmental Protection (FDEP) Form 62-761.900(5)] and Limited Closure Summary Report [FDEP Form 62-761.900(8)] have been completed and submitted to the FDEP. These completed forms are presented in **Appendix A**. The following report and supporting documentation detail the UST removal procedures and closure assessment findings.

Since the UST was previously un-documented, WRS proceeded to register the tank with the FDEP, according to state requirements. A copy of the Storage Tank Registration Form No. 62-761.900(2) is also included in **Appendix A**.

1.2 Site Description

The subject site is located on the west side of North Buena Vista Drive approximately one tenth (0.1) of a mile north of the intersection of Haines Boulevard in Lake Alfred, Polk County, Florida. The tank location was situated approximately fifty (50) feet off of the existing pavement of N Buena Vista Dr, as seen in **Figures 2 through 4**. The front portion of the property was acquired by the FDOT for use as Pond SMF 400 as part of the roadway widening and realignment of US 17/92. The tank was subsequently discovered in the FDOT ROW.

1.3 Site History

The Pond SMF 400 Site is currently a vacant lot. Historic aerials were used to determine the land use for this site. The 1941 and 1952 aerials show a CSX railroad spur creating the southwestern border of the property and there is a small structure on the northeast portion of the property directly south of the existing CSX railroad. Several large structures are visible on the adjacent property, Grower's Fertilizer, in the 1968 aerial. On the 1971 aerial, an additional railroad spur is observed parallel to the CSX mainline track on the north side of the proposed pond property that loops around a smaller structure which now includes a large silo and several other small sheds near Grower's Fertilizer. In the 1980 aerial a residence and driveway are visible towards the center of the proposed pond site. By 2006 the silo, storage structures and extra track segments on the northern portion of the site have been removed. It appears that the CSX railroad spur along the southwest border of the proposed pond site appeared to have been recently demolished when the site was visited in April 2008.

To confirm the presence or absence of contaminated soil along the FDOT right-of-way, an Impact to Construction Assessment Report dated May 2008 was prepared by WRS. As part of the assessment, sixty seven (67) soil samples were collected for lab analyses from a grid covering the proposed pond site. Nine (9) soil samples exceeded the residential SCTL for arsenic of 2.1 mg/kg, but were found below the commercial SCTL. Three (3) soil samples exceeded the commercial SCTL for arsenic of 12.0 mg/kg. From July 2008 through August 2008, remediation activities took place to excavate the arsenic contaminated soil at this as well as other contaminated sites identified along the construction corridor.

2.0 <u>UNDERGROUND STORAGE TANK REMOVAL PROCEDURES</u>

2.1 Quality Assurance

All work was performed within the authority granted to WRS pursuant to Chapter 489, Part One, FS, under its State of Florida Pollutant Storage System Specialty Contractors License, No. PCC056793. Site work was conducted at the direction of the licensee, Andrew J. Hooper, and performed in accordance with the American Petroleum Institute's Recommended Procedure 1604 (AP1604), "Removal and Disposal of Used Underground Storage Tanks," general industry standards, and WRS standard operating procedures (SOP). In addition, all sample collection, handling, and analyses were conducted in accordance with FDEP SOP (DEP-SOP-001/01), dated March 31, 2008.

2.2 Physical Tank Removal

During trenching activities for storm water pipe installation on September 15, 2009, the general roadway contractor (K&R) discovered one (1) 1,750-gallon UST within the FDOT ROW. On September 17, 2009 WRS mobilized a crew to the site to remove the tank and perform closure assessment activities so that roadway construction activities could proceed with minimal delays. The tank was uncovered utilizing hand tools to determine contents and size. Before the tank was removed, 682 gallons of petroleum contact water (PCW) were removed from within the tank and disposed of at Aqua-Clean in Lakeland, Florida. Photographs of the tank contents removal are included as **Photographs 2 and 3**. After confirming that a safe atmosphere existed in the tank, the UST was removed from the excavation and placed within the FDOT ROW, as seen in **Photograph 4**. Soil screening with an OVA revealed no petroleum impacted soil was encountered on the four sides and bottom of the tank excavation pit. After the tank was removed 110 gallons of petroleum impacted soil and sludge were removed from within the tank, sampled for characterization, and disposed of. A copy of the non-hazardous waste manifest for disposal of the 682 gallons of PCW is included in **Appendix B**.

2.3 Removal of Hazardous Vapors

On September 22, 2009 WRS personnel monitored the atmospheres in the tank with a lower explosive limit/oxygen/carbon dioxide (LEL/O₂/CO₂) meter. WRS personnel checked the top, middle, and bottom of the UST for hazardous atmospheres. WRS personnel then added thirty (30) pounds of dry ice into the tank to purge any potentially combustible atmospheres. The amount of dry ice added into the tank exceeded the RP1604 recommended quantity of 1.5 pounds per 100 gallons of tank capacity. After confirming that the atmospheres surrounding the tank were safe, WRS then used a pneumatically-powered reciprocating saw to cut the tank open for further cleaning, as seen in **Photograph 5**. At this time 110 gallons of petroleum impacted soil and sludge were removed from within the tank and placed in 55-gallon drums for future disposal. After the tank was cleaned thoroughly, as seen in **Photograph 6**, it was loaded onto a truck and transported to a scrap metal recycling facility, R & L Metals, Inc. Steel Division, 1913 N. 62nd Street, Tampa, Hillsborough County, Florida on September 23, 2009. Copies of the receipts for the disposal of the UST at the recycling facility and photographs documenting the tank removal activities are included in **Appendix B and C**, respectively.

2.4 Visual Inspection Methodology

Following the excavation and removal of the UST, the tank was inspected to evaluate the integrity. The visual inspection was limited to the examination of the UST for cracks, separation of welds, and holes. The UST showed visible signs of rusting, but there were no cracks, holes, and other physical damage except for the hole created when the tank was discovered. PCW only filled the bottom third of the tank so no spilling occurred when the hole was created. The work areas were visually inspected for the presence of petroleum product or staining of the soils

indicative of petroleum product leaks. There was no petroleum odor or free-floating product noted within the excavation.

2.5 Soil Investigation Methodology

After the removal of the tank on September 17, 2009, soil samples (N, S, E, W, and B) were collected from the four side walls and bottom of the tank excavation pit and field-screened using an OVA equipped with a Flame Ionization Detector (OVA/FID) in accordance with Chapter 62-770.200(12), F.A.C. The OVA/FID was calibrated prior to use to insure proper operation. Calibration records are included in **Appendix D**. In this procedure, two (2) 16-ounce glass jars were half-filled with a discrete soil sample, tightly sealed with a layer of aluminum foil and allowed to equilibrate. After sufficient time was allowed for vapor headspace to buildup in the sample jars, the OVA/FID intake probe was inserted through the airtight aluminum foil seal on one jar to measure the soil vapor headspace for unfiltered organic vapor concentrations. If organic vapors were detected using the unfiltered probe, the second jar sample representing the same discrete sample location was screened in the same fashion using an in-line, activated carbon filter. The carbon-filtered result is subtracted from the total unfiltered organic result to yield a net organic concentration supporting the likely presence of petroleum hydrocarbons in the soil.

Within the low operating range, the OVA/FID is specified to measure concentrations of organic vapors from 0.5 parts per million (ppm) to over 5,038 ppm. Chapter 62-770, F.A.C., defines excessively contaminated soil as soil which produces an OVA/FID response of 50 ppm or greater for mixed fuel contaminated sites and 500 ppm or greater for gasoline contaminated sites. All soil samples were screened for hydrocarbon vapors. If organic vapors were detected above 10 ppm using the unfiltered probe, the soil samples were then screened for background levels of methane gas, which can occur naturally as a product of decomposing organic materials in the soil. The OVA screening results are discussed in Section 4 and a summary of the OVA results are presented in **Table 1**.

No positive detections from visual, olfactory, and Organic Vapor Analyzer (OVA) screening results above 50 parts per million (ppm) were detected in soil samples that were collected from the side walls and bottom of tank excavation pit down to the maximum excavation depth of six (6) feet bls. No excessively contaminated soil was found in close proximity to the tank or in the footprint of pond construction activities.

At the completion of soil screening activities on September 17, 2009, a soil sample, identified as TP-B, was collected directly below where the tank had previously been situated and submitted for laboratory analysis for confirmation of screening results. The approximate size of the excavated area was six (6) feet by fifteen (15) feet and six (6) feet deep. Tank and soil sample locations are presented in **Figures 3 and 4**. OVA soil screening results are presented in **Table 1**. Soil laboratory analytical results are presented in **Table 2**

On September 22, 2009, WRS returned to the site and approximately 110 gallons of petroleum impacted soil and sludge was removed from within the tank and placed into 55-gallon drums for later disposal. A soil sample (Preburn) was collected for non-virgin petroleum preburn laboratory analysis from the drum contents. The sample was submitted for laboratory analyses by the following Environmental Protection Agency (EPA) Methods: 8260B Volatile Organic Halocarbons (VOH), 9253 Total Organic Halides (TOX), 8082 Poly Chlorinated Biphenyls (PCB), Total Recoverable Petroleum Hydrocarbons (TRPH) by Florida Petroleum Range Organics (FL-PRO) Method, and 6010B four (4) Resource Conservation and Recovery Act (RCRA) Metals – Arsenic (As), Cadmium (Cd), Chromium (Cr), and Lead (Pb). The soil preburn analytical results are summarized and presented in **Table 3**.

On October 8, 2009 a total of 110 gallons of petroleum impacted soil from the tank contents was transported in two 55-gallon drums to Clark Environmental at 755 Prairie Industrial Pkwy, Mulberry, Florida for thermal treatment. Copies of Non-Hazardous waste manifests for the transported soil are included in **Appendix B**.

3.0 CLOSURE ASSESSMENT SAMPLING

3.1 Confirmation Soil Sampling

On September 17, 2009, in order to confirm OVA screening results, a confirmation soil sample (TP-B) was collected from the floor of the tank excavation pit and submitted for laboratory analysis. The handling and transfer of the soil sample was documented on a chain of custody form that was signed and dated at each transfer. The soil sample was submitted for laboratory analyses by the following EPA Methods: 8260B (VOH) and Volatile Organic Aromatics (VOA), 8270 Polynuclear Aromatic Hydrocarbons (PAH), and TRPH by FL-PRO Method. The laboratory results are discussed in Section 4. Soil analytical results are summarized in Table 2. Copies of the laboratory analytical reports and chain of custody records are included in Appendix E.

3.2 Groundwater Investigation

According to The FDEP's Storage Tank System Closure Assessment Requirements revised April 1998, a groundwater sample is not necessary when the depth to groundwater is greater than twenty (20) feet. On September 18, 2009, WRS personnel returned to the Subject Site to investigate depth to groundwater. Utilizing a hand auger, it was determined that depth to groundwater at the site was greater than twenty (20) feet and groundwater sample was not necessary.

4.0 SOIL INVESTIGATION

4.1 Soil Sampling Analytical Results

OVA soil screening results collected around the perimeter of the Tank excavation did not reveal any positive readings (hydrocarbon measurements greater than 10 ppm) as defined in Chapter 62-770, F.A.C.

One confirmation sample was collected from the bottom of the tank excavation since this is the area believed most likely to have contamination. Certificates of laboratory analyses showed that all analyzed constituents were below laboratory Method of Detection Limits (MDLs).

The soil OVA results and soil laboratory analyses are summarized in **Table 1** and **Table 2**, respectively, and soil laboratory analytical reports are included in **Appendix E**.

5.0 CONCLUSIONS AND RECOMMENDATIONS

On September 15, 2009 one (1) UST was discovered during construction activities within the FDOT right-of-way on the west side of N Buena Vista Drive, approximately 0.1 miles N of the intersection of Haines Blvd, Lake Alfred, Polk County, Florida. On September 17, 2008, six hundred and eighty two (682) gallons of petroleum contact water was removed from the tank using a vacuum truck supplied by SWS and was disposed of at Aqua-Clean in Lakeland, FL. The UST was removed from the ground and stored on visqueen for later transportation to a disposal facility. Prior to disposal, the UST was visually inspected and was found to be in relatively good condition with visible signs of rust but no holes. Following removal, no petroleum odors were noted in the excavation, and no free-floating product was observed in the open excavation pit.

Soil samples were collected from the side walls and bottom of the tank excavation pit and screened with an OVA/FID, which indicated no excessively contaminated soils. A confirmation soil sample (TP-B) was collected at the bottom of the tank excavation pit and submitted for laboratory analyses. The laboratory analytical results of the confirmation soil sample indicated that all constituents analyzed were below their respective laboratory MDLs. Based on these results, it appears that no excessively contaminated soil existed, and no soil removal is necessary. The excavation was backfilled using the material from the surrounding area to create a safe environment until pipe installation activities could resume.

Groundwater sampling at the project site was deemed unnecessary since it was determined that depth to groundwater was greater than twenty (20) feet.

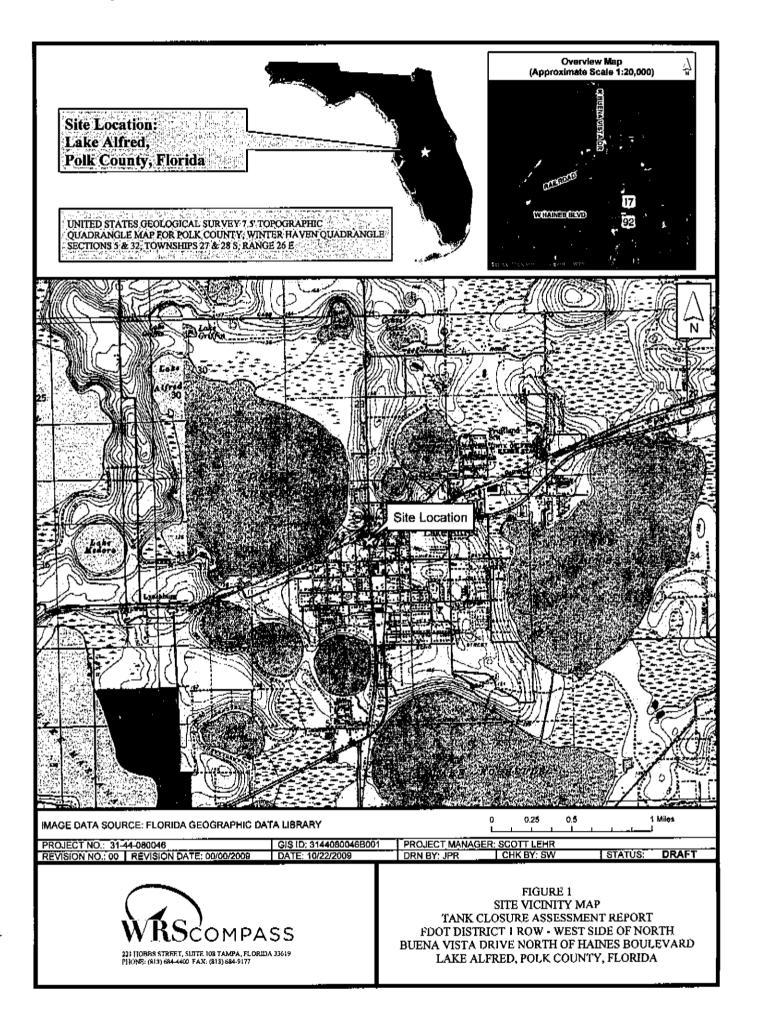
On September 22, 2009, approximately 110 gallons of petroleum impacted soil and sludge was removed from the tank during cleaning activities. The tank was then transported to a scrap metal recycling facility, R & L Metals, Inc. in Tampa for destruction on September 23, 2009. A preburn sample was collected from petroleum impacted soil and sludge removed from within the tank and sent to the laboratory for analysis, and waste profiling. Two 55-gallon drums of petroleum impacted soil and sludge was subsequently transported to Clark Environmental, 755 Praire Industrial Pkwy, Mulberry, Florida for thermal treatment on October 8, 2009.

Based on the results of the closure assessment activities, it appears that there were no soil or groundwater impacts during the removal of the UST and no further assessment activities are necessary at the tank location site.

6.0 REFERENCES

- 1. Drinking Water Standards, Monitoring and Reporting, Chapter 62-550, Florida Administrative Code.
- 2. Underground Storage Tank Systems, Chapter 62-761, Florida Administrative Code.
- 3. Petroleum Contamination Site Cleanup Criteria, Chapter 62-770, Florida Administrative Code.
- 4. Contaminant Cleanup Target Levels, Chapter 62-770, Florida Administrative Code.
- 5. Florida Department of Environmental Protection, Storage Tank System Closure Assessment Requirements, April 1998.
- 6. Florida Department of Environmental Protection, Standard Operating Procedures for Field Activities (DEP-SOP-001/01), February 1, 2004.

FIGURES



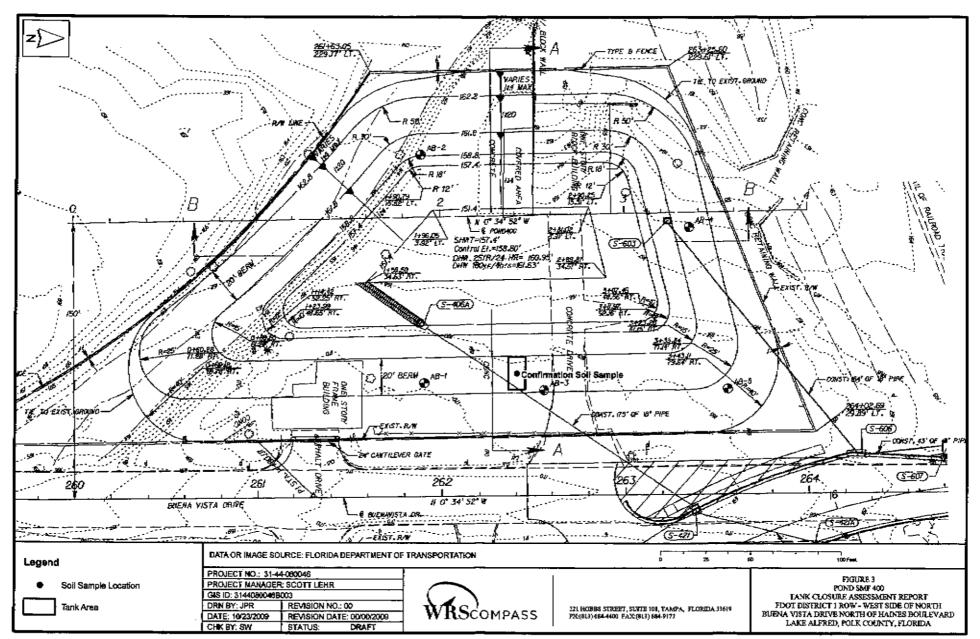


TABLE 1 SOIL OVA RESULTS FDOT DISTRICT ONE RIGHT-OF-WAY POND SMF 400 LAKE ALFRED, POLK, COUNTY, FL SEPTEMBER 2009

Soil Boring Number	- I Henin		Unfiltered Concentration (ppm)	Filtered Concentration (ppm)	Net Concentration (ppm)
N		9/17/09	1.5	N/A	1.5
E		9/17/09	1,2	N/A	1,2
s		9/17/09	1.2	N/A	1.2
W		9/17/09	1.1	N/A	1.1
B **		9/17/09	1.0	N/A	1.0

NOTES:

ft bis

= feet below land surface

ppm

= parts per million

** = Soil sample col

tolded values meet or exceed soil cleanup contamination criteria of 50 ppm as per Chapter 62-770, F.A.C

TABLE 2 SOIL ANALYTICAL RESULTS FDOT DISTRICT ONE RIGHT-OF-WAY POND SMF 400 LAKE ALFRED, POLK COUNTY, FL SEPTEMBER 2009

Sample Name	Sample Date	Sample Depth (ft bis)	Вепиен	Ethyl- benzent	Tolnene	Total Xylenes	Napà-thalene	2-Methyl- naphthalene	1-Methyl- naphthalene	CPAH⊁	TRPH by FL. PRO
SCTL- residential (mg/kg)	-	-	1.2	1,500	7,500	130	55	210	200	0.1	460
SCTL- commercial (mg/kg)	-	-	1.7	9,200	60,000	700	300	2,100	1,800	0.7	2,700
TP-B	9/17/2009		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

Notes:

FDOT = Florida Department of Transportation

SCTL = Soil Cleanup Target Level per Storage Tank System Closure assessment Requirements and FDEP Chapter 62-777, F.A.C.

FDEP = Florida Department of Environmental Protection

ft bls = Feet Below Land Surface

TRPH = Total Recoverable Petroleum Hydrocarbons by FL-PRO method

FL-PRO = Florida Petroleum Range Organics

* Carcinogenic Polycyclic Aromatic Hydrocarbons - Site concentrations for CPAH's (Benzo(a)pyrene, Benzo(a)anthracene, Benzo(b)fluoranthene,

Benzo(k)fluoranthene, Chrysene, Indeno(1,2,3-cd)pyrene) must be converted to Benzo(a)pyrene equivalents before comparison with the appropriate

exposure SCTL for Benzo(a)pyrene using the approach described in the February 2005 Final Technical Report: Development of Cleanup Target Levels

____ s) for Chapter 62-777, F.A.C.

BDL = Below Detection Limit

All data recorded in milligrams per kilogram (mg/kg)

Bolded and shaded values meet or exceed SCTLs

TABLE 3 PRE-BURN ANALYTICAL RESULTS FDOT DISTRICT ONE RIGHT-OF-WAY POND SMF 400 LAKE ALFRED, POLK COUNTY, FL SEPTEMBER 2009

Sample Name	Sample Date	Sample Depth (ft bls)	Arsenic	Cadmium	Сһгоніяя	Lead	Total Organic Halides	Poty Chlorinated Biphenyla	TRPH by FL. PRO
Pre-Burn	9/17/2009	_	BDL	0.673	2.70	4.79	BDL	BDL	9,700

Notes

ft bls = Fect Below Land Surface
TRPH = Total Recoverable Petroleum Hydrocarbons by FL-PRO method
FL-PRO = Florida Petroleum Range Organics
BDL = Below Detection Limit
All data recorded in milligrams per kilogram (mg/kg)

TABLES



Florida Department of Environmental Protection
Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

DEP Form # 62-761.900(5)	
Form Title: UST Contractor Form	
Effective Date: July 13, 1998	
Elicotive Date: FWIJ 191-77-	_

Underground Storage System Installation and Removal Form for Certified Contractors

Pollutant Storage Systems Contractor as defined in Section 489.113, Florida Statutes (certified contractors as defined in Section 62-761.200, Florida Administrative Code) shall use this form to certify that the installation, replacement or removal of the underground storage tank system(s) located at the address listed below was performed in accordance with Department Reference Standards. This includes system components such as dispenser liners, piping sumps, and overfill protection devices.

General Facility Information	
Facility Name: FDOT ROW - Pond SMF 400	DEP Facility Identification No. : 539811700
Street Address (physical location); FDOT ROW W side	of N Buena Vista Dr 0.1 miles N of Haines Blvd.
County: Palk	Telephone #: (863) 519-2515
Owner Name: FDOT District 1	Telephone #: (863)519-2515
Owner Address: 801 North Broadway Avenue, Bartow	, Florida 33830
Storage Tank System Information	
Number of Tanks Installed: 0	Number of Tanks Removed: 1
Date Work Initiated: 9/17/09	Date Work Completed: 9/17/09
Tank(s) Manufactured by: Unknown	<u></u>
Description of work Completed: Removed one Unkno	wn 1750 gallon UST.
· ·	
Certification	
Protection: that to the best of my knowledge and belief, the	lity that is registered with the Florida Department of Environmental he storage tank system installation, replacement or removal at this facility statutes, Section 376.303, Florida Statutes, and Chapter 62-761, Florida and documents for underground storage tank systems.
WRS Infrastructure and Environment, Inc. (Type or Print)	PSSC Number
Certified Pollutant Tank Contractor Name	Pollutant Storage Systems Contractor License Number
Mo	11/5/09
Certified Tarle Contractor Signature	Date (1/18/109)
LAN-SVA	11/2/29

The owner or operator of the facility must register the tanks with the Department upon completion of the installation. The installer must submit this form to the County no more than 30 days after the completion of installation, replacement, or removal of a storage tank



Department of Environmental Protection

DEP Form 62-761,900(3)
Form Title: Limited Closure
Summary Report;
Effective Date: 7/13/98

n Towers Office Building

• 2500 Blair Stone Road

• Tallahassee, Florida 32399-2400

Limited Closure Summary Report

This form is required for facilities that have sites with documented contamination requiring a site assessment in accordance with Chapter 62-770, F.A.C. This includes those facilities that are eligible for the Early Detection Incentive Program (EDI), the Florida Petroleum Liability and Restoration Insurance Program (FPLRIP), and the Petroleum Cleanup Participation Program (PCPP), pursuant to Sections 376.3071 and 376.3072, F.S. Documentation of procedures followed, and results obtained during closure shall be reported in this form, along with any attachments. This form shall be submitted to the County within 60 days of completion of the closure in accordance with Section A of the "Storage Tank System Closure Assessment Requirements."

Complete All Applicable Blanks. Please Print or Type

General Information	1					<u>.</u>				
Date 9/21/09	FDEP	Facility ID Number 539	<u>811700</u>		County Poll	<u> </u>				
Facility Name FDOT ROW Facility Telephone #: (863)519-2515										
Facility Address: FDOT ROW N Buena Vista Dr and W Haines Blvd Intersection, Lake Alfred, Florida 33850										
Owner or Operator Name	Owner or Operator Name: FDOT District 1 Owner/Operator phone #: (863)519-2515									
Mailing Address: 801 No	orth Bro	adway Avenue, Bartov	v, F <u>lorida 338</u>	30		<u>.</u>				
Storage Tank Syste	m Clos	sure Information								
1. Were the storage tanks						_				
Aboveground	(+)- (✓ Unders	gound						
- 1100108104114										
2. General System Informat	ion				<u> </u>					
Types of Products Stored		วพก	Number of	Fanks C <u>los</u>	sed 1	Age(s) of Tan	CS			
"		_			,					
3. Was the Limited Closu		nary Report Performed a	s a Result of:	(check onc	or more)	New Bornleted Co	-betonen			
✓ Tank Systems Removal?		Spill Containment Insta				Non-Regulated Surier Installation?	uosiancer			
Tank Systems Closed in		 Dispenser Liners Install 								
Piping Sump Installation	7	 Secondary Containment 	Installation?	• Omer?	(please explain	<u>)</u>				
		C. 11								
4. Please Check Yes or I	vo to the	tollowing:	ed on site? If	ves was		• Yes	✓ No			
a. Was there previously	геропес	rm submitted to the Cou	11.02	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		• Yes	✓ No			
1. A Discharge R	epon Fo	med in accordance with	Rule 62-761 8	20. F.A.C.	,	• Yes	▼ No			
2. An investigation	n perior	med in accordance with	<u>Kuic 02-701.0.</u>	20, 1 121101	<u> </u>	• Yes	✓ No			
b. Is the depth to ground	iwater ic	ess than 20 fect?				• Ycs	✓ No			
c. Are there monitoring						- Yes	✓ No			
1. Groundwater n						• Yes	✓ No			
2. Vapor monitor						• Yes	✓ No			
3. Used for closu		ment sampling?				• Yes	✓ No			
4. Properly close			·			• Yes	✓ No			
5. Retained for site assessment purposes:							✓ No			
d. If tanks were replaced, were contaminated soils returned to the tank excavation?										
as exit for FOOT Scott Lehr										
Signature of owner or	operato		f person perfo			e of person perfo				
_		Limited 9	losure Assessi	nent	Limi	ted Closure Asse	soment			
(date)///5/0	7	(date)	on recycled par		liation	mador				



Florida Department of Environmental Protection Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassec, Florida 32399-2400

	_
DEP Form # <u>62-761,900(2)</u>	_
Form Title Storage Tank Resistration Form	
Effective Date July 13, 1998	
DEP Application No.	_
(Filled in by DEP)	

Storage Tank Facility Registration Form

Submit a completed form for the facility when registration of storage tanks or compression vessels is required by Chapter 378.303, Florida Statutes

Please review Registration Instructions before completing the form.

<u></u>		· 1 =	N	ion	No.	w Owner	·····	New Ta	inks	
ase check	all that app	PY. [New Registrat	ion odate/Correctio			Jpdate/Correction		fo Update/Co	prection
			racility into O	Dualer Con actic	// U.					
FACILITY	INFORMA	TION	County: Polk				DEP Facility	ID:	<u>.</u>	
acility Name	, FD	- OT Rigi	nt-of-Way - F	ond SMF 4	00					
acility Addre		ROW W side	of N Buena Vista Dr	0.1mile8 N of Halno	es Blvd City: _	Lake Ā	lfred	Zip:	33850	
		Notting					Business	- 110110	5 <u>19-2515</u>	
acility Conta	~ ~	FDOT	ROW	NAIC	S Code:		——— Financial	Responsibility: N	٩	
acility Type(s):								<u></u>	
4 Hour Em	ergency Co	ontact: R	tay Nottingha	am			Emergency	Phone: (⁸⁶³)	519-2515	
. RESPON	SIBLE PE	RSON IN	FORMATION - cation named a	Identify Individ	ual(s) or Busin le additional l	ress(es) Informat	responsible for sto ion in an attachπ	rage tank manage ent if necessary.	ment, fueling	operations, ar
lame: FDC			<u> </u>				Facility - Respons	ible Person Relati	on Type: E	ffective Date
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							Facility Account (Owner Information	must be prov	ided when the
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Contact R	ay <u>Nottin</u>	igham_					-	Number (if known		
Felephone:	863-519	9-2515							Storage Tar	k Owner
dentify othe	r appropria	te facility	relationships fo	r this party:	Facility O	wner/Ope	erator VI Mop	erty Owner LZI	Stolage 1al	
						-	Other owner, rela	tionship type(s)	1	Effective Date
Vame:							Facility Ov			
Mail address	3:						Property C			
City, ST, Zip):									
Contact:						_	Storage T	ank Owner		
Telephone:					'		Other:			
C. TANK/VI	ESSEL INF	ORMATI	ON - Complete	one row for e	ach storage t	tank or c	ompression vest	sel system located	d at this faci	lity.
Tank ID	Τ̈́Λ	A/U	Capacity	Installed	Content	Status	s/Effective Date	Construction	Piping	Monitoring
Tank 1	T T	Ų	1750	unk	Y	В	9/17/09	C	NONE	X
						<u> </u>			+-	
						 	<u> </u>			-
		 -	 	-	+	 				
	+	┼──	<u> </u>	$\overline{}$	 	1				
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Pensacola, FL 32501 850-596-8360

Suite B200 Jacksonville, FL 32258 904-448-4300 Suite 232 Orlando, FL 32803 407-894-7656

Tampa, FL 33619 813-744-6100

W Palm Beach, FL 33416

Fort Myers, FL 33901 941-332-6975

Marathon, FL 33050 305-289-2310

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CERTIFICATE OF DESTRUCTION AFFIDAVIT

This is to certify that on	9/23/09	R & L Metals,
Inc. has completed the destru-		
From the Florida Deportur District one	ment of Tanspor	techon.
Located at US 17/92 Contruction Lake Alfred, FL		<u>.</u>
Brought in by NRS Infrastructure 221 Hobbs Street Su		f. Twx.
Jampa FL 336/7		
The address of the destruction	n site is:	
R & L Metals, Inc. 1913 N. 62nd. Street Tampa, FL 33619		

The method of destruction is the material is placed into a shredder and broken down into several little pieces, then the metal will be shipped to a mill to be melted.

I declare under penalties of perjury, that the above is, to the best of my knowledge and belief, true, correct and complete.

Signed

R & L Metals, Inc.

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The undersigned convenions to R & L Metals, Inc. (R & L) that the metal material on this invoke is the lawful property of the Seller; that Seller has complied with all laws to allow lawful transfer of title to R & L; that this material is free from all claims of others, and that the undersigned and Seller shall defend title in R & L, and shall indemnify R & L for all damages, attorney's fees and court costs in any action brought against R & L, as a result of any breach of these warranties and representations. These covenants shall survive the transfer of this material.

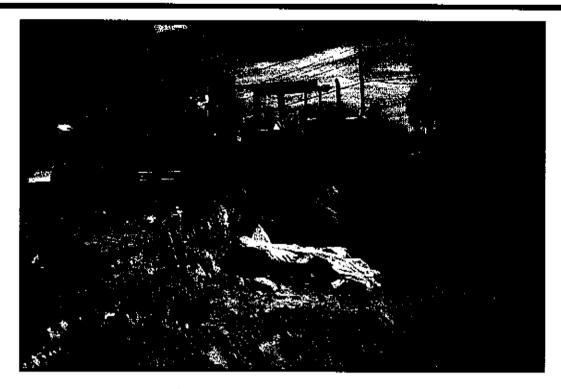
Payment received on behalf of Seller:

INVOICE

A Cooks

12008-DTO1

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Photograph 1 - UST in FDOT right-of-way



Photograph 2 - PCW inside of UST

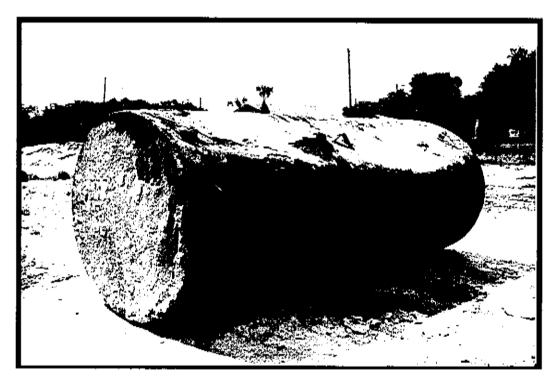


WRS Infrastructure & Environment, Inc.

221 HÖBB\$ STREET, SUITE 108,, TAMPA, FLORIDA 33614 PH:(813) 684-4400 FAX:(813) 684-9177 Photographs 1 & 2
Tank Closure Assessment Report
Lake Alfred, Polk County, FL
31-44-080046



Photograph 3 - Removal of PCW



Photograph 4 - 1,750-gallon UST after removal



WRS Infrastructure & Environment, Inc.

221 HOBBS STREET, SUITE 108,, TAMPA, FLORIDA 33614 PH:(813) 684-4400 FAX:(813) 684-9177 Photographs 3 & 4
Tank Closure Assessment Report
Lake Alfred, Polk County, FL
31-44-080046



Photograph 5 - Opening of tank for further cleaning



Photograph 6 - Inside of cleaned UST



WRS Infrastructure & Environment, Inc.

221 MQBB\$ \$TREET, SUITE 108,, TAMPA, FLORIDA 33614 PH:(813) 684-4400 FAX:(813) 684-9177 Photographs 5 & 6
Tank Closure Assessment Report
Lake Alfred, Polk County, FL
31-44-080046

Old Dixie Trail PD&E Study FPID No: 435391-1-22-01 Contamination Screening Evaluation Report



Map ID 13: Quality #111



Department of Environmental Protection

Twin Towers Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Colleen M. Castille Secretary

FEB 2 8 2005

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Steve Weeks Quality Petroleum Corporation Post Office Box 3889 Lakeland, FL 33802

Subject: Site Rehabilitation Completion Order

Amoco #111

110 N. Lake Shore Way-Highway 92

Lake Alfred, Polk County FDEP Facility ID# 538623713

Discharge Date: December 1, 1988 (PCPP)

Discharge Score: 95

Dear Mr. Weeks:

The Polk County Health Department Petroleum Cleanup Program has reviewed the Limited Contamination Assessment Report (LCAR) and No Further Action Proposal (NFAP) dated January 11, 2005 (received January 13, 2005), prepared and submitted by Enviro-Logical Solutions, Inc. for the petroleum product discharge discovered at this site. Documentation submitted with the NFAP confirms that criteria set forth in Rule 62-770.680(1), Florida Administrative Code (F.A.C.), have been met. The NFAP is hereby incorporated by reference in this Site Rehabilitation Completion Order (Order). Therefore, you are released from any further obligation to conduct site rehabilitation at the site for petroleum product contamination associated with the discharge listed above, except as set forth below.

In the event concentrations of petroleum products' contaminants of concern increase above the levels approved in this Order, or if a subsequent discharge of petroleum or petroleum product occurs at the site, the Florida Department of Environmental Protection (Department) may require site rehabilitation to reduce concentrations of petroleum products' contaminants of concern to the levels approved in the NFAP or otherwise allowed by Chapter 62-770, F.A.C. (2)

Please send a copy of the approved assessment document to Ken Weber of the Southwest Florida Water Management District within 30 days of receiving this Order.

Mr. Steve Weeks FDEP Facility ID# 538623713 Page two

L'egal Issues

The Department's Order shall become final unless a timely petition for an administrative proceeding (hearing) is filed under Sections 120.569 and 120.57, Florida Statutes (F.S.), within 21 days of receipt of this Order. The procedures for petitioning for a hearing are set forth below.

Persons affected by this Order have the following options:

- (A) If you choose to accept the Department's decision regarding the NFAP you do not have to do anything. This Order is final and effective as of the date on the top of the first page of this Order.
- (B) If you choose to challenge the decision, you may do the following:
- (1) File a request for an extension of time to file a petition for hearing with the Agency Clerk in the Office of General Counsel of the Department within 21 days of receipt of this Order; such a request should be made if you wish to meet with the Department in an attempt to informally resolve any disputes without first filing a petition for hearing; or
- (2) File a petition for administrative hearing with the Agency Clerk in the Office of General Counsel of the Department within 21 days of receipt of this Order.

Please be advised that mediation of this decision pursuant to Section 120.573, F.S., is not available.

How to Request an Extension of Time to File a Petition for Administrative Hearing

For good cause shown, pursuant to Rule 62-110.106(4), F.A.C., the Department may grant a request for an extension of time to file a petition for hearing. Such a request must be filed (received) by the Agency Clerk in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from Mr. Steve Weeks (Quality Petroleum Corporation), shall mail a copy of the request to Mr. Steve Weeks (Quality Petroleum Corporation) at the time of filing. Timely filing a request for an extension of time tolls the time period within which a petition for administrative hearing must be made.

How to File a Petition for Administrative Hearing

A person whose substantial interests are affected by this Order may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) by the

LP SRCO rev 3/1/04

Mr. Steve Weeks FDEP Facility ID# 538623713 Page three

Agency Clerk in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from Mr. Steve Weeks (Quality Petroleum Corporation), shall mail a copy of the petition to Mr. Steve Weeks (Quality Petroleum Corporation) at the time of filing. Failure to file a petition within this time period shall waive the right of anyone who may request an administrative hearing under Sections 120.569 and 120.57, F.S.

Pursuant to Subsections 120.54(5)(b)4. and 120.569(2), F.S., and Rule 28-106.201, F.A.C., a petition for administrative hearing shall contain the following information:

- (a) The name, address, and telephone number of each petitioner, the name, address, and telephone number of the petitioner's representative, if any, the site owner's name and address, if different from the petitioner, the FDEP facility number, and the name and address of the facility;
- (b) A statement of when and how each petitioner received notice of the Department's action or proposed action;
- (c) An explanation of how each petitioner's substantial interests are or will be affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by the petitioner, or a statement that there are no disputed facts;
- (e) A statement of the ultimate facts alleged, including a statement of the specific facts the petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the Department's action or proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the Department to take with respect to the Department's action or proposed action.

This Order is final and effective as of the date on the top of the first page of this Order. Timely filing a petition for administrative hearing postpones the date this Order takes effect until the Department issues either a final order pursuant to an administrative hearing or an Order Responding to Supplemental Information provided to the Department pursuant to meetings with the Department.

Judicial Review

Any party to this Order has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the Agency Clerk in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida

LP SRCO rev 3/1/04

Mr. Steve Weeks FDEP Facility ID# 538623713 Page four

32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days after this Order is filed with the clerk of the Department (see below).

Questions

Any questions regarding the Polk County Health Department Petroleum Cleanup Program's review of your NFAP should be directed to Carol White at (863) 701-1303. Questions regarding legal issues should be referred to the Department's Office of General Counsel at (850) 245-2242. Contact with any of the above does not constitute a petition for administrative hearing or request for an extension of time to file a petition for administrative hearing.

The FDEP Facility Number for this site is 538623713. Please use this identification on all future correspondence with the Department or the Polk County Health Department Petroleum Cleanup Program.

Sincerely,

Michael E. Ashey, Chief

Bureau of Petroleum Storage Systems

Leleus May act

MEA/clw

cc: Laurel Culbreth, FDEP Southwest District
 Grace Rivera, FDEP – BPSS
 Carol White, Polk County Health Department Petroleum Cleanup Program
 Ryan Bahn, Enviro-Logical Solutions, Inc., 5147 West Clifton Street, Tampa, FL

File

33634

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

(or Deputy Clerk)

Date

P.G. CERTIFICATION

Limited Contamination Assessment Report and No Further Action Proposal, Amoco #111, 110 N. Lake Shore Way-Highway 92, Lake Alfred, Polk County, Florida, FDEP Facility ID# 538623713.

I hereby certify that in my professional judgement, the components of this Limited Contamination Assessment Report (LCAR) and No Further Action Proposal (NFAP) dated January 11, 2005 (received January 13, 2005), prepared and submitted by Enviro-Logical Solutions, Inc. for this site satisfy the requirements set forth in Chapter 62-770, Florida Administrative Code (F.A.C.), and that the conclusions in this report provide reasonable assurances that the objectives stated in Chapter 62-770, F.A.C. have been met.

_ I personally completed this review.

X This review was conducted by <u>Carol White</u>, <u>Environmental Specialist II</u> working under my direct supervision.

George W. Ellswort

Professional Geologist 0000848 Polk County Health Department

Petroleum Cleanup Program

January 31, 2005

JUN 26 2009

Southwest District



Environmental Services

June 15, 2009

Ms. Carol Cassels
Polk County Health Department
Environmental Engineering Division
Stationary Tanks Inspection Program
200 North Kentucky Ave, Suite 404
Lakeland, Florida 33801

Re:

Site Assessment Report Quality Petroleum #111 110 North Lake Shore Way – Hwy. 92 Lake Alfred, Polk County, Florida Facility ID# 53/8623713 Discharge Date: April 11, 2008

Dear Ms. Cassels:

EnviroTrac Ltd. Inc. (EnviroTrac), on behalf of Quality Petroleum Corporation, is pleased to provide you with this Site Assessment Report (SAR) for the above referenced facility. This report addresses the lateral and vertical extent of contamination associated with the April 11, 2008 Discharge Reporting Form (DRF). The ensuing investigation, summarized in the following, was conducted in accordance with the requirements of 62-770.300 FAC. A copy of the DRF is provided in Appendix A.

Facility Description

The subject site is a closed gasoline retail station located on the northwest corner of North Lake Shore Way (U.S. Highway 17/92) and West Haines Boulevard. Previously, this facility was branded as the Amoco #111; most recently the site was known as Quality #111. A review of the Winter Haven, Florida United States Geological Survey (USGS) 7.5-minute quadrangle map indicates that the site is located in Section 32 of Township 27 South, Range 26 East in a mixed commercial/residential area. The facility lies at approximately 170-feet above mean sea level and exhibits relatively flat topography. A copy of the USGS topographic map identifying the location of the subject site is included in Appendix B.

Presently, the facility layout consists of a single-story building, which was partitioned into a convenience store/office, a small vehicle repair garage, and a car wash. A metal canopy roof extends east and west from the southeast building corner and covers two (2) dispenser islands. The former Underground Storage Tank (UST) field is located slightly north of the canopy roof. It should be restated that the site is vacant and the gasoline station is no longer active. Facility layout is depicted on Figure 1.

Facility History

According to available information regarding the operational history of the subject site, it appears that this facility operated as a gasoline station since 1976. Reportedly, a total of four (4) 4,000-gallon USTs were installed February 1976 for the onsite storage and sales of unleaded gasoline. In addition, a 550-gallon UST was utilized onsite for the storage of waste oil. Reportedly, the former 550-gallon waste oil UST was replaced (date unknown) by a 250-gallon aboveground storage tank (AST) that was installed in September 1989 and was positioned adjacent to the western exterior wall of the office/garage building. According to FDEP records, a DRF was submitted December 1988 in response to possible contamination due from spills that occurred during filling from the waste oil AST. The discharge was granted partial eligibility into the Petroleum Cleanup Participation Program (PCPP) that was restricted solely to the waste oil contamination from the waste oil AST. A Limited Contamination Assessment Report (LCAR) prepared by Enviro-Logical Solutions, Inc. (ELS) January 2005 was subsequently approved February 2005. The December 1988 DRF was granted No Further Action (NFA) status on February 28, 2005.

A June 2008 UST System Closure Assessment prepared by PPM Consultants, Inc. documented the removal of the UST system, which consisted of four (4) USTs containing various grades of unleaded gasoline, the associated spill buckets, product lines, and six (6) fuel dispensers on April 1 and 2, 2008. It appears that the previously mentioned 250-gallon waste oil AST was removed from the site sometime prior to April 2008. Associated laboratory analytical samples collected during the Closure Assessment activities reported exceedances of established Soil Cleanup Target Levels (SCTLs). A DRF was therefore submitted by Quality Petroleum on April 11, 2008. The closure report indicated that a total of 18 cubic yards of petroleum-impacted soil were removed from the UST field and from an area around fuel dispenser #5 for offsite treatment. Based on the Polk County Health Department Closure Assessment Report review letter dated August 13, 2008, several items did not meet Storage Tank System Closure Assessment Requirements and needed to be addressed.

To address the Tank Closure Assessment Report (TCAR) deficiencies, EnviroTrac performed additional Site Assessment activities in November 2008. Based on the assessment activities, it appeared that no soil impacts exist at the west and east sides of the former UST field and near the dispenser where previous source removal activities took place. However, laboratory analysis of groundwater samples collected from the boring locations around the former UST field indicated petroleum contaminants of concern above their respective Groundwater Cleanup Target Levels (GCTLs). As such, subsequent delineation of the contamination was necessary and the ensuing assessment activities are described below (April 2008 Discharge Assessment). Pertinent selected FDEP facility file information is included in Appendix A. A copy of the TCAR prepared by PPM Consultants is included in Appendix C.

Area Land Use and Potential Sources of Offsite Contamination

The subject site is bounded by West Haines Boulevard to the south and North Lake Shore Way to the east. Commercial use properties front both roads with private residences off the main thoroughfares and in the outlying areas. The adjoining property to the north consists of a vacant grassy field, beyond which is located a commercial property occupied by Chinh's Tires. The Lake Alfred U.S. Post Office is located adjacent to the subject property to the west. An annotated 2008 Polk County aerial photograph identifying surrounding property uses and locations is included as a Site Vicinity Area Use Map in Appendix B.

The FDEP Storage Tank/contaminated Facilities Database was queried for contaminated facilities within 0.25-mile radius of the target property. This query yielded three (3) additional facilities with ongoing cleanup within the search radius:

- The "Travis Property" (FDEP FAC ID# 53/9804436) located at 300 South Lake Shore Way (approximately 1,000 feet south) historically was a retail gasoline station that reportedly closed during the mid 1970's. Contamination was discovered during an offsite assessment investigation of the Gray Truck Lines, Inc. facility (discussed below). The site is currently in Post Active Remedial Monitoring (PARM) and based on the most recent document found on OCULUS, it appears that site had recently met all media milestones established in the established Task Assignment.
- The Gray Truck Lines, Inc. facility (FDEP FAC ID# 53/8624009) located at 325 South Lake Shore Way (approximately 1,100 feet south) currently is engaged in active remediation of petroleum hydrocarbon contamination. Based on the most recent document found on OCULUS, it appears that a quarterly Operations & Maintenance (O&M) report for the active Air Sparge/Soil Vapor Extraction (AS/SVE) remedial system was recently approved. As reported, groundwater flow at the site is west southwest (away from the subject property).
- The Growers Fertilizer Co-Op facility (FDEP FAC ID# 53/8624425) located at 312 North Buena Vista Drive (approximately 1,100 feet northwest) currently is engaged in active remediation of petroleum hydrocarbon contamination using an AS/SVE remedial system. As reported, groundwater flow at the site is northwest (towards Lake Alfred and away from the subject property).



Based on available facility file information and respective locations/distances relative to the subject site, these sites do not appear to be potential offsite contamination concerns to the subject property. The results of the FDEP Contaminated Facility search are included in Appendix A.

Regional Hydrogeology

The dominant straitigraphy of Polk County is composed of lithologies which are Eocene to Recent in age and which lie unconformable upon each other. The surficial sediments consist of Pliocene to Recent quartz sands, clays and clayey sands that blanket all of Polk County. Thicknesses of the unconsolidated sediments range from 10 to 120 feet. Beneath the surficial sediments lies the Hawthorn Group of Miocene age. The Hawthorn Group consists of a series of dolomites. Many of the lithologies contain appreciable phosphate content. Thicknesses range from 50 to 100 feet. The Ocala Group is Eocene in age and contains the Crystal River, Williston, and Inglis formations. All of Polk County is underlain by the Ocala Group. The three formations are each white to cream to brown limestones that are poorly to well indurated. Dolomitization and silicification is present within these formations. The formations are distinguished by their fossil assemblages. The Avon Park formation is the deepest unit that is consistently documented as underlying Polk County. The Avon Park formation is a cream to brown colored, soft to hard, chalky to granular to crystalline limestone. Thicknesses are generally several hundred feet thick.

Regional Hydrogeology

A surficial aquifer system, an intermediate aquifer system, and the Florida Aquifer are the three systems recognized in Polk County. The surficial system is a water table aquifer composed of unconsolidated sands of Pliocene to Recent in age as well as the uppermost portions of the Hawthorn Group. The base of this unconfined aquifer is the less permeable clay beds of the Hawthorn Group. The intermediate aquifer system is composed of the limestone and dolomite of the Hawthorn Group. This system is artesian with upper and lower confining units consisting of the clays of the hawthorn Group. Locally the lower confining unit may be breached or absent allowing for a hydrologic connection to the Floridian Aquifer. The Floridian Aquifer in Polk County consists of the water bearing portions of the Avon Park formation and the Ocala Group. This is the principal aquifer of Polk County, and is the source of most major municipal, industrial and irrigation water supplies.

Site Specific Hydrogeology

Site-specific geology was evaluated during the installation of onsite soil borings and monitoring wells during recent site assessment activities. Recent investigations indicate the lithology of the site is primarily fine- to medium-grained sands of varying color from the surface to an average depth of 16' below land surface (BLS). Below 16' BLS, fine-grained clayey-sands and fine to medium grained sands/trace clays were encountered at various depth intervals to a total approximate depth of 57' BLS (which represents the terminal depth of the single vertical extent well installed. The average depth to water (DTW) based on static DTW levels recorded during subsequent groundwater sampling events was approximately 40' BLS. The average hydraulic gradient, based on site specific groundwater elevation data, is approximately 0.39-ft/ft in a northwesterly direction. A lithologic cross-section which illustrates the stratum described above is included as Figure 14.

Potable Well Information and Physical Features

The most recent Florida Department of Health (FDOH) Subsurface Underground Petroleum Environmental Response (SUPER) Act potable well survey found on OCULUS was approved November 2004 and identified two (2) large public wells (>100,000 gallon per day) within 0.5-miles of the subject site and one (1) private well located within a 0.25-mile radius of the subject site.

The two (2) large public supply wells are listed as community wells for the City of Lake Alfred (located at 120 E. Pameto Street) and assigned Well IDs AAC5847 and AAC5848, respectively. As indicated, both wells were sampled on October 21, 2004 and no compounds were detected (EPA 524.2).



The single private well (SUPER act Well ID: AAG3824) is listed for an inactive limited use well permitted to the Growers Fertilizer Corporation. As indicated, no sample record was listed for this well. However, it should be noted that contaminants of concern have been documented at this facility, as previously stated in the Area Land Use and Potential Sources of Offsite Contamination section of this report above. The potable well information obtained during the preparation of this report is included in Appendix D.

A physical inspection of the surrounding area was conducted by EnviroTrac personnel on April 27, 2009 to supplement the online queries. The surrounding properties were visually inspected for readily apparent evidence of potable wells including pressure tanks, protective risers, well casings and pump heads. No private or potable wells were identified in the immediate vicinity during the physical inspection.

Potential surface receptors identified within the immediate study area include the numerous lakes which surround the Lake Alfred area including: Lake Alfred (1,900 feet northwest), Lake Swoope (2,100 feet north), Lake Echo (2,700 feet south) and Lake Haines (4,200 feet east). The above-listed lakes are depicted on the USGS Quadrangle Map provided in Appendix B.

April 2008 Discharge Assessment

To address the April 11, 2008 DRF, and based on Polk County Health Department Environmental Engineering Division (PCHDEED) review comments for the TCAR prepared by PPM Consultants, Inc. EnviroTrac initiated site assessment activities at the site to determine the vertical and horizontal extent of (if any) petroleum hydrocarbon contamination onsite.

Soil Boring Installations (November 2008)

On November 11, 2008, EnviroTrac mobilized to the site to advance three (3) soil borings (designated SB-1, SB-2, and SB-3). The soil borings were installed by Preferred Drilling Solutions Inc., of Largo, Florida (Preferred Drilling), via Direct Push Technology (DPT). It should be noted that boring locations were discussed with PCHDEED prior to installation. SB-1 was advanced on the western edge of the former UST field; SB-2 was advanced along the eastern edge of the former UST field; SB-3 was advanced near the middle dispenser (of the western row of dispensers) where source removal activities took place during the UST system closure. Soil boring locations are illustrated on Figure 1.

Soil samples were screened at 1.0' intervals using a calibrated Thermo 580S Photo Ionization Detector (OVA/PID) to a total depth of forty feet (40') below land surface (BLS) from SB-1 and SB-3. Screening for petroleum vapors was conducted using the headspace reading procedure specified in Rule 62.770.200(19) of the Florida Administrative Code (FAC). Soil samples were not collected from SB-2 as they were not required to determine the depth to water or site lithology once SB-1 was completed. Screening was performed during the advancement of SB-3 as this area previously required a source removal due to elevated OVA levels reported during the former UST system closure. During the OVA/PID survey, no positive responses above 10.0 parts per million (ppm) were recorded. Groundwater was encountered at approximately 36.0' BLS. As per prior conversations with PCHDEED, no confirmatory soil samples were required for laboratory analysis. A summary of the vapor survey results are provided on the Boring Installation Logs (Appendix E) and Table 1.

Groundwater Sampling and Laboratory Analysis

For screening purposes, groundwater samples were collected from soil borings SB-1, SB-2, and SB-3 at the completion of the boring installations on November 10, 2008. Following collection of the soil samples for OVA screening, a temporary well was installed in each boring to collect groundwater samples. The temporary wells were constructed with 5.0' of machine-slotted well screen (2"\$\phi\$, SCH40 PVC, 0.010"), flush-mounted to 35.0' of blank casing for a total depth of 40.0' BLS. A groundwater sample was subsequently recovered from each of the borings with a bladder pump in accordance with the procedures outlined in DEP SOP 001/01 (effective April 10, 2002, revised February 1, 2004) and PCS-005. Groundwater samples were placed on ice, logged on a chain of custody, and submitted to Accutest Laboratories of Orlando (Accutest) for laboratory analysis by EPA Method 8260B (BTEX/MTBE).



Laboratory analysis indicated contaminant levels above established GCTLs listed in Chapter 62-777, FAC (effective August 5, 1999, revised April 17, 2005) for the groundwater quality samples collected from boring locations SB-1 and SB-2. Specifically, toluene (14,200 μ g/L), ethylbenzene (704 μ g/L), and total xylenes (3,560 μ g/L) tested above their GCTLs in SB-1. It should be noted that the method detection limits (MDLs) for benzene and MTBE in SB-1 were reported above GCTLs due to laboratory dilution of the sample. Benzene (30.1 μ g/L), toluene (3,420 μ g/L), ethylbenzene (838 μ g/L), and total xylenes (3,980 μ g/L) tested above their respective GCTLs in SB-2. All constituents in SB-3 tested below GCTLs and/or laboratory MDLs. Analytical results from the groundwater grab samples are summarized on Table 3 and illustrated on Figure 4. A complete copy of the laboratory analytical report is included in Appendix G.

Monitoring Well Installations (February 2009)

On February 17 & 18, 2009 EnviroTrac mobilized back to the site with Preferred Drilling to oversee the installation of three- (3) monitoring wells (MW-1, MW-2 and MW-3). MW-1 and MW-2 were installed to a total depth of 40.0' BLS with 10.0' sections of machine-slotted PVC well screen (2"\$\phi\$, SCH40 PVC, 0.010") flush threaded to 30.0' of solid PVC riser. MW-3 was installed to a total depth of 45.0' BLS with a 15.0' section of machine-slotted PVC well screen (2"\$\phi\$, SCH40 PVC, 0.010") flush threaded to 30.0' of solid PVC riser. The annuli were sand-packed with 20/30 silica sand up to 1.0' above the top of the screen intervals, followed by 1.0' seals of fine sand. The remaining annular spaces were grouted to the surface and completed with flush-mounted road boxes formed in 2.0' x 2.0' concrete pads. The wells were developed with a down-well submersible pump until the discharged effluent flowed clear. Monitoring well locations are indicated on the accompanying figures. Copies of the Boring Logs and Well Construction and Development Logs are provided in Appendix E.

During the installation of the wells, soil samples were continuously collected (1-foot intervals) with split-spoon samplers for field screening with calibrated Thermo 580S OVA/PID. The vapor survey was conducted in the same manner described above. During this investigation, depth to water appeared to be approximately 35.5' BLS in MW-1 to 38.5' in MW-2 and MW-3 (based on observable moisture content in the recovered soils). Positive OVA/PID responses were recorded during the installation of all three wells. Subsequently, three (3) soil samples, representative of the range of measured responses, were submitted for laboratory analysis. The "low" sample (72.8-ppm) was collected from the 34.0' interval of MW-1; the "medium" sample (451-ppm) was collected from the 37.0' interval of MW-2; and the "high" sample (1,805-ppm) was collected from the 34.0' interval of MW-3. EnviroTrac acknowledges that the "medium" sample was moist and likely representative of the capillary fringe. However, most if not all positive OVA/PID responses were measured at or below the water table interface.

The samples were collected using the procedures outlined in the Department's July 15, 1998 "New Soil Sampling Procedures and Recommended EPA Analytical Methods (per changes to (USEPA SW-846) and Other Quality Assurance Issues for the Division of Waste Management" memorandum to interested parties. The soil samples from MW-1 and MW-2 were collected on February 17, 2009 and were submitted to SunLabs, Inc. (SunLabs). The soil sample MW-3 was collected February 18, 2009 and submitted to Accutest. The soil samples were analyzed by EPA Methods: 8021B (BTEX/MTBE), 8310 (PAHs) and FL-PRO (TRPHs).

Laboratory Analysis (Soil Samples)

Laboratory analysis of the soil samples collected did not indicate the presence of petroleum products' contaminants of concern in excess of current SCTLs listed in Chapter 62-777, FAC (effective April 17, 2005), with the exception of total xylenes, which was reported for the MW-3 sample in slight excess of SCTLs (0.2 mg/kg) at 0.222 mg/kg. All remaining constituents tested below SCTLs and the majority tested below respective MDLs for the soil samples analyzed. A tabular summary of the soil analytical data is included on Table 2. A site map illustrating the soil analytical results is provided as Figure 2. A complete copy of the laboratory analytical report is included as Appendix G.



Monitoring Well Sampling

On February 24, 2009, EnviroTrac personnel returned to the site to collect groundwater samples from the three (3) newly installed monitoring wells MW-1, MW-2 and MW-3. Prior to the collection of groundwater samples, depth-to-water measurements were collected from the wells using an oil/water interface probe. The top of casing elevations of the wells were surveyed by EnviroTrac personnel relative to an assigned project benchmark of 100.00 feet. Groundwater gauging results, casing elevations and corrected water table elevation data is provided in Table 4. Figure 3A is a groundwater elevation contour map depicting the shallow flow direction of the water aquifer on February 24, 2009. As indicated, the flow direction of the shallow water table aquifer was towards the northwest.

Depth-to-water measurements and total well depths were used to calculate well volumes. EnviroTrac used a variable speed peristaltic pump to purge the wells in accordance with DEP SOP 001/01, FS2200 (effective April 3, 2002, revised March 31, 2008) and SOP PCS-005 (Variances and Clarifications to the Groundwater Sampling Standard Operating Procedure for Bureau of Petroleum Storage Systems Sites new and effective May 2, 2005). Field stabilization parameters were collected after the first well volume was purged and every three (3) minutes thereafter. The following water quality meters were calibrated and used to collect the requisite parameters during purging: Hanna (pH and conductivity), YSI-55 Dissolved Oxygen meter (dissolved oxygen and temperature) and La Motte 2020 (turbidity). The samples were placed on ice, logged on a chain of custody and submitted to SunLabs for laboratory analysis by EPA Methods 8260 (BTEX/MTBE), 8270 (PAHs) and FL-PRO (TRPHs). Copies of the associated field calibration (Form FD 9000-8) and groundwater sampling logs (Form FD 9000-24) are included in Appendix F.

Laboratory Analysis (Groundwater Samples)

Laboratory analysis of the samples recovered on February 24, 2009 indicated the presence of single and/or multiple contaminants of concern in excess of the revised GCTLs in monitoring wells MW-1, MW-2 and MW-3. Several of the contaminants of concern present also reported above respective Natural Attenuation Default Concentrations (NADCs). A tabular summary of the groundwater analytical results is provided on **Table 5**. Individual contaminant plume maps are included as **Figures 5-13**. A complete copy of the laboratory analytical report, including the chain of custody, is provided in **Appendix G**.

An evaluation of the above referenced laboratory analytical results revealed that additional delineation (including vertical delineation) was necessary due to contaminant concentrations in the monitoring wells.

Monitoring Well Installations (April 2009)

On April 20-23, 2009 EnviroTrac was onsite with Preferred Drilling to oversee the installation of four (4) additional monitoring wells (MW-4, MW-5, MW-6 and MW-7) and one (1) double-cased vertical extent well (DW-1). Monitoring wells MW-4 through MW-7 were installed to a total depth of 45.0' BLS with 15.0' sections of machine-slotted PVC well screen (2"¢, SCH40 PVC, 0.010") flush threaded to 30.0' of solid PVC riser and constructed in the same manner previously described. The vertical extent well (DW-1) was installed down-gradient and adjacent to MW-1. DW-1 was double cased to prevent the "dragging" down of contamination from the upper limits of the surficial aquifer. The 6" diameter outer casing was installed to a completion depth of 52.0' BLS. The completion depth of the 2" diameter inner casing was 57.0' BLS and was constructed with a 5.0' section of machine-slotted PVC well screen (2"o, SCH40 PVC, 0.010") flush threaded to 52.0' of solid PVC riser. The annulus was sand-packed with 20/30 silica sand up to 1.0' above the top of the screen interval, followed by a 0.5' seal of fine sand. The remaining annular space was grouted to the surface and completed with flush-mounted road box formed in 2.0' x 2.0' concrete pad. Monitoring wells MW-4 through MW-7 and DW-1 were developed with a down-well submersible pump until the discharged effluent flowed clear. Monitoring well locations are indicated on the accompanying figures. Copies of the Boring Logs and Well Construction and Development Logs are provided in Appendix E.



During the installation of the wells, soil samples were continuously collected at 1.0' intervals to 5.0' BLS (2.0' intervals thereafter) and a vapor survey was performed in the same manner described above. During this investigation, the vadose zone appeared to extend from the ground's surface to 39.0' BLS based on observable moisture content in the recovered soils. Positive OVA/PID responses were recorded at depths of 40.0'—44.0' BLS during the installation of MW-6 and at depths of 38.0'—46.0' BLS from the soils recovered from DW-1 (highest response was 1,496-ppm at 38.0'—40.0' BLS). Because all positive responses were again measured at or below the water table interface, no additional soil samples were collected for laboratory analysis. A tabular summary of the soil analytical data is included on Table 1.

Monitoring Well Sampling

On April 27, 2009, EnviroTrac personnel mobilized to the site to collect groundwater samples from the five (5) new on-site monitoring wells (MW-4 through MW-7 and DW-1). Prior to the collection of groundwater samples, depth-to-water measurements were collected from the wells using an oil/water interface probe. The TOC elevations of the newly installed wells were surveyed by EnviroTrac personnel and incorporated into the pre-existing TOC elevations for MW-1, MW-2 and MW-3. Groundwater gauging results, casing elevations and corrected water table elevation data is provided in Table 4. Figure 3B is a groundwater elevation contour map depicting the shallow flow direction of the water aquifer on April 27, 2009. As indicated, the flow direction of the shallow water table aquifer was towards the northwest, which is consistent with the previous sampling event.

The groundwater samples were collected in accordance with the procedures outlined in DEP-SOP-001/01 (revised March 2008) and PCS-005. The samples were placed on ice, logged on a chain of custody and submitted to SunLabs for laboratory analysis by EPA Methods 8260 (BTEX/MTBE), 8270 (PAHs) and FL-PRO (TRPHs). Copies of the field calibration (Form FD 9000-8) and groundwater sampling logs (Form FD 9000-24) are included in Appendix F.

Laboratory Analysis (Groundwater Samples)

Laboratory analysis of the samples recovered on April 27, 2009 did not indicate the presence of any contaminants of concern above the established GCTLs in monitoring wells MW-4, MW-5, MW-7 or vertical extent well DW-1. However, the sample recovered from MW-6 reported concentrations of toluene, ethyl-benzene, total xylenes and naphthalene above GCTLs. A tabular summary of the groundwater analytical results is provided on Table 5. Individual contaminant plume maps are included as Figures 5-13. A complete copy of the laboratory analytical report, including the chain of custody, is provided in Appendix G.

Well Gauging (May 2009)

In accordance with Chapter 62-770.600(8)(a)8, EnviroTrac returned to the subject site on May 12, 2009 to obtain a second set of water level measurements. All onsite wells were gauged with an oil/water interface probe. The corrected water table elevations suggest that groundwater continues to flow in a northwest direction. A tabular summary of the water table elevation data is included as Table 4. A groundwater elevation contour map is provided as Figure 3C. Please note that monitoring wells MW-1 and MW-2 were dry during the May 12, 2009 gauging event which is attributable to regional drought conditions. EnviroTrac fully expects that these wells will again prove viable once the water table recharges during the wet season.

Conclusions

Presently, the site is vacant and the gasoline station is no longer active. As documented in the June 2008 UST System Closure Assessment prepared by PPM Consultants, Inc. the former UST system, which consisted of four (4) USTs containing various grades of unleaded gasoline, the associated spill buckets, product lines, and six (6) fuel dispensers were removed on April 1 and 2, 2008. It appears that the historical petroleum-impacted soil reported in the former UST field area and from an area around the fuel dispenser #5 were effectively removed during associated source removal activities.



Soil Contamination

Based on the assessment activities conducted for this SAR, it appears no soil impacts remain onsite. EnviroTrac acknowledges that the soil sample collected during the installation of monitoring MW-3 reported a slight exceedance of the SCTL for total xylenes, but based on the sample collection depth (34.0' BLS) relative to the moisture content in the underlying soils, the slight exceedance is more indicative of groundwater quality conditions in the capillary fringe (approximately 35.0' BLS). This is further substantiated by the groundwater quality sample collected from MW-3 which yielded total xylenes at concentration above its NADC.

Groundwater Contamination

The results of the current groundwater investigation indicate the presence of a dissolved phase groundwater plume underlying the former UST field and extending towards the northwest, consistent with recorded groundwater flow trends. Several of the constituents were detected at concentrations in excess of respective NADCs. Currently, the inferred source well is MW-1 with a total BTEX concentration of 9,620-ug/l. The onsite vertical extent well (DW-1), located downgradient and adjacent to MW-1, suggests that groundwater contamination does not extend below 52.0' (top of the screen interval).

Recommendations

Based on the onsite concentrations of dissolved phase petroleum products' of concern, EnviroTrac recommends the preparation of a Remedial Action Plan (RAP) as the next appropriate course of action. Concurrently, EnviroTrac will install one additional shallow-depth monitoring well (northwest of MW-6) to define the downgradient extent of the groundwater contaminant plume. EnviroTrac would, however, like to schedule a pre-RAP teleconference to discuss these recommendations and potential cleanup strategies. Please feel free to contact us with any questions or comments regarding this submittal in the interim.

Sincerely,

EnviroTrac, Ltd.

Nick Makris Senior Scientist

Attachments

Steve Weeks, Quality Petroleum Corporation

Tais



CERTIFICATION

I certify that I have prepared this Site Assessment Report, May 2009, for Quality Petroleum #111, 110 North Lake Shore Way, Lake Alfred, Polk County, Florida, FDEP Facility Number 53/8623713 with information gathered from qualified personnel who properly evaluated the information submitted. The applicable portions of this technical document and associated work comply with standard professional practices, rules of the FDEP and any other laws and rules governing the profession. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Reviewed and Certified By:

EnviroTrpc, Ltd.

Name

Date .

Date

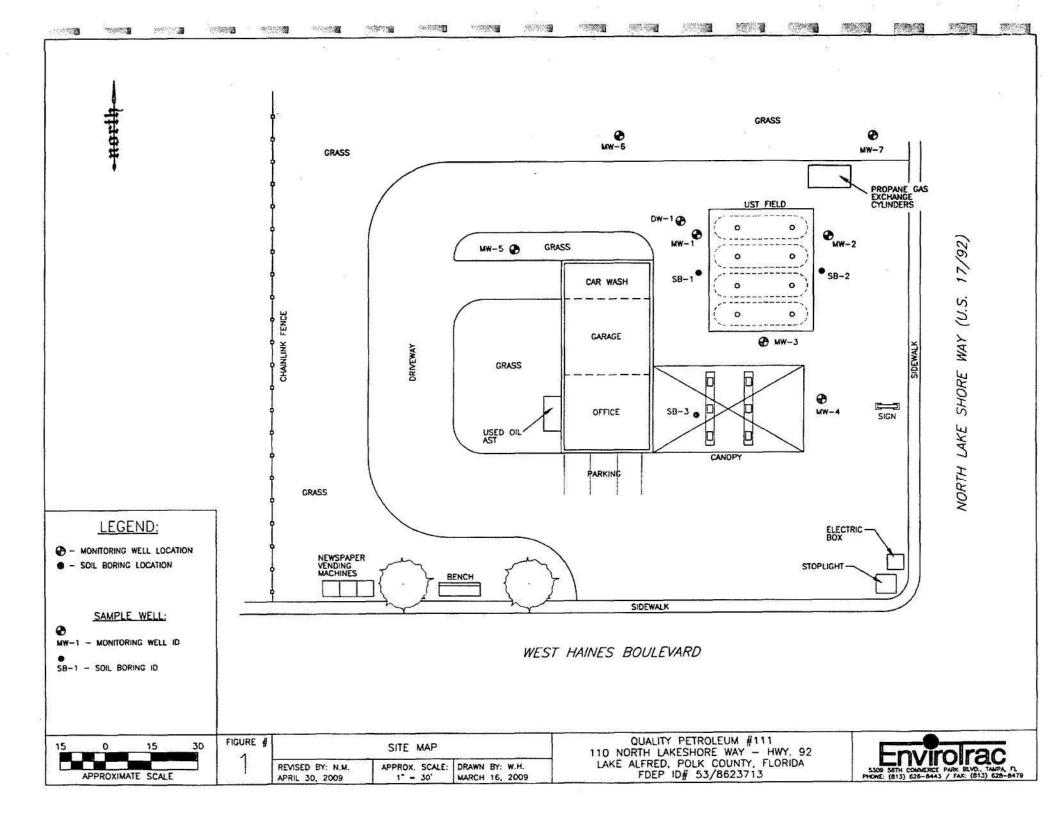
John H. Ferrill, P.G.

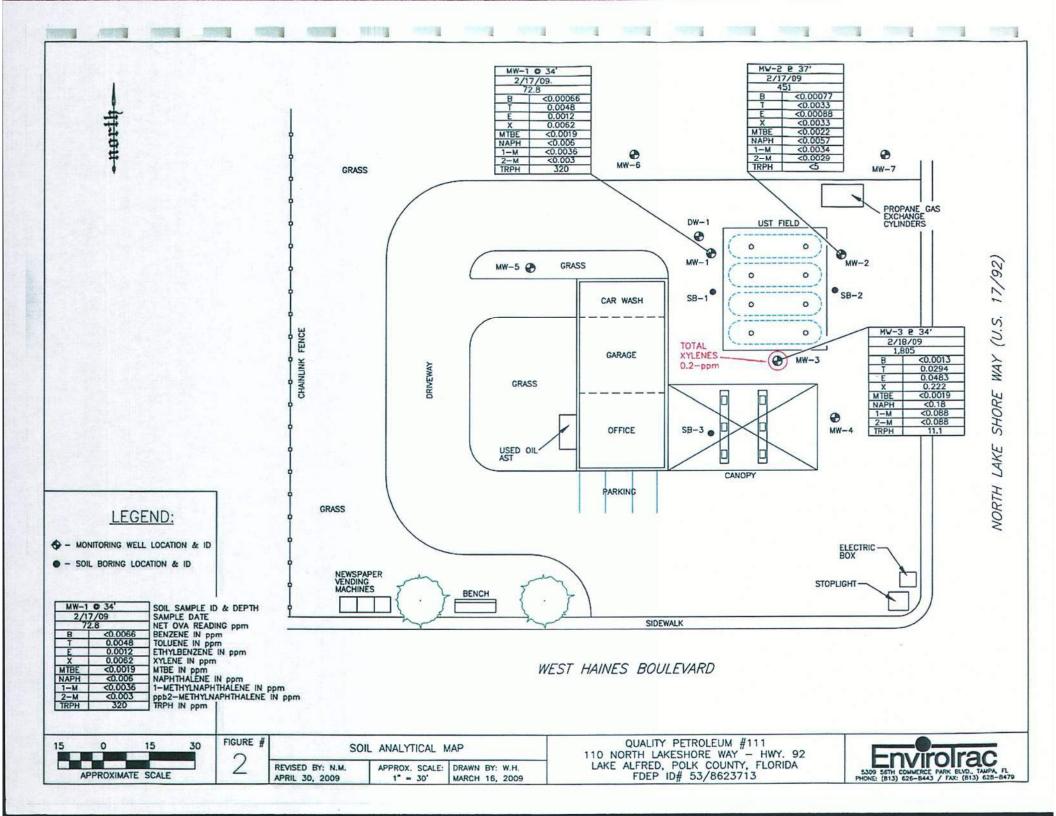
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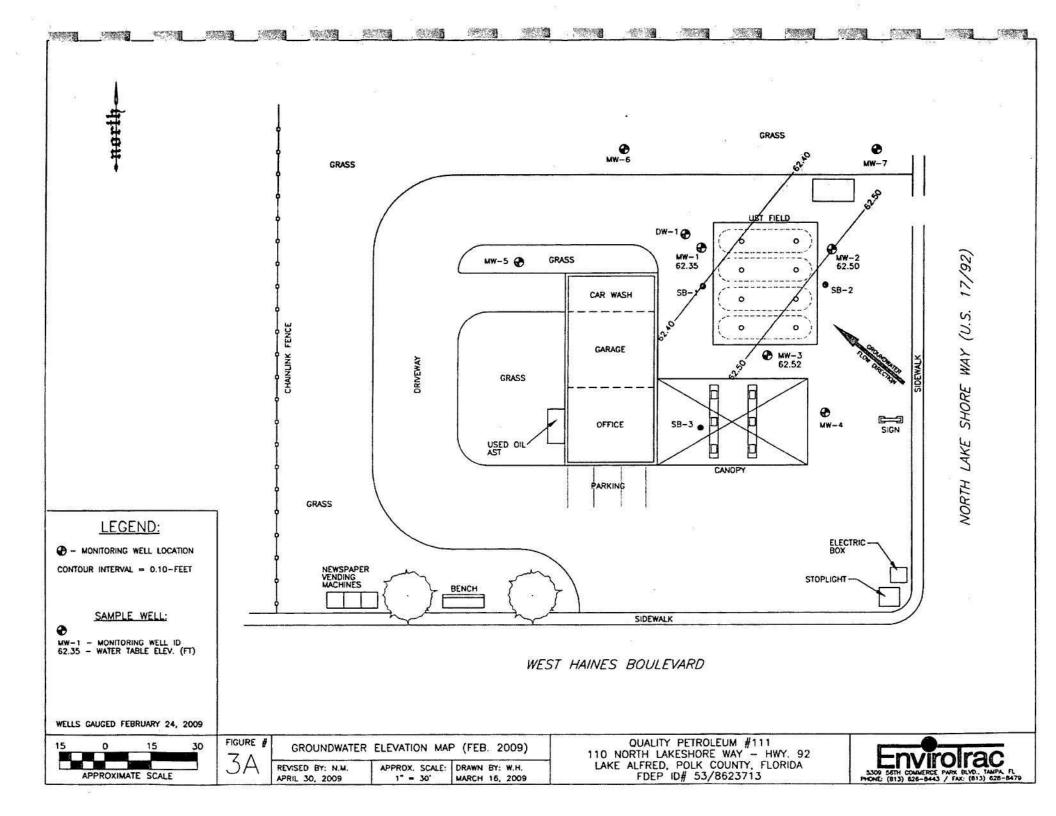


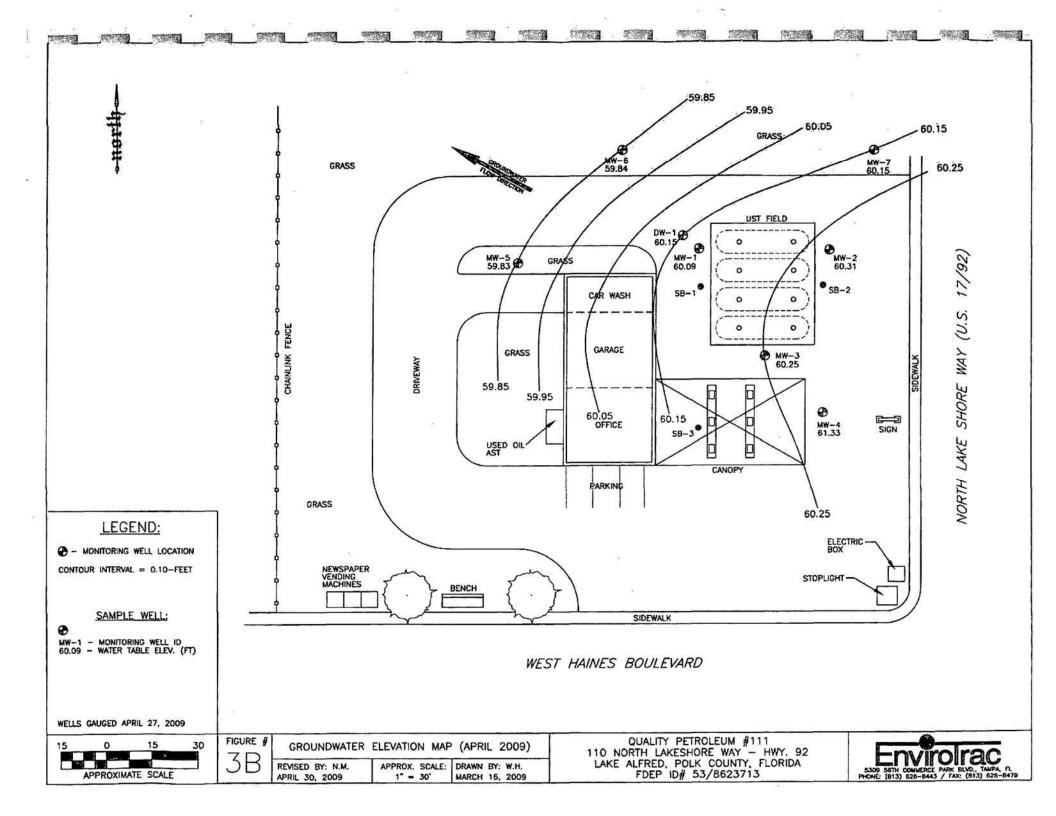
FIGURES

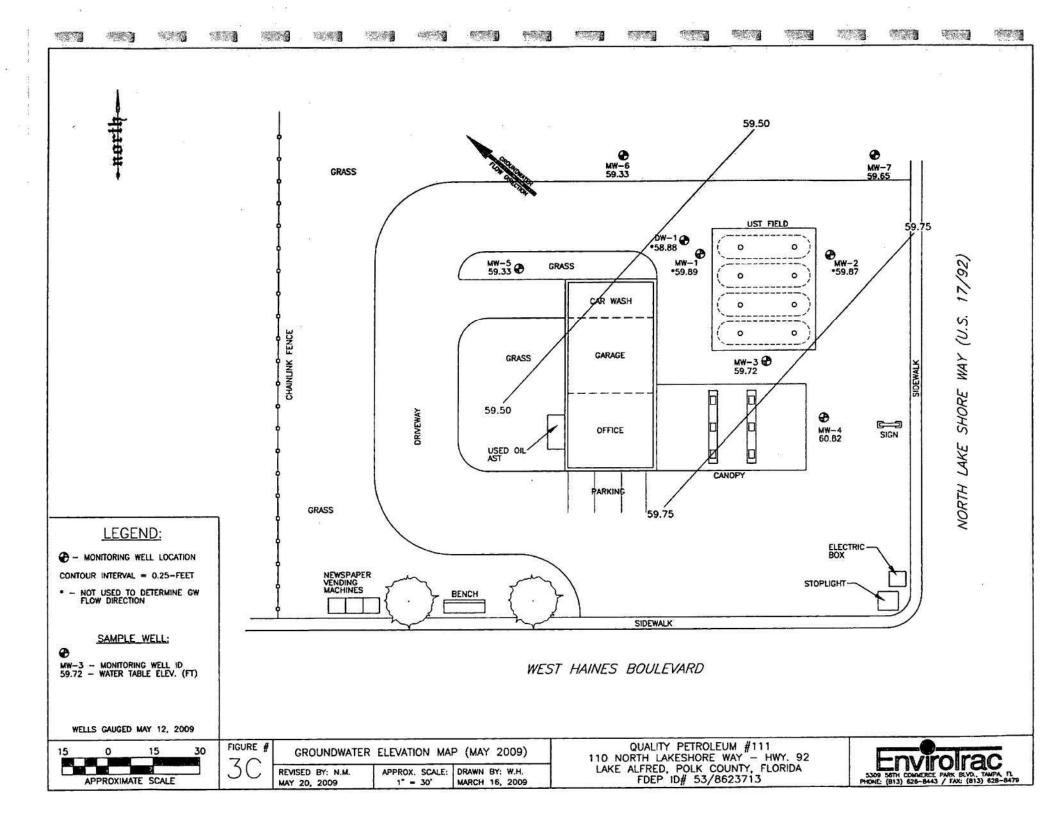
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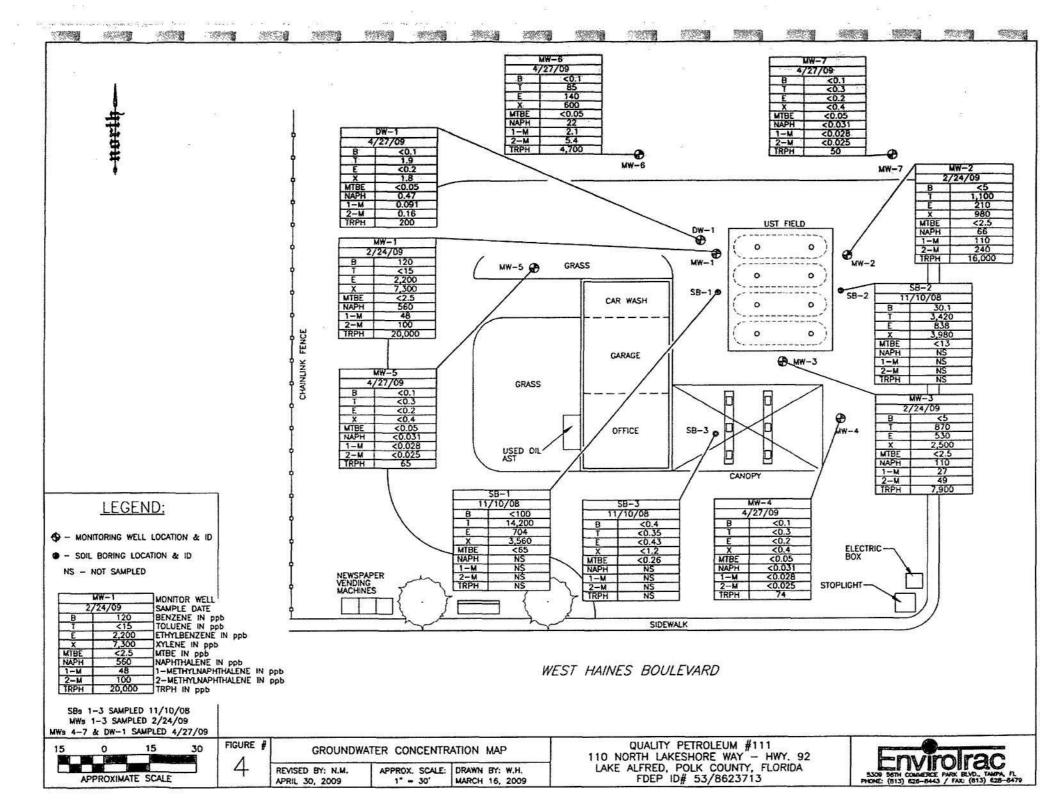


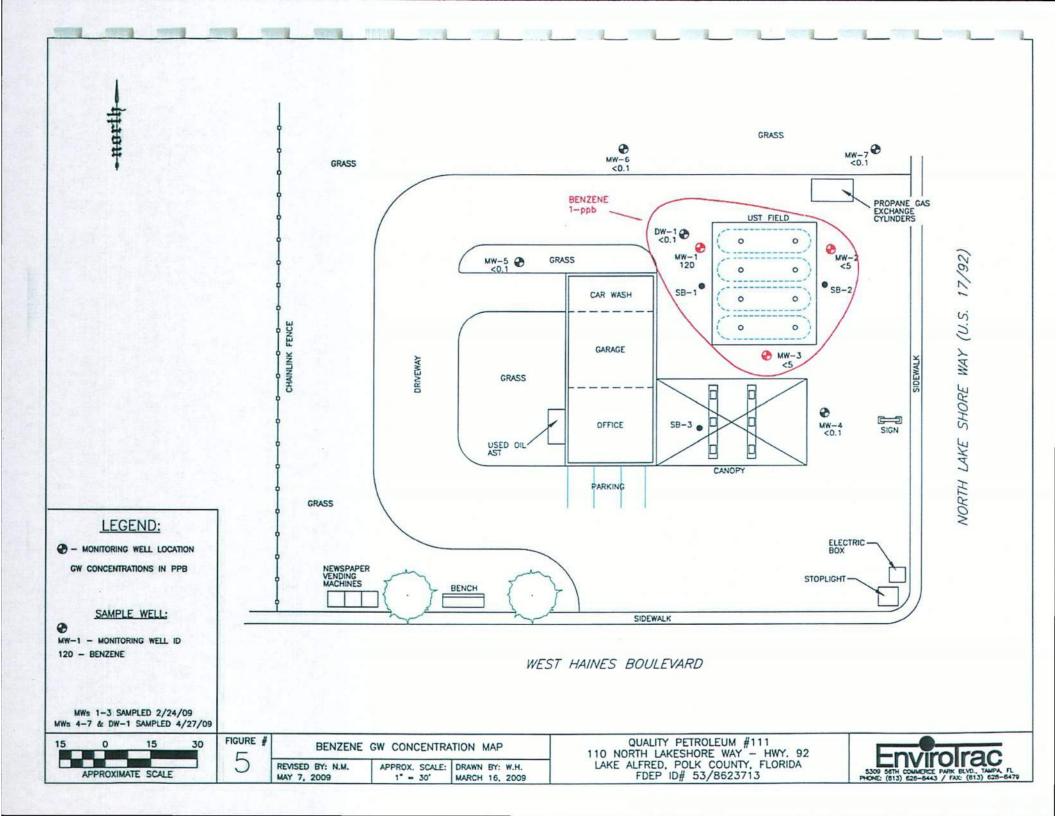


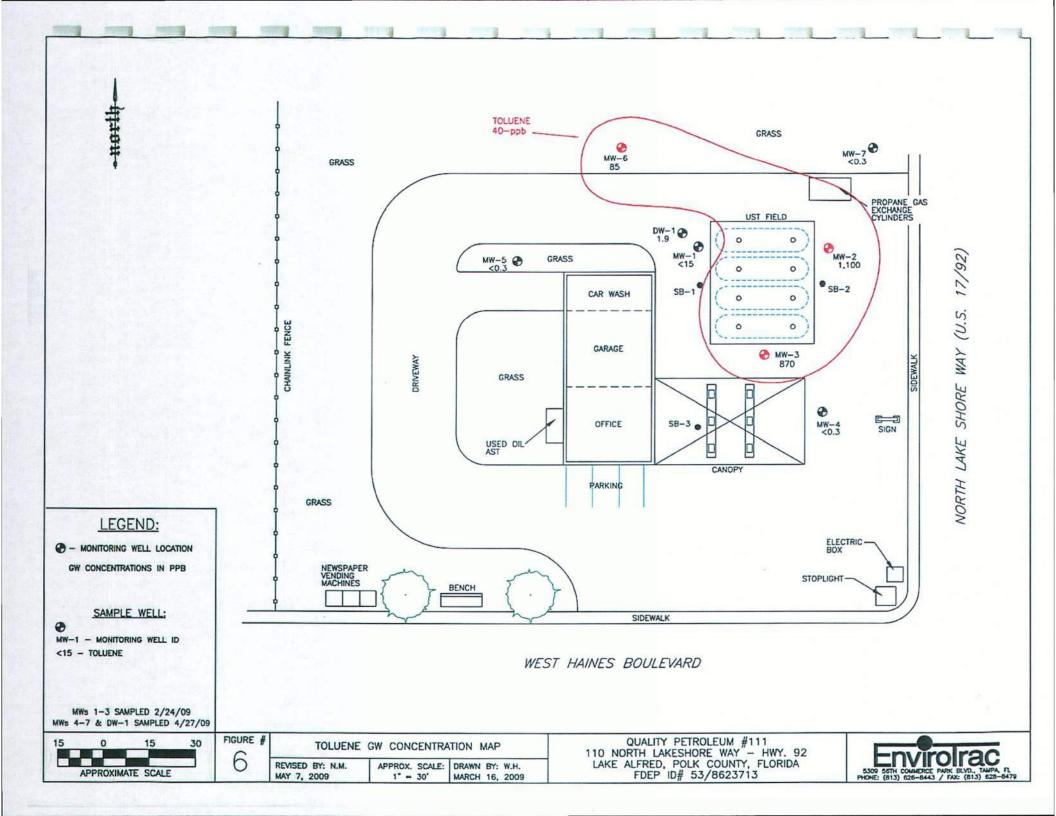


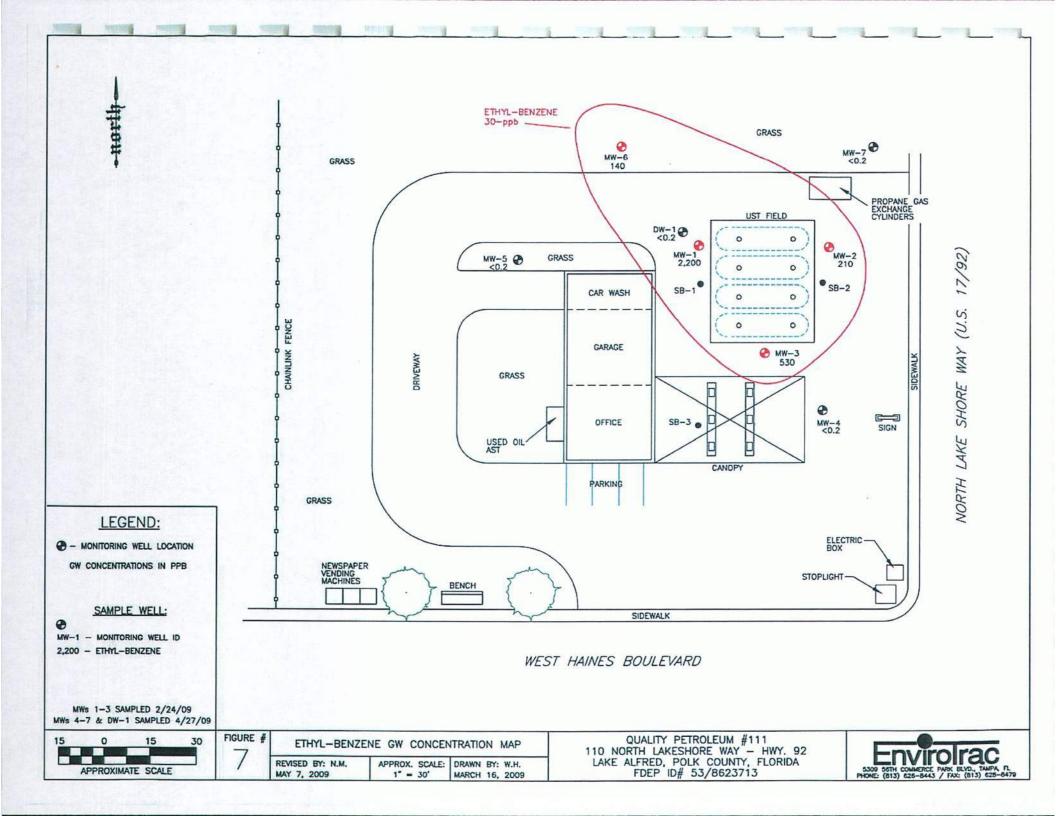


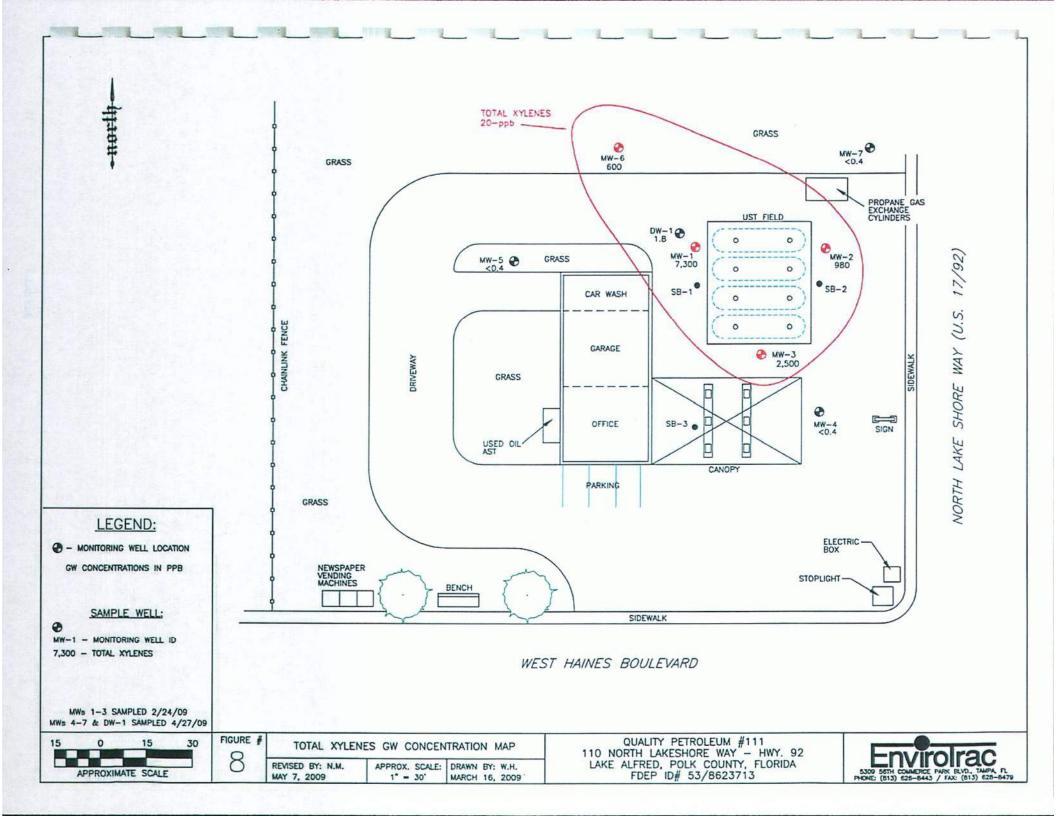


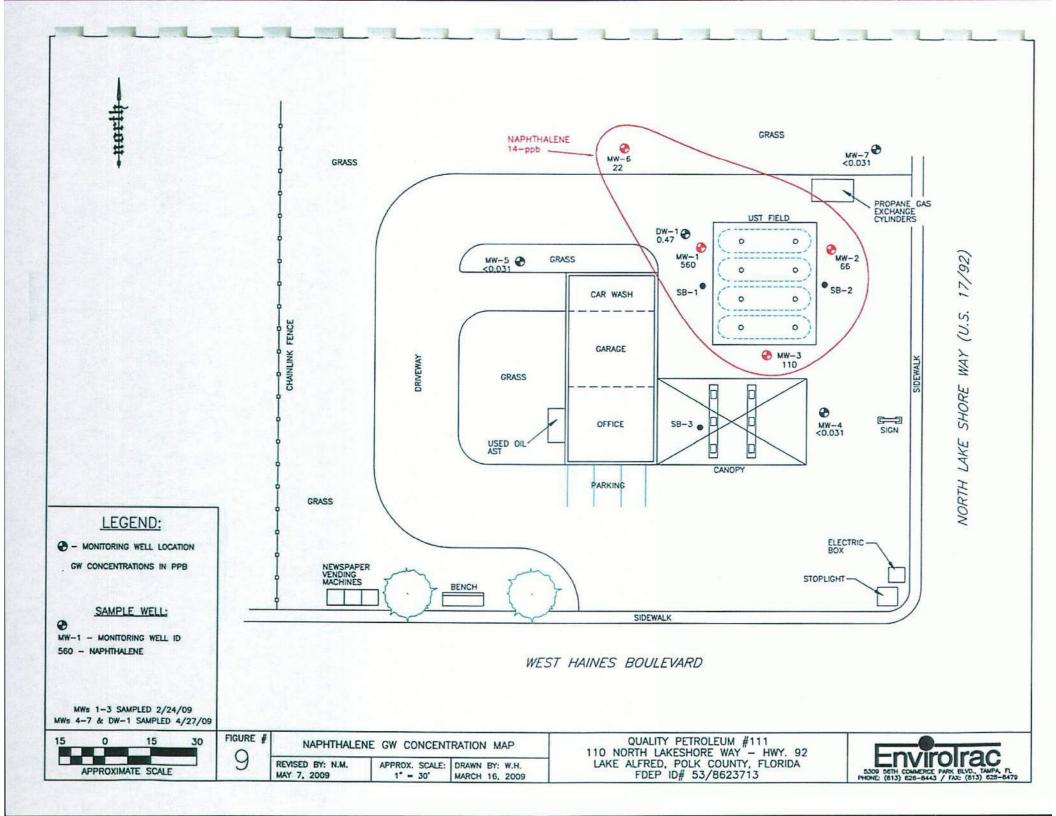


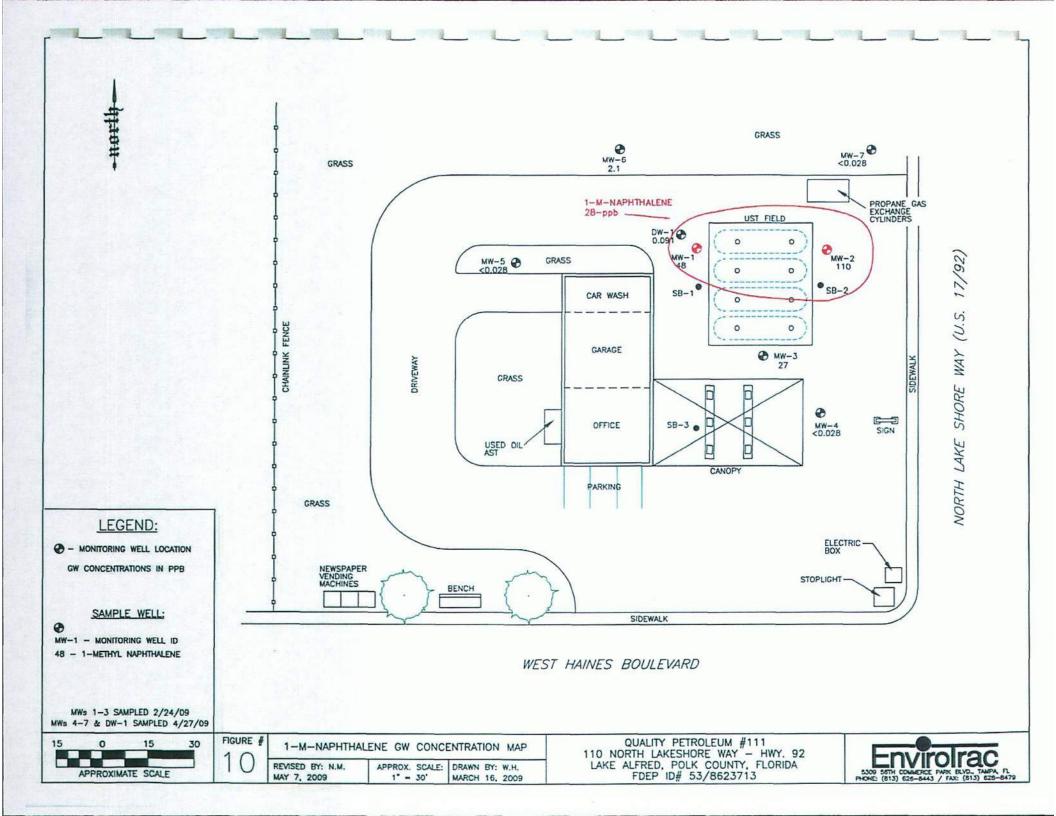


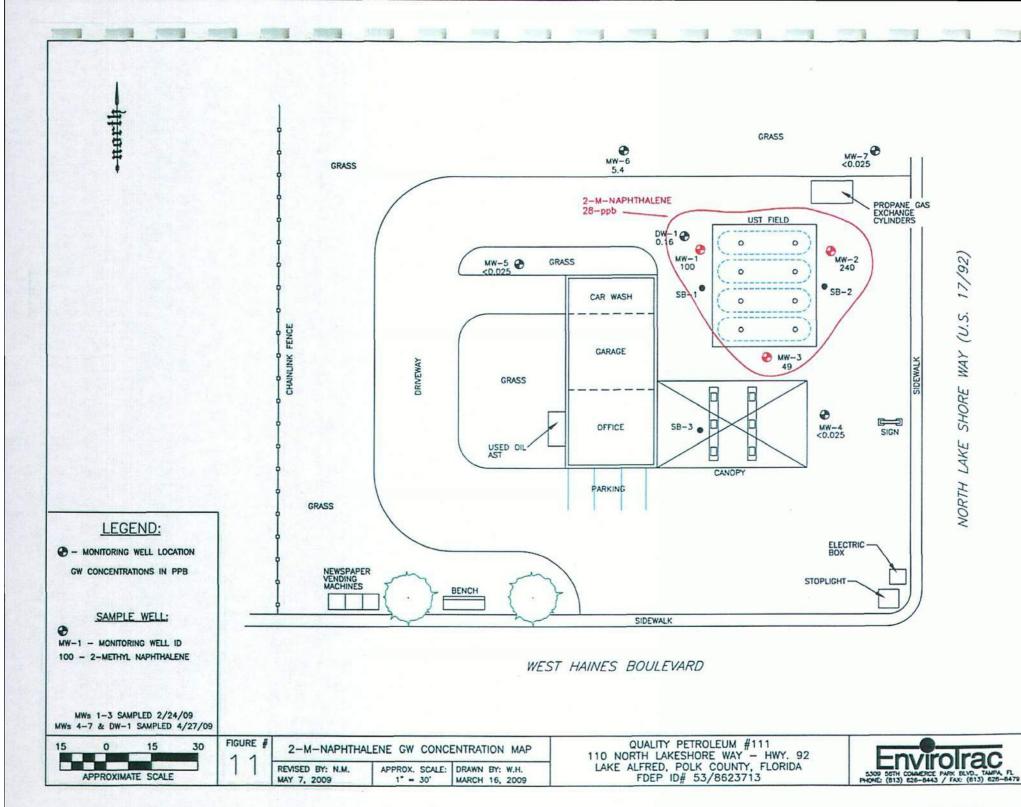












-north GRASS MW-7 € <0.007 MW-6 GRASS < 0.007 PROPANE GAS EXCHANGE CYLINDERS UST FIELD DW-1 0.045 € 0 ₩-2 0.08 MW-1 <0.007 MW-5 <0.007 € GRASS 0 BENZO(B)FLUORANTHENE 0.05-ppb SB-1 CAR WASH SB-2 0 0 CHAINLINK FENCE 0 0 GARAGE ⊕ MW-3 DRIVEWAY <0.007 GRASS SB-3 . OFFICE MW-4 <0.007 SIGN USED OIL CANOPY PARKING GRASS LEGEND: ELECTRIC BOX — MONITORING WELL LOCATION NEWSPAPER VENDING MACHINES GW CONCENTRATIONS IN PPB STOPLIGHT BENCH SAMPLE WELL: SIDEWALK MW-1 - MONITORING WELL ID < 0.007 - BENZO(B)FLUORANTHENE WEST HAINES BOULEVARD MWs 1-3 SAMPLED 2/24/09 MWs 4-7 & DW-1 SAMPLED 4/27/09 FIGURE # 15 30 BENZO(B)FLUORANTHENE GW CONCENTRATION MAP

APPROX. SCALE: DRAWN BY: W.H.

MARCH 16, 2009

1" - 30"

REVISED BY: N.M.

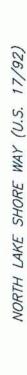
MAY 7, 2009

APPROXIMATE SCALE

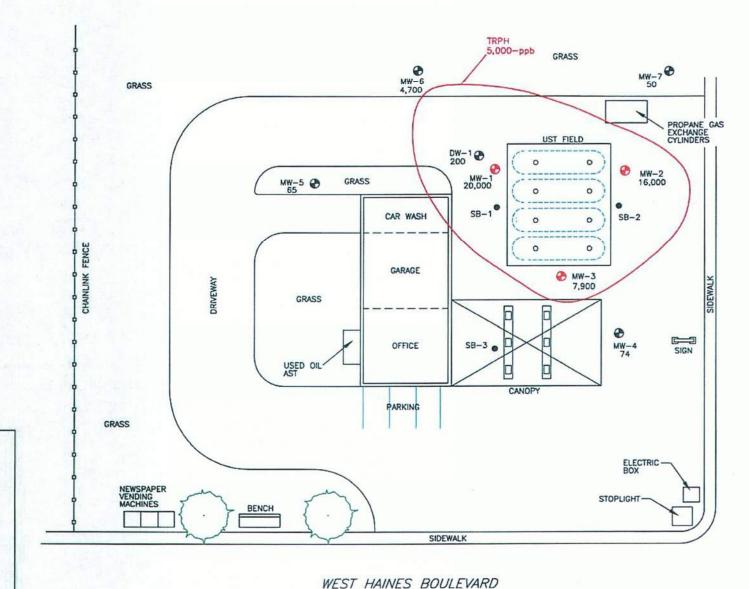
QUALITY PETROLEUM #111
110 NORTH LAKESHORE WAY - HWY. 92
LAKE ALFRED, POLK COUNTY, FLORIDA
FDEP ID# 53/8623713

Envirolrac S309 56TH COMMERCE PARK BLVO., TAMPA, P. PHONE (813) 628-843 / FAX: (813) 628-8479

NORTH LAKE SHORE WAY (U.S.







LEGEND:

- MONITORING WELL LOCATION GW CONCENTRATIONS IN PPB

SAMPLE WELL:

MW-1 - MONITORING WELL ID

MWs 1-3 SAMPLED 2/24/09 MWs 4-7 & DW-1 SAMPLED 4/27/09

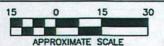


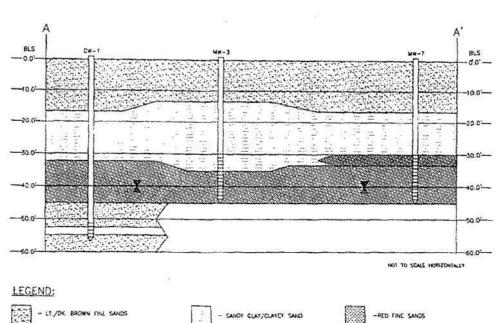
FIGURE #

TRPH GW CONCENTRATION MAP

REVISED BY: N.M. APPROX. SCALE: DRAWN BY: W.H. MAY 7, 2009 1" - 30" MARCH 16, 2009

QUALITY PETROLEUM #111 110 NORTH LAKESHORE WAY - HWY. 92 LAKE ALFRED, POLK COUNTY, FLORIDA FDEP ID# 53/8623713

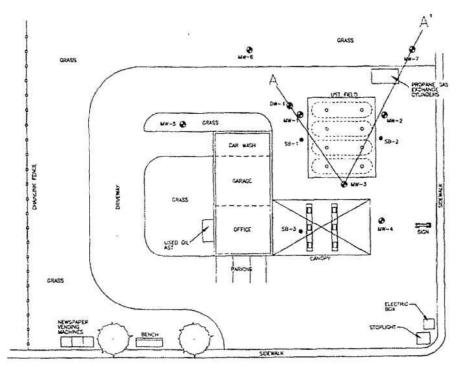
20,000 - TRPHs



- WHITE FINE SANDS

- CREY FINE SANDS

- WATER TABLE INTERFACE, BASED ON OBSERVABLE MOISTURE CONTENT



WEST HAINES BOULEVARD

SITE SPECIFIC LITHOGRAPHIC CROSS-SECTION FIGURE # 14

QUALITY PETROLEUM #111
110 NORTH LAKESHORE WAY - HWY. 92
LAKE ALFRED, POLK COUNTY, FLORIDA
FDEP ID# 53/8623713

Envirolrac

NORTH LAKE SHORE WAY (U.S. 17/92)

TABLES

Facility Name: Quality Petroleum #111 110 N. Lakeshore Way (Hwy 92) Lake Afred, Polk County, FL

	SAMPLE			OVA SC	REENING R	ESULTS	
NO.	DATE COLLECTED	TO WATER	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
SB-1	11/10/08	~36'	1	<10	NA	<10	black fine grained sand with limestone rocks, dry
	1		2	<10	NA NA	<10	brown fine grained sand, dry
	1		3	<10	NA	<10	brown fine grained sand, dry
			4	<10	NA	<10	brown fine grained sand, dry
			5	<10	NA	<10	brown fine grained sand, dry
	i		6	<10	NA	<10	light brown fine grained sand, dry
			7	<10	NA	<10	light brown fine grained sand, dry
			8	<10	NA	<10	light brown fine grained sand, dry
			9	<10	NA NA	<10	light brown fine grained sand, dry
	B		10	<10	NA	<10	light brown fine grained sand, dry
			11	<10	. NA	<10	light brown fine grained sand, dry
			12	<10	NA	<10	light brown fine grained sand, dry
	:		13	<10	NA	<10	light brown fine grained sand, dry
			14	<10	NA	<10	light brown fine grained sand, dry
			15	<10	NA'	<10	light brown fine grained sand, dry
	1		16	<10	NA	<10	light brown fine grained sand, dry
			17	<10	NA	<10	reddish brown sandy clay, dry
	į		. 18	<10	NA	<10	reddish brown sandy clay, dry
			19	<10	NA	<10	reddish brown sandy clay, dry
			20	<10	NA	<10	reddish brown sandy clay, dry
			21	<10	NA	<10	reddish brown sandy clay, dry
			22	<10	NA	<10	reddish brown sandy clay, dry
			23	<10	NA	<10	reddish brown sandy clay, dry
			24	<10	NA	<10	reddish brown clayey sand, dry
	1		25	<10	NA	<10	reddish brown clayey sand, dry
			26	<10	NA	<10	reddish brown clayey sand, dry
			27	<10	NA	<10	reddish brown clayey sand, dry
	1		28	<10	NA	<10	reddish brown clayey sand, dry
			29	<10	NA NA	<10	reddish brown clayey sand, dry
			30	<10	NA	<10	reddish brown clay and medium sand mix, dry
			31	<10	NA	<10	reddish brown clay and medium sand mix, dry
	1		32	<10	NA	<10	reddish brown clay and medium sand mix, dry
			33	<10	NA	<10	reddish brown clay and medium sand mix, dry
			34	<10	NA	<10	reddish brown clay and medium sand mix, moist
			35	<10	NA	<10	reddish brown clay and medium sand mix, wet
	-		36	<10	NA	<10	reddish brown clay and medium sand mix, saturated
			37	<10	NA	<10	reddish brown clay and medium sand mix, saturated
	1		38	<10	NA	<10	reddish brown clay and medium sand mix, saturated
			39	<10	NA NA	<10	White medium grained sand, saturated
	1		40	<10	NA	<10	White medium grained sand, saturated

Facility Name: Quality Petroleum #111 110 N. Lakeshore Way (Hwy 92) Lake Afred, Polk County, FL

	SAMPLE			OVA SCREENING RESULTS				
BORING NO.	DATE	DEPTH TO WATER	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS	
SB-3	11/10/08	~36'	1	<10	NA	<10	Dark brown fine grained sand, dry	
			. 2	<10	NA	<10	Dark brown fine grained sand, dry	
	7 3		3	<10	NA	<10	Dark brown fine grained sand, dry	
			4	<10	NA	<10	Light brown fine grained sand, dry	
			5	<10	NA	<10	Light brown fine grained sand, dry	
			6	<10	NA	<10	Light brown fine grained sand, dry	
			7	<10	NA	<10	Light brown fine grained sand, dry	
	1		8	<10	NA	<10	Light brown fine grained sand, dry	
	E S		9	<10	NA	<10	Light brown fine grained sand, dry	
			10	<10	NA	<10	Light brown fine grained sand, dry	
	a .		11	<10	NA	<10	Light brown fine grained sand, dry	
			12	<10	NA	<10	Light brown fine grained sand, dry	
0			13	<10	NA	<10	Light brown fine grained sand, dry	
			14	<10	NA	<10	Light brown fine grained sand, dry	
			15	<10	NA	<10	reddish brown sandy clay, dry	
			16	<10	NA	<10	reddish brown sandy clay, dry	
	1		17	<10	NA	<10	reddish brown sandy clay, dry	
			: 18	<10	NA	<10	reddish brown sandy clay, dry	
			19	<10	NA	<10	reddish brown sandy clay, dry	
			20	<10	NA	<10	reddish brown sandy clay, dry	
			21	<10	NA	<10	reddish brown sandy clay, dry	
			22	<10	NA	<10	reddish brown sandy clay, dry	
			23	<10	NA	<10	reddish brown sandy clay, dry	
			. 24	<10	NA	<10	reddish brown clayey sand, dry	
	į į		25	<10	NA	<10	reddish brown clayey sand, dry	
	-		26	NM	NA	NM	cores stuck, could not recover soil	
			27	NM	NA	NM	cores stuck, could not recover soil	
			28	NM	NA	NM	cores stuck, could not recover soil	
			29	NM	NA	NM	cores stuck, could not recover soil	
			30	NM	NA	NM	cores stuck, could not recover soil	
	r.		31	NM	NA	NM	cores stuck, could not recover soil	
	1		32	NM	NA	NM	cores stuck, could not recover soil	
	i		33	NM	NA	NM	cores stuck, could not recover soil	
			34	NM	NA	NM	cores stuck, could not recover soil	
			35	NM	NA	NM	cores stuck, could not recover soil	
			36	NM	NA	NM	cores stuck, could not recover soil	
	1		37	NM	NA .	NM	cores stuck, could not recover soil	
			38	NM	NA	NM	cores stuck, could not recover soil	
			39	NM	NA	NM	cores stuck, could not recover soil	
			40	NM		* *** **** (* ***********	and the same of th	
0	2 2 3 3 4		to commence and a con-	The Part of the Pa	NA .	NM	cores stuck, could not recover soil	

Indicates soil sample collected for laboratory analysis 110 Tables 05.09

Facility Name: Quality Petroleum #111 110 N. Lakeshore Way (Hwy 92) Lake Afred, Polk County, FL

	SAMPLE			OVA SCREENING RESULTS				
NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS	
MW-1	02/17/09	~35.5*	1	<10	NA	<10	Dark brown fine grained sand, dry	
			2	<10	NA	<10	Dark brown fine grained sand, dry	
			3	<10	NA	<10	Dark brown fine grained sand, dry	
			4	<10	NA	<10	Dark brown fine grained sand, dry	
	i i		5	<10	NA	<10	Dark brown fine grained sand, dry	
	The state of the s		6	<10	NA	<10	Dark brown fine grained sand, dry	
8	a constant		7	<10	NA	<10	Dark brown fine grained sand, dry	
			8	<10	NA	<10	Dark brown fine grained sand, dry	
	1		9	<10	NA	<10	Dark brown fine grained sand, dry	
	1		10	<10	NA	<10	Dark brown fine grained sand, dry	
			11	<10	NA	<10	Dark brown fine grained sand, dry	
			. 12	<10	NA	<10	Dark brown fine grained sand, dry	
			13	<10	NA	<10	Dark brown fine grained sand, dry	
			14	<10	NA NA	<10	Dark brown fine grained sand, dry	
			15	<10	NA	<10	Dark brown fine grained sand, dry	
			16	<10	NA	<10	Dark brown fine grained sand, dry	
	1		17	<10	NA NA	<10	Dark brown fine grained sand, dry	
			18	<10	NA	<10	Dark brown fine grained sand, dry	
	1		19	<10	NA	<10	Dark brown fine grained sand, dry	
			20	<10	NA	<10	Dark brown fine grained sand, dry	
	1		21	<10	NA _	<10	Reddish orange clayey sand, dry	
	İ		22	<10	NA _	<10	Reddish sandy clay, dry	
	1		23	<10	NA	<10	Reddish sandy clay, dry	
			. 24	<10	NA .	<10	Reddish sandy clay, dry	
	i		25	<10	NA	<10	Reddish sandy clay, dry	
	1	2	. 26	<10	NA	<10	Reddish sandy clay, dry	
	1		27	<10	NA NA	<10	Reddish sandy clay, dry	
			28	<10	NA _	<10	Reddish sandy clay, dry	
			. 29	<10	NA	<10	Reddish sandy clay, dry	
			30	<10	NA	<10	Reddish sandy clay, dry	
			31	<10	NA	<10	Reddish sandy clay, dry	
			32	<10	NA NA	<10	Reddish sandy clay, dry	
			33	<10	NA	<10	Reddish sandy clay, dry	
			34	73	NA	73	Reddish sandy clay, dry	
			35	NM .	NA_	NM	Reddish sandy clay, moist	
	and the second		36	3072	NA	3072	Reddish sandy clay, saturated	
			37	NM	NA	NM	Reddish sandy clay, saturated	
	1		38	3070	NA	3070	Reddish sandy clay, saturated	
		1	39	NM	NA	NM	Reddish sandy clay, saturated	
	i	1	40	3002	NA	3002	Reddish sandy clay, saturated	

Indicates soil sample collected for laboratory analysis

Facility Name: Quality Petroleum #111 110 N. Lakeshore Way (Hwy 92) Lake Afred, Polk County, FL

89	SAMPLE			OVA SCREENING RESULTS				
NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS	
MW-2	02/17/09	~38.5	1	<10	NA	<10	Asphalt base, dry	
			2	<10	NA	<10	Sub base material, dry	
			3	<10	NA	<10	Dark brown fine grained sand, dry	
			4	<10	NA	<10	Dark brown fine grained sand, dry	
			5	<10	NA	<10	Dark brown fine grained sand, dry	
			6	<10	NA	<10	Dark brown fine grained sand, dry	
			7	<10	NA	<10	Light brown fine grained sand, dry	
			8	<10	NA	<10	Light brown fine grained sand, dry	
			9	<10	NA	<10	Light brown fine grained sand, dry	
			10	<10	NA	<10	Light brown fine grained sand, dry	
			11	<10	NA	<10	Light brown fine grained sand, dry	
	į į		12	<10	NA	<10	Light brown fine grained sand, dry	
	1		13	<10	NA	<10	Light brown fine grained sand, dry	
			14	<10	NA	<10	Light brown fine grained sand, dry	
	i . '		15	<10	NA	<10	Reddish clayey sand, dry	
			16	<10	NA	<10	Reddish clayey sand, dry	
			17	<10	NA	<10	Reddish clayey sand, dry	
			18	<10	NA	<10	Reddish sandy clay, dry	
			19	<10	NA	<10	Reddish sandy clay, dry	
			20	<10	NA	<10	Reddish sandy clay, dry	
			21	<10	NA NA	<10	Reddish sandy clay, dry	
			22	<10	NA .	<10	Reddish sandy clay, dry	
			23	<10	NA	<10	Reddish sandy clay, dry	
			. 24	<10	NA	<10	Reddish sandy clay, dry	
			25	<10	NA	<10	Reddish sandy clay, dry	
	1		26	<10	NA	<10	Reddish clayey sand, dry	
			27	<10	NA	<10	Reddish clayey sand, dry	
8			28	<10	NA	<10	Reddish clayey sand, dry	
	100		29	<10	NA	<10	Reddish clayey sand, dry	
	-		30	<10	NA	<10	Reddish clayey sand, moist	
			31	<10	NA	<10	Reddish clayey sand, moist	
	1		32	<10	NA .	<10	Tan sand, moist	
			33	<10	NA .	<10	Tan sand, moist	
	1		34	<10	NA	<10	Light tan coarse sand, moist	
	-		35	<10	NA .	<10	Light tan coarse sand, moist	
	-		36	69	NA	69	Light tan coarse sand, moist	
*//	ļ		37	451	NA	451	Light tan coarse sand, moist	
	1		. 38	NM	NA NA	NM	White coarse sand, moist	
			39	NM	NA .	NM	White coarse sand, saturated	
			40	NM	NA	NM	White coarse sand, saturated	

Indicates soil sample collected for laboratory analysis
 110 Tables 05.09

Facility Name: Quality Petroleum #111 110 N. Lakeshore Way (Hwy 92) Lake Afred, Polk County, FL

	SAMPLE			OVA SC	REENING R	ESULTS	2-min 2-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
MW-3	02/18/09	~38.5	111	<10	NA	<10	Asphalt base, dry
			2	<10	NA	<10	Sub base material, dry
			3	<10	NA	<10	Dark brown fine grained sand, dry
	: 1		4	<10	NA	<10	Dark brown fine grained sand, dry
	i		. 5	<10	NA	<10	Dark brown fine grained sand, dry
			6	<10	NA	<10	Dark brown fine grained sand, dry
			7	<10	NA	<10	Dark brown fine grained sand, dry
	1		8	<10	NA	<10	Dark brown fine grained sand, dry
	1		9	<10	NA	<10	Light brown fine grained sand, dry
	1 1		10	<10	NA	<10	Light brown fine grained sand, dry
			11	<10	NA	<10	Light brown fine grained sand, dry
			12	<10	NA	<10	Light brown fine grained sand, dry
	1		13	<10	NA	<10	Light brown fine grained sand, dry
	1		14	<10	NA	<10	Light brown fine grained sand, dry
	1		15	<10	NA	<10	Reddish clayey sand, dry
			16	<10	NA	<10	Reddish sandy clay, dry
	1		17	<10	NA .	<10	Reddish sandy clay, dry
			18	<10	NA	<10	Reddish sandy clay, dry
	and the same of th		19	<10	NA	<10	Reddish sandy clay, dry
	and the same of th		20	<10	NA .	<10	Reddish sandy clay, dry
			21	<10	NA	<10	Reddish sandy clay, dry
	1		22	<10	NA	<10	Reddish sandy clay, dry
	1		23	<10	NA .	<10	Reddish sandy clay, dry
	1		24	<10	NA NA	<10	Reddish sandy clay, dry
			25	<10	NA .	<10	Reddish sandy clay, dry
			26	<10	NA	<10	Reddish sandy clay, dry
	1		27	<10	NA	<10	Reddish sandy clay, dry
	1		28	<10	NA .	<10	Reddish sandy clay, dry
			29	<10	NA	<10	Reddish sandy clay, dry
			30	<10	NA	<10	Grey sand/reddish sandy clay, dry
			31	<10	NA .	<10	Grey sand/reddish sandy clay, dry
	3		32	178	NA.	178	Grey sand/reddish sandy clay, dry
			33	NM	NA .	NM	Grey sand/reddish sandy clay, dry
			34	1805	NA	1805	Grey sand/reddish sandy clay, dry
			\$4.50 material maps and	NM 1070	NA	NM	Grey sand/reddish sandy clay, moist
			36	1872	NA .	1872	White coarse sand, moist
	i		37	NM 3425	NA NA	NM 2125	White coarse sand, moist
			39	3125	. NA	3125	White coarse sand, moist
	1		40	NM 2867	NA NA	NM 2867	White coarse sand, saturated
	1		41	NM	NA NA	and the second second second second	White coarse sand, saturated
	3		41	1939	NA	NM 1939	White coarse sand, saturated
			43	1939 NM	the second will be	at metal transports	Reddish/white coarse sand, saturated
	15		43	NM NM	NA NA	NM	White coarse sand, saturated
	162		45	NM NM	NA NA	NM NM	White coarse sand, saturated White coarse sand, saturated
			45	INIVI	- '*'	INIV	vvinte coalse sand, saturated

^{*.} Indicates soil sample collected for laboratory analysis 110 Tables 05.09

Facility Name: Quality Petroleum #111 110 N. Lakeshore Way (Hwy 92) Lake Afred, Polk County, FL

	SAMPLE	2 8		OVA SC	REENING R	ESULTS	
BORING NO.	DATE	DEPTH TO WATER	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
MW-4	04/21/09	-39'	. 1	<10	NA	<10	Dark brown fine grained sand, dry
			2	<10	NA	<10	Light brown fine grained sand, dry
	i		3	<10	NA	<10	Light brown fine grained sand, dry
	i		4	<10	NA	<10	Light brown fine grained sand, dry
			5	<10	NA	<10	Light brown fine grained sand, dry
			. 6-8	<10	NA	<10	Light brown fine grained sand, dry
			8-10	<10	NA	<10	Light brown fine grained sand, dry
			10-12	<10	NA	<10	Light brown fine grained sand, dry
	1		12-14	<10	NA	<10	Light brown fine grained sand, dry
			14-16	<10	NA	<10	Light brown fine grained sand, dry
			16-18	<10	NA	<10	Light brown fine grained sand, dry
			18-20	<10	NA	<10	Reddish clayey sand, dry
			20-22	<10	NA	<10	Reddish clayey sand, dry
			22-24	<10	NA	<10	Reddish clayey sand, dry
			24-26	<10	NA	<10	Reddish clayey sand, dry
			26-28	<10	NA	<10	Reddish clayey sand, dry
			28-30	<10	NA	<10	Reddish/tan clayey sand, dry
			30-32	<10	NA	<10	Reddish/tan clayey sand, dry
			32-34	<10	NA	<10	Reddish/tan clayey sand, dry
			34-36	<10	NA	<10	Tan fine to medium sand , dry
			36-38	<10	NA	<10	Tan fine to medium sand , dry
			38-40	<10	NA NA	<10	White fine to medium sand , moist
			40-42	<10	NA	<10	White fine to medium sand , saturated
	1		42-44	<10	NA	<10	White fine to medium sand , saturated
	40.4		45	<10	NA	<10	White fine to medium sand , saturated
MW-5	04/23/09	-39	1	<10	NA	<10	Dark brown fine grained sand, dry
	1		2	<10	NA	<10	Dark brown fine grained sand, dry
			3	<10	NA	<10	Dark brown fine grained sand, dry
			4	<10	NA	<10	Light brown fine grained sand, dry
			5	<10	NA NA	<10	Light brown fine grained sand, dry
	į.		6-8	<10	NA	<10	Light brown fine grained sand, dry
			8-10	<10	NA NA	<10	Light brown fine grained sand, dry
	!		10-12	<10	NA	<10	Light brown fine grained sand, dry
	30		12-14	<10	NA	<10	Light brown fine grained sand, dry
	i t		14-16	<10	NA .	<10	Orange fine grained sand, dry
	Ī		16-18	<10	NA NA	<10	Orange clayey sand, dry
	1		18-20	<10	NA	<10	Reddish clayey sand, dry
	And the second		20-22	<10	. NA	<10	Reddish clayey sand, dry
			22-24	<10	NA	<10	Reddish clayey sand, dry
			24-26	<10	NA	<10	Reddish clayey sand, dry
	1		26-28	<10	NA	<10	Reddish fine-med. Sand/trace clay, dry
	į		28-30	<10	NA NA	<10	Reddish fine-med. Sand/trace clay, dry
	1		30-32 32-34	<10 <10	NA NA	<10	Reddish fine-med. Sand/trace clay, dry
			34-36	<10	NA NA	<10 <10	Light red fine-med. Sand/trace clay, dry
			36-38	<10	NA NA	<10	White fine to medium sand , dry White fine to medium sand , dry
	1		: 38-40	<10	NA NA	<10	White fine to medium sand , moist
	1		40-42	<10	NA NA	<10	White fine to medium sand, moist White fine to medium sand, saturated
	1		42-44	<10	NA NA	<10	White fine to medium sand, saturated
50			45	<10	NA NA	<10	White fine to medium sand, saturated
		1	1	110	140		Trinic inic to incoluin salu , saturated

Indicates soil sample collected for laboratory analysis
 110 Tables 05.09

Facility Name: Quality Petroleum #111 110 N. Lakeshore Way (Hwy 92) Lake Afred, Polk County, FL

	SAMPLE			OVA SC	REENING R	ESULTS	
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
MW-6	04/22/09	~39'	1	<10	NA	<10	Light brown fine grained sand, dry
			2	<10	NA	<10	Light brown fine grained sand, dry
	1		3	<10	NA	<10	Light brown fine grained sand, dry
	1		4	<10	NA	<10	Light brown fine grained sand, dry
			5	<10	NA	<10	Light brown fine grained sand, dry
			6-8	<10	NA	<10	Light brown fine grained sand, dry
			8-10	<10	NA	<10	Light brown fine grained sand, dry
	1		10-12	<10	NA	<10	Light brown fine grained sand, dry
	į.		12-14	<10	NA	<10	Light brown fine grained sand, dry
			14-16	<10	NA	<10	Orange fine grained sand, dry
	-		16-18	<10	NA	<10	Orange fine grained sand, dry
			18-20	<10	NA	<10	Orange fine grained sand, dry
	1		20-22	<10	NA	<10	Reddish clayey sand, dry
			22-24	<10	NA	<10	Reddish clayey sand, dry
			24-26	<10	NA	<10	Light red clayey sand, dry
			26-28	<10	NA	<10	Reddish fine-med. Sand/trace clay, dry
			28-30	<10	NA	<10	Reddish fine-med. Sand/trace clay, dry
			30-32	<10	NA	<10	Reddish fine-med. Sand/trace clay, dry
	i		32-34	<10	NA	<10	White fine to medium sand/trace clay , dry
			34-36	<10	NA	<10	Tan fine to medium sand , dry
9			36-38	<10	NA	<10	White fine to medium sand , dry
			38-40	<10	NA	<10	White fine to medium sand , moist
			40-42	207	NA	207	White fine to medium sand, saturated
			42-44	75	NA	75	Red orange fine to medium sand , saturated
	i mar a de		45	10	NA	10	Red orange fine to medium sand , saturated
MW-7	04/21/09	-39	1	<10	NA	<10	Light brown fine grained sand, dry
			2	<10	NA	<10	Light brown fine grained sand, dry
			3	<10	NA	<10	Light brown fine grained sand, dry
			4	<10	NA	<10	Light brown fine grained sand, dry
			5	<10	NA	<10	Light brown fine grained sand, dry
			6-8	<10	NA	<10	Light brown fine grained sand, dry
			8-10	<10	NA	<10	Light brown fine grained sand, dry
			10-12	<10	NA	<10	Light brown fine grained sand, dry
			12-14	<10	NA	<10	Dark brown fine grained sand, dry
			14-16	<10	NA	<10	Dark brown fine grained sand, dry
			16-18	<10	NA	<10	Dark brown fine grained sand, dry
	1		18-20	<10	NA	<10	Dark brown clayey sand, dry
			20-22	<10	NA	<10	Reddish clayey sand, dry
	•		22-24	<10	NA	<10	Reddish clayey sand, dry
	1		24-26	<10	NA	<10	Reddish clayey sand, dry
	1		26-28	<10	NA	<10	Reddish clayey sand, dry
			28-30	<10	NA	<10	Reddish clayey sand, dry
	1	41	30-32	<10	NA	<10	Reddish fine-med Sand, dry
	1		32-34	<10	NA	<10	Reddish fine-med. Sand, dry
	1	0 0 0 0	34-36	<10	NA	<10	White fine to medium sand , dry
	1		36-38	<10	NA	<10	White fine to medium sand , dry
	1		38-40	<10	NA	<10	White fine to medium sand , moist
	i		40-42	<10	NA	<10	White fine to medium sand , saturated
		Accelerate p	42-44	<10	NA	<10	White fine to medium sand , saturated
			45	<10	NA	<10	White fine to medium sand , saturated
3		Christian communication	42-44	<10	NA _	<10	White fine to medium sand , saturated

Indicates soil sample collected for laboratory analysis
 110 Tables 05.09

Facility Name: Quality Petroleum #111 110 N. Lakeshore Way (Hwy 92) Lake Afred, Polk County, FL

	ESULTS	REENING RI	OVA SC		SAMPLE		
COMMENTS	NET READING (ppm)	CARBON FILTERED (ppm)	TOTAL READING (ppm)	SAMPLE INTERVAL (FBLS)	DEPTH TO WATER	DATE COLLECTED	BORING NO.
Dk brown fine grained sand/clay, dry	<10	NA	<10	1	~39'	04/20/09	DW-1
Dark brown fine grained sand, dry	<10	NA	<10	2			
Light brown fine grained sand, dry	<10	NA	<10	3		1	
Light brown fine grained sand, dry	<10	NA	<10	4		į	
Light brown fine grained sand, dry	<10	NA	<10	5		i i	
Light brown fine grained sand, dry	<10	NA	<10	6-8			
Light brown fine grained sand, dry	<10	NA	<10	8-10		1	
Light brown fine grained sand, dry	<10	NA	<10	10-12			
Dark brown fine grained sand, dry	<10	NA	<10	12-14			
Dark brown fine grained sand, dry	<10	NA	<10	14-16			
Light brown clayey sand, dry	<10	NA	<10	16-18		į	
Reddish clayey sand, dry	<10	NA	<10	18-20		i i	
Reddish clayey sand, dry	<10	NA	<10	20-22		1	
Light brown sandy clay, dry	<10	NA	<10	22-24		1	
Reddish clayey sand, dry	<10	NA	<10	24-26			
Reddish clayey sand, dry	<10	NA	<10	26-28			
Lt red medium sand/trace clay, dry	<10	NA	<10	28-30			
Lt red medium sand/trace clay, dry	<10	NA	<10	30-32			
Reddish fine-med. Sand, dry	<10	NA	<10	32-34			
White fine sand , dry	<10	NA	<10	34-36		li	
White fine to medium sand , dry	<10	NA	2.5	36-38			
White fine to medium sand (grey staining), mois	<10	NA	1496	38-40			
White fine to medium sand (no staining), saturate	<10	NA	874	40-42			
White fine sand , saturated	<10	NA	26.7	42-44		-	
White fine to medium sand, saturated	<10	NA	2.2	44-46			
Light brown fine to medium sand, saturated	<10	NA	<10	46-48			
Light brown fine to medium sand , saturated	<10	NA	<10	48-50		1	
Light brown fine to medium sand , saturated	<10	NA	<10	50-52			
Light grey fine to medium sand , saturated	<10	NA	<10	52-54			
ight brown fine to medium sand/trace clay, satura	<10	NA	<10	54-57			

Indicates soil sample collected for laboratory analysis
 110 Tables 05:09

TABLE 2: SOIL ANALYTICAL SUMMARY

Facility Name: Quality Petroleum #111 110 N. Lakeshore Way (Hwy 92), Lake Alfred Facility ID#: 53/8623713

Less Than Reporting Limit = <RL
Analyte detected but could not be quantified with certainty = I
Analyte detected in the associated Method Blank above Rep. Limit = V

	Samp	le		OVA	Principle and the		a monagera :				University Alexandria	PROPERTY OF THE PARTY OF THE PA	
Soil Sample	Date Collected	Depth to Water (ft)	Sample Interval (BLS)	Net OVA Reading (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl- benzene (ppm)	Total Xylenes (ppm)	MTBE (ppm)	Naph- thalene (ppm)	1-Methyl naphti (ppm)	2-Methyl nalene (ppm)	TRPHs (ppm)
MW-1	02/17/09	~35.5 ft	34'	72.8	<0.00066	0.0048	0.0012	0.0062	<0.0019	<0.006	<0.0036	<0.003	320
MW-2	02/17/09	-38.5 ft	37'	451	<0.00077	<0.0033	<0.00088	<0.0033	<0.0022	<0.0057	<0.0034	<0.0029	<5
MW-3	02/18/09	~38.5 ft	34'	1,805	<0.0013	0.0294	0.0483	0.222	<0.0019	<0.18	<0.088	<0.088	11.1
Soil Cleanup	Target Levels	(April 17, 20	05)		0.007	0.5	0.6	0.2	0.09	1.2	3.1	8.5	340
Residential Di	rect Exposure	(April 17, 2	005)		1.2	7,500	1,500	130	4,400	55	200	210	460
Industrial Dire					1.7	60,000	9,200	700	24,000	300	1,800	2,100	2,700

TABLE 3: SOIL BORING GROUNDWATER ANALYTICAL SUMMARY

Facility Name: Quality Petroleum #111
Facility Address: 110 N. Lakeshore Way (Hwy 92), Lake Alfred, Polk Co.

Facility ID#: 53/8623713

Analytical Results = ppb Less than Method Detection Limit = <MDL

San	nple			Ethyl-	Total	Total		Naph-	1-Methyl-	2-Methyl-	F0004254000
Location	Date	Benzene	Toluene	benzene	Xylenes	VOA	MTBE	thalene	naph	thalene	TRPH
SB-1	11/10/08	<100.0	14,200	704	3,560	18,554	<65.0		-		
SB-2	11/10/08	30.1	3,420	838	3,980	8,268.1	<13.0		-		
SB-3	11/10/08	<0.40	<0.35	<0.43	<1.2	<mdl< td=""><td><0.26</td><td>-</td><td>-</td><td>-</td><td></td></mdl<>	<0.26	-	-	-	
GCTLs (revis	sed 04/17/05)	1	40	30	20	•	20	14	28	28	5,000
NADCs (revis		100	400	300	200	190	200	140	280	280	50,000

TABLE 4: GROUNDWATER ELEVATION TABLE

Facility Name: Quality Petroleum #111

Facility Address: 110 N. Lakeshore Way (Hwy 92), Lake Alfred, Polk Co.

Facility ID#: 53/8623713

Not Measured = NM All Measurements = Feet

WELL NO.		MW-1			MW-2			MW-3			MW-4			MW-5			MW-6	
DIAMETER		2"			2"			2"			2"			2"			2"	
WELL DEPTH		40.00			40.00	2072.00		45.00		111111111111111111111111111111111111111	45.00			45.00	2 202000		45.00	// E
SCREEN INTERVAL	100000000000000000000000000000000000000	30'-40'			30'-40'	11000		30'-45'		100000000000000000000000000000000000000	30'-45'	22.		30'-45'	OMESU AND		30'-45'	
TOC ELEVATION	quelor e	100.00		1020	99.90		1 20	99.37	- 1		99.88		1 - 10-14-114 114	99.76			100.11	TT 100.000
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
02/24/09	62.35	37.65	-	62.50	37.40		62.52	36.85	-	La construction of the			newshiponaysa ma					
04/27/09	60.09	39.91		60.31	39.59		60.25	39.12	-	61.33	38.55	-	59.83	39.93	•	59.84	40.27	
05/12/09	59.89	40.11	-	59.87	40.03	•	59.72	39.65		60.82	39.06	•	59.33	40.43		59.33	40.78	
100	13			200					n sau i						9.			27 673
2000 ESE 30												DECEMBER OF STREET						

WELL NO. DIAMETER WELL DEPTH SCREEN INTERVAL TOC ELEVATION	10	MW-7 2" 45.00 30'-45' 100.65		3344	DW-1 2" 57.00 52'-57' 100.01		1000 000		P1			10					941. At 1	
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
04/27/09	60.15	40.50	•	60.15	39.86				ţ		i		23.00-22.10.00-23				1	
05/12/09	59.65		•• ••	58.88	41.13				1						1			a at
the model of the second of the	\$ N %				30.000.000								14 (23)					
Maria si	# # 2 · .		•				. 4	516		٠				1			5	

TABLE 5: MONITORING WELL GROUNDWATER ANALYTICAL SUMMARY

Facility Name: Quality Petroleum #111

Facility Address: 110 N. Lakeshore Way (Hwy 92), Lake Alfred, Polk Co.

Facility ID#: 53/8623713

Analytical Results = ppb Less than Method Detection Limit = <MDL

San Location	nple Date	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Total VOA	MTBE	Naph- thalene	1-Methyl- naphi	2-Methyl- thalene	Benzo(b)- fluoranthene	TRPH
MW-1	02/24/09	120	<15	2,200	7,300	9,620	<2.5	560	48	100	<0.007	20,000
MW-2	02/24/09	<5	1,100	210	980	2,290	<2.5	66	110	240	0.08	16,000
MW-3	02/24/09	<5	870	530	2,500	3,900	<2.5	110	27	49	<0.007	7,900
MW4	04/27/09	<0.1	<0.3	<0.2	<0.4	<mdl< td=""><td><0.05</td><td><0.031</td><td><0.028</td><td><0.025</td><td><0.007</td><td>74</td></mdl<>	<0.05	<0.031	<0.028	<0.025	<0.007	74
MW-5	04/27/09	<0.1	<0.3	<0.2	<0.4	<mdl< td=""><td><0.05</td><td><0.031</td><td><0.028</td><td><0.025</td><td><0.007</td><td>65</td></mdl<>	<0.05	<0.031	<0.028	<0.025	<0.007	65
MW-6	04/27/09	<0.1	85	140	600	825	<0.05	22	2.1	5.4	<0.007	4,700
MW-7	04/27/09	<0.1	<0.3	<0.2	<0.4	<mdl< td=""><td><0.05</td><td><0.031</td><td><0.028</td><td><0.025</td><td><0.007</td><td>50</td></mdl<>	<0.05	<0.031	<0.028	<0.025	<0.007	50
DW-1	04/27/09	<0.1	1.9	<0.2	1.8	3.7	<0.05	0 47	0.091	0.16	0.045	200
NAC - COLOR SOLITION	4 8	1	omining and a	1 10	Se g	9				(a) = 674	• • • •	
GCTLs (revis	ed 04/17/05)	1	40	30	20		20	14	28	28	0.05	5,000
NADCs (revis	sed 04/17/05)	100	400	300	200		200	140	280	280	5	50,000

Florida Department of

Memorandum

Environmental Protection

TO:

Lewis Cornman, Environmental Manager (Eligibility Coordinator)

THROUGH: Grace Rivera, Environmental Manager

FROM:

Laura Mills, Environmental Specialist II

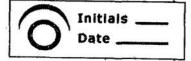
DATE:

March 2, 2010

SUBJECT:

Request for Change of Discharge Date

Discharge Date: June 10, 2008



Facility Id Number:

538623713

Facility Name:

Quality #111

Facility Address:

110 North Lake Shore Way - Hwy 92

Lake Alfred, Polk County

Please review the attached Memorandum dated February 16, 2010 and backup data for a request the June 10, 2008 discharge date be changed to April 11, 2008 in PCT.

After review of the information, I concur the discharge date be changed.

Discharge in pet 35 Am Corrected 2010 3/9/2010



Charlie Crist Governor

Ana M. Viamonte Ros, M.D., M.P.H. State Surgeon General

Memorandum

TO:

Lewis Cornman, Eligibility Coordinator, FDEP-BPSS

Laura Mills, County Contact, FDEP-BPSS

THROUGH Corey S. Franklin, Environmental Manager, Local Program, PCHD

THROUGH: Richard A. Spaulding, Professional Engineer # 58180, PCHD

FROM:

Jessica Stulginski, Environmental Specialist II, PCHD

DATE:

February 16, 2010

SUBJECT:

Request for Change of Discharge Date

Quality # 111

110 North Lake Shore Way - Hwy 92

Lake Alfred, Polk County FDEP Facility ID #538623713 Discharge Date: June 10, 2008

The Polk County Health Department Petroleum Cleanup Program (PCHD) is recommending that the discharge dated June 10, 2008 be changed in the Storage Tank Contamination Monitoring (STCM) database and re-entered as April 11, 2008. The Discharge Reporting Form (DRF) states the date of discharge as April 11, 2008, not June 10, 2008. There is no DRF on file with a June 10, 2008 discharge.

Based on the Discharge Reporting Form for facility # 538623713, PCHD believes the June 10, 2008 discharge date should be deleted and changed to April 11, 2008.

Attachments:

A. Discharge Reporting Form

APE: 11 08 03:54p PPM Consultar APE: 11/2008/721 04:45 FX QUALITY PETROLEUM

PPM Consultants

FAY No. 861 868 1613

F (C)

Apr 11 08 03:32p

PPN Consultants

(407) 240-1310

		NUTED:		
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<u>su</u>	OR	DA		

Discharge Report Form

PLEASE PRINT OR TYPE

OCTIVATE PERMITAN - "Transmission on an

S(FLORIDA	largerman ne	un the revenue side Please com	piete als <u>Aprilis alis</u> e viteski	***************************************	agent manufacture and a second
L Facility ID Number (8")	eginzed): <u>5366237</u> (3 I. fipe	uf form consoletto =: 4/11/03		
Contact Person Signs & Facility or Discharger & Localies of Discharger (se	ou, or Discharges: Que Manko Ping Address: PO. B port address), 170 N L	Ounly #111 hilly Petroleum Guspordius Telephone Nichbor (ox 3889, Lakeland, Fl. 32) aka Shoro Way - Hay \$2, 28.05-31 (sat) and 81:43-4	863 1581-1-521 302 Lake Altred FL 33850	County: Potk	
4. Date of script of lest discovery of confirmed		branchidayiyest	A latimated number of get discharged particularly		Date
6. Uhramege affected:	IAN I/ISM	Grovenstwater	water well(s) () Sho shots	Sunface water (water body name)	
7. Method of discovery feet Liquid desector feature Vapor desector factoris Vapor desector factoris 1 Tightness test 1 Pressure test 1 Studiated lavendary Re	edic en en especij (lauasten en suis 	I Internet inspection I Inventory council Monitoring wells Automatic bank gaseens Manual tank gaseins	Cleant-Class - Assesses Counte water analytical is - Soil on algebras for and Viewal abservation Other	niples	
3. Type of regulated tobate 1 Unhawar - Used/mure oil Aviation gas includes CERCLA subst	Jet fiel	Newstay will Kerstay will Kerstay will	Newfate on Indicated and Indicated and declaratives		
9. Source of Discharges (d. (1) Duperains system 1 1 Tanh 1 1 Unknown 1/1 Other Regular Spin is	Pape Pabag Valve fedure	1 starge Thaker slop Other Vessel	Popolius Railroad (volcto Turk trail	Veheti Asplan: Dran	APR 1 5 2008 STATIONARY
14. Cause of the discharge: [Loose consection] Firefeeplation	Punkture	† Spill Hunun Error	1 Certasian 1 Certasian	† Corresion Installation failure	TANKS
12. Comment: Laborator	y analytical results	show that benzana tuben	ns path of the April 1st per o entrother zone, bitologier found also or EDE! SCILA	ics MTRE TREEL naphir	
)3 Agencies notified (at ap § 1 State Warning Point 1-800 X70-8519	plicable) [National Response [-800.434-820]	ic Center Family Mat (100) 121-	ine Patrol Fire 1: apartment	DEP (district/person) County Table Proprie	
	THO KIN -	JANE WISER	is true, accurate, and comp		

Poor Original

Co / Facility 531 36 Facility Status CLOSED	Facility Name and 2874E QUALITY #111 116 N LAKE SHOR	EWAY-HWY 92	Highest	STULCINSKI_IR Ileanup Status Discharge Score e Record	ONGO
Cleanup Info	Info Source Lead Agency LP Cleanup Required*	CLOSURE REPORT LOCAL PROGRAM CLEANUP REQUIRE 08/10/2008	Score Effect		
Discharge Info	Combined With		Cleanup Status/Da	RA RA	10/14/2009
Eligibility and Application Info	Application Received	Cleanup Program Lead	Status	Determination Letter Sent	Redetermined?



Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

May 13, 2010

CERTIFIED MAIL #7009 3410 0000 2532 8435 RETURN RECEIPT REQUESTED

Mr. Steve Weeks Quality Petroleum Corp 1625 George Jenkins Blvd. Lakeland, FL 33815-3729

Subject:

Remedial Action Plan Approval Order

Quality #111

110 N Lake Shore Way- Hwy 92

Lake Alfred, Polk County

FDEP Facility ID# 538623713

Discharge Date: April 11, 2008 (Non Program)

Dear Mr. Weeks:

The Polk County Health Department Petroleum Cleanup Program (PCHDPCP), on behalf of the Florida Department of Environmental Protection (Department), has reviewed the Remedial Action Plan (RAP) dated April 12, 2010 (received April 16, 2010), prepared and submitted by Envirotrac, LTD for the petroleum product discharge referenced above. We found all the documents submitted to date to be adequate to meet the RAP requirements of Rule 62-770.700, Florida Administrative Code (F.A.C.). The Department has determined that the actions proposed in this RAP represent a reasonable strategy toward accomplishing the cleanup objectives of Chapter 62-770, F.A.C. Pursuant to Paragraph 62-770.700(8)(a), F.A.C., the Department approves the RAP as described in this RAP Approval Order (Order). However, if it appears during RAP implementation that the remedial strategy is not effective, a request for modification of this Order, pursuant to Subsection 62-770.700(15), F.A.C., may be submitted to the Department, or the Department may require the preparation and submittal of a RAP Modification to enhance the active remediation. Depending on the nature of the system modification, the Department may revoke this Order. The operation of the active remediation system must be initiated within 120 days, as required by Subsection 62-770.700(11), F.A.C.

You are also required to submit to PCHDPCP record drawings (as-built drawings) of the treatment system within 120 days of initiating operation of the active remediation system(s). These drawings must be certified by a professional engineer.

MW-1, MW-2, MW-3, MW-6, MW-8, MW-10 and MW-5 (temporary point of compliance) must be sampled on a quarterly basis during the first year of operation of the remediation system, and the samples must be analyzed for Benzene, Ethylbenzene, Toluene, Xylenes, MTBE, Polycyclic Aromatic Hydrocarbons, and Total Recoverable Petroleum Hydrocarbons. A written request for a modification of the temporary point of compliance monitoring well to be

Mr. Steve Weeks FDEP Facility ID# 538623713 May 13, 2010 Page two

sampled, sampling frequency, or sampling parameters, may be made after the first year of operation based on the analytical results obtained.

Legal Issues

The Department's Order shall become final unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, Florida Statutes (F.S.), within 21 days of receipt of this Order. The procedures for petitioning for an administrative hearing are set forth below.

Persons affected by this Order have the following options:

- (A) If you choose to accept the Department's decision regarding the RAP you do not have to do anything. This Order is final and effective on the date filed with the Clerk of the Department, which is indicated on the last page of this Order.
- (B) If you choose to challenge the decision, you may do the following:
- (1) File a request for an extension of time to file a petition for an administrative hearing with the Department's Agency Clerk in the Office of General Counsel within 21 days of receipt of this Order; such a request should be made if you wish to meet with the Department in an attempt to informally resolve any disputes without first filing a petition for an administrative hearing; or
- (2) File a petition for an administrative hearing with the Department's Agency Clerk in the Office of General Counsel within 21 days of receipt of this Order.

Please be advised that mediation of this decision pursuant to Section 120.573, F.S., is not available.

How to Request an Extension of Time to File a Petition for an Administrative Hearing

For good cause shown, pursuant to Subsection 62-110.106(4), F.A.C., the Department may grant a request for an extension of time to file a petition for an administrative hearing. Such a request must be filed (received) by the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from Quality Petroleum Corp, shall mail a copy of the request to Quality Petroleum Corp, at the time of filing. Timely filing a request for an extension of time tolls the time period within which a petition for an administrative hearing must be made.

How to File a Petition for an Administrative Hearing

A person whose substantial interests are affected by this Order may petition for an administrative hearing under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) by the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from Quality

LP RAP Approval Order 09-09-09

Mr. Steve Weeks FDEP Facility ID# 538623713 May 13, 2010 Page three

Petroleum Corp, shall mail a copy of the petition to Quality Petroleum Corp, at the time of filing. Failure to file a petition within this time period shall waive the right of anyone who may request an administrative hearing under Sections 120.569 and 120.57, F.S.

Pursuant to Subsection 120.569(2), F.S. and Rule 28-106.201, F.A.C., a petition for an administrative hearing shall contain the following information:

- (a) The name, address, and telephone number of each petitioner; the name, address, and telephone number of the petitioner's representative, if any; the facility owner's name and address, if different from the petitioner; the FDEP facility number, and the name and address of the facility;
- (b) A statement of when and how each petitioner received notice of the Department's action or proposed action;
- (c) An explanation of how each petitioner's substantial interests are or will be affected by the Department's action or proposed action;
- (d) A statement of the disputed issues of material fact, or a statement that there are no disputed facts;
- (e) A statement of the ultimate facts alleged, including a statement of the specific facts the petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the Department's action or proposed action; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the Department to take with respect to the Department's action or proposed action.

This Order is final and effective on the date filed with the Clerk of the Department, which is indicated on the last page of this Order. Timely filing a petition for an administrative hearing postpones the date this Order takes effect until the Department issues either a final order pursuant to an administrative hearing or an Order Responding to Supplemental Information provided to the Department pursuant to meetings with the Department.

Judicial Review

Any party to this Order has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days after this Order is filed with the Department's clerk (see below).

Questions

Any questions regarding PCHDPCP's review of your RAP should be directed to Jessica Stulginski at (863) 413-3325 extension 18116. Questions regarding legal issues should be referred to the Department's Office of General Counsel at (850) 245-2242. Contact with any of

LP RAP Approval Order

Mr. Steve Weeks FDEP Facility ID# 538623713 May 13, 2010 Page four

the above does not constitute a petition for an administrative hearing or a request for an extension of time to file a petition for an administrative hearing.

The FDEP Facility Number for this facility is 538623713. Please use this identification on all future correspondence with the Department or PCHDPCP.

Sincerely,

Bureau of Petroleum Storage Systems

MEA/tac

ec: Jessica Stulginski, PCHDPCP – Jessica_Stulginski@doh.state.fl.us Grace Rivera, FDEP Tallahassee – Grace.Rivera@dep.state.fl.us

cc: Nick Markis, EnviroTrac, LTD- 5309 56th Commerce Park Blvd., Tampa, FL 33610 File

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

(or Deputy Clerk)

09-09-09

P.E. CERTIFICATION

Remedial Action Plan (RAP) dated April 12, 2010 (received April 16, 2010), for Quality #111, located at 110 North Lake Shore Way – Hwy 92, Lake Alfred, Polk County, FDEP Facility ID# 538623713 prepared and submitted by EnviroTrac Environmental Services.

I hereby certify that in my professional judgment, the components of this RAP for air sparging and soil vapor extraction prepared for the April 11, 2008 petroleum product discharge discovered at the above-referenced facility satisfy the requirements set forth in Chapter 62-770, Florida Administrative Code (F.A.C.), and that the engineering design features incorporated in this plan provide a reasonable strategy toward accomplishing the cleanup objectives of Chapter 62-770, F.A.C. However, I have not evaluated and do not certify aspects of this plan that are outside my area of expertise (including, but not limited to, electrical, mechanical, and structural features). Implementation of this RAP may not result in a complete cleanup of the discharge to the applicable cleanup target levels referenced in Chapter 62-770, F.A.C., or site-specific cleanup target levels. A subsequent phase of remedial design or natural attenuation monitoring may be necessary to accomplish the comprehensive cleanup in accordance with Chapter 62-770, F.A.C.

N3-00-34	I personally completed this revi	ew.	
<u>X</u>	This review was conducted by working under my direct superv		

Richard A. Spaulding, P.E. Professional Engineer # 58180 Polk County Health Department

Date

Mission:

To protect, promote & improve the health of all people in Florida through integrated state, county & community efforts.



Rick Scott Governor

John H. Armstrong, MD, FACS State Surgeon General & Secretary

Vision: To be the Healthiest State in the Nation

December 31, 2014

Mr. Steve Weeks Quality Petroleum Corp PO Box 3889 Lakeland, FL 33802

Subject:

Natural Attenuation Monitoring (NAM) Plan Approval

Quality #111

110 N Lake Shore Way- Hwy 17-92

Lake Alfred, Polk County FDEP Facility ID# 538623713

Discharge Date: April 11, 2008 (Non-program)

Dear Mr. Weeks:

The Florida Department of Health in Polk County Petroleum Cleanup Program (FDOH-Polk), on behalf of the Florida Department of Environmental Protection (FDEP), has reviewed the Natural Attenuation Monitoring (NAM) Plan, dated December 3, 2014, (received December 3, 2014) prepared and submitted by EnviroTrac Ltd Inc., for the above referenced site. The NAM Plan is acceptable and meets the requirements set forth in Chapter 62-780.690, Florida Administrative Code (FAC), however the FDOH-Polk has the following comments:

- The FDOH-Polk does not object to the sampling of the proposed wells, however the only wells required to be sampled are monitor wells MW-1R and MW-6, for Benzene, Toluene, Ethyl benzene, Xylenes (BTEX), Methyl tert-butyl ether (MTBE), Polycyclic Aromatic Hydrocarbons (PAH), and Total Recoverable Petroleum Hydrocarbons (TRPH).
- Since the noted wells have been sampled for four quarters during Post Active Remediation Monitoring (PARM), at a minimum they are only required to be sampled during NAM until two consecutive clean quarters are achieved.
- 3. The FDOH-Polk agrees that monitor well MW-1R should be sampled for Lead and EDB one time. In addition, the soil must be sampled and analyzed in adherence to Table C referenced in Chapter 62-780.600(4)(b)1., FAC (previously Table B of 62-770, FAC). If clean soil has been previously demonstrated, please provide those results.



2090 East Clower Street • Bartow, FL 33830-6741 PHONE: (863) 519-8330 • FAX: (863) 534-0245 • www.MyPolkHealth.org

Florida Department of Health in Polk County

ENVIRONMENTAL ENGINEERING • PETROLEUM CLEANUP

TWITTER:HealthyFLA FACEBOOK:FLDepartmentofHealth YOUTUBE: fldoh If you have any questions about this review, you may contact me at (863) 519-8330 ext 12141, by e-mail at Carol.Cassels@flhealth.gov, or at the letterhead address.

Sincerely,

Carol Cassels

Environmental Specialist II

Reviewed by:

Pamela Reynolds, P.G.

Professional Geologist #1809

Date

cc: FDOH-Polk File

Ben Crider, P.O. Box 1178, Lake Alfred, FL 33850

ec: Ron Kiely, EnviroTrac Ltd., ronk@envirotrac.com

FDEP - PRP File

Cassels, Carol R

From: Ronald Kiely <ronk@envirotrac.com>
Sent: Tuesday, July 21, 2015 3:00 PM

To: Cassels, Carol R

Cc: Ifern@vertexeng.com; 'Steve Weeks' (rsweeks@qpetro.com)

Subject: RE: FAC ID#: 53/8623713, QP#111,

Attachments: 110 PARM 07.2015.pdf

Follow Up Flag: Follow up Flag Status: Flagged

Please see the attached PARM Report for the referenced facility. If a hard copy of the report is needed, let me know and we'll send one out. Thanks.

From: Ronald Kiely

Sent: Wednesday, May 27, 2015 4:50 PM **To:** 'Carol Cassels@doh.state.fl.us'

Cc: Ifern@vertexeng.com; 'Steve Weeks' (rsweeks@gpetro.com)

Subject: RE: FAC ID#: 53/8623713, QP#111,

Field Notification:

110 North Lakeshore Way, Lake Alfred, FL

Groundwater sampling is scheduled for Friday, May 29.

Please contact me with any questions about the upcoming field work.

Thanks.

From: Ronald Kiely

Sent: Monday, June 09, 2014 6:32 PM **To:** 'Carol_Cassels@doh.state.fl.us'

Cc: lfern@vertexeng.com; 'Steve Weeks' (rsweeks@qpetro.com)

Subject: FAC ID#: 53/8623713, QP#111,

Field Notification:

110 North Lakeshore Way, Lake Alfred, FL

Groundwater sampling is scheduled for Thursday, June 10, 2014. This sampling event is considered 4th Quarter PARM. The system last operated the week of July 8, 2013. We'll also be performing cleaning/maintenance activities in the compound area.

Let me know if there are any questions about the site.

Thanks.

Ronald Kiely | Senior Project Manager | EnviroTrac Ltd. | 5309 56th Commerce Park Blvd., Tampa FL 33610 813.626.8443 (Office) | 813.628.8479 (Fax) | 813.478.0076 (Cell) | ronk@envirotrac.com

Solutions in Action - http://www.envirotrac.com









CONFIDENTIALITY: This e-mail (including any attachments) may contain confidential, proprietary and privileged information, and unauthorized disclosure or use is prohibited. If you received this e-mail in error, please notify the sender and delete this e-mail from your system.

NATURAL ATTENUATION MONITORING (NAM) REPORT 3RD QUARTER (MAY 2015)

Site:

QUALITY PETROLEUM #111
110 NORTH LAKE SHORE WAY – HWY. 92
LAKE ALFRED, POLK COUNTY, FLORIDA
FDEP FACILITY # 53/8623713
DISCHARGE DATE: APRIL 11, 2008 (NON-PROGRAM)

Submitted To:

MS. CAROL CASSELS
POLK COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL ENGINEERING DIVISION
PETROLEUM CLEANUP PROGRAM
200 NORTH KENTUCKY AVENUE, SUITE 404
LAKELAND, FLORIDA 33801

Prepared By:

ENVIROTRAC LTD. 5309 56TH COMMERCE PARK BOULEVARD TAMPA, FLORIDA 33610 (813) 626-8443

JULY 2015

A Full Service Environmental Consulting and Contracting Firm

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FIGURE 3 GROUNDWATER CONCENTRATION MAP



1.0 PROFESSIONAL GEOLOGIST'S CERTIFICATION

I certify that I have prepared this:

Natural Attenuation Monitoring Report, 3rd Quarter (May 2015), for the Quality Petroleum #111 facility located at 110 North Lake Shore Way – Hwy. 92, Lake Alfred, Polk County, Florida FDEP Facility ID# 53/8623713,

with information gathered from qualified personnel who properly evaluated the information submitted. The applicable portions of this technical document and associated work comply with standard professional practices, rules of the FDEP and any other laws and rules governing the profession. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Reviewed and Certified By:

100050

EnviroTrac Ltd Inc

Name

Date

John Ferrill, P.G.

Florida P.G. License No. 1953

Florida Engineering Certificate of Authorization No. 00008333



2.0 SYSTEM OVERVIEW

This report describes the third Natural Attenuation Monitoring (NAM) for the Quality Petroleum #111 facility, located at 110 North Lake Shore Way – Hwy. 92, in Lake Alfred, Florida. NAM activities occurred on May 29, 2015.

A remedial system consisting of eight soil vapor extraction (SVE) and eight air sparge (AS) wells were installed in the configuration shown in **FIGURE 1**. All wells are piped individually to the system compound.

AS wells are constructed with 3 feet of 2-inch diameter, schedule 40 PVC screen threaded to 52 feet of schedule 40 PVC casing. SVE wells are constructed with ten feet of 2-inch diameter, schedule 40 PVC screen threaded to 20 feet of schedule 40 PVC casing. System piping was installed below grade and all wells were finished at the surface with an 8-inch diameter manhole for access. As-built figures showing the locations of the SVE/AS wells, piping, trench layout, well details, and a Process and Instrumentation Diagram (P&ID) have previously been submitted with the Remedial System Startup Report dated January 31, 2011.

The system enclosure (trailer unit surrounded by a 6-foot privacy fence), housing the components for the remedial system, is located on the northwest portion of the site. Equipment is housed inside a trailer for protection from weather, noise abatement, and restricting access by unauthorized personnel.

The system is designed and operating to avoid recovering groundwater. Any liquid recovered is treated by activated carbon before discharging onsite to an exfiltration line within the radius of influence (ROI) of the SVE/AS system. The exfiltration line is located within the ROI of AS/SVE-2. During the first three months of operation, approximately 30 gallons of moisture accumulated in the knockout drum.

PARM was initiated in 2012 for two quarters. After contaminants of concern (COC) increased in select wells, the remedial system was re-started for approximately one week per month starting October 2012. Limited system operation continued through July 2013. Based on June 2013 groundwater analytical results, the system was last operated the week of July 8, 2013. The minimum one year PARM period was reset and the first quarter of PARM sampling was performed in September 2013, second quarter in December 2013, third quarter in March 2014,



and fourth quarter in June 2014. Based on the January 27, 2014 Memorandum with the SUBJECT: Petroleum Restoration Program Closure Sampling Guidelines for Groundwater, Issue 3: 1. a) requires the subject site be moved to Natural Attenuation Monitoring (NAM).

Approval of the Natural Attenuation Monitoring (NAM) Plan was received on December 31, 2014. MW-1R and MW-6 will be analyzed for BTEX/MTBE, PAHs, and TRPHs for at least two consecutive quarters. The first quarterly sampling event for MW-1R only, was completed on September 3, 2014. The second quarterly NAM sampling event for MW-1R and MW-6 was conducted on January 7, 2015 while the third NAM event (for MW-1R & MW-6) was completed on May 29, 2015.

3.0 SITE ASSESSMENT HIGHLIGHTS

The site is a former gasoline retail facility located on the northwest corner of the intersection of North Lake Shore Way (U.S. Highway 17/92) and West Haines Boulevard in Lake Alfred, Polk County, Florida. The former underground storage tank (UST) field housed four 4,000-gallon USTs, containing various grades of unleaded gasoline and one 550-gallon UST containing waste oil. According to the FDEP UST database, all tanks were installed in February 1976. The four 4,000-gallon USTs were removed from the site in June 2008, while the 550-gallon UST was replaced by a 250-gallon above ground storage tank (AST) in 1989. The AST is no longer present on site. However, it is not known when it was removed.

As reported in a SUPER Act potable well survey conducted on October 20, 2004, two large public supply potable wells are located within ½ mile of the site and one small private potable well is located within ¼ mile of the site. All three (3) potable wells are located north of the property.

Soil quality at this site has been presented in the previously submitted SAR and subsequent addendums. The SAR and SARAs reported that lithology of the site is primarily fine- to medium-grained sands of varying color from the surface to an average depth of 16 feet below land surface (bls). Below 16 feet bls, fine-grained clayey sands and fine- to medium-grained sands with trace clays were encountered at various depth intervals to a total approximate depth of 57 feet bls.



Monitoring Well Replacement

On August 6, 2014 EnviroTrac mobilized to the site with Preferred Drilling Solutions, Inc. (Preferred) (Florida License No. 2613) of Largo, FL to abandon monitoring well, MW-1 (Permit No. 837867) and install replacement monitoring well, MW-1R (Permit No. 837868). MW-1R was installed to 45.0 feet bls with 15 feet of machine-slotted well screen (2"\$\phi\$, SCH40 PVC, 0.010") flush threaded to 30.0 feet of solid casing riser (2"\$\phi\$, SCH40 PVC).

4.0 GROUNDWATER SAMPLING AND LABORATORY ANALYSIS

May 2015

On May 29, 2015, EnviroTrac mobilized to the site to conduct quarterly groundwater sampling of monitoring wells MW-1R and MW-6. Prior to sampling activities, depth-to-water (DTW) measurements were collected from the monitoring wells to be sampled. Groundwater elevation data is summarized in **TABLE 1** and depicted on **FIGURE 2**.

Groundwater sampling was conducted in accordance with the procedures outlined in DEP-SOP-001/01 (latest revision March 1, 2014, effective July 30, 2014) and PCS-005 (Variances and Clarifications for Bureau of Petroleum Storage System Sites, effective May 2, 2005). While purging, pH, temperature, dissolved oxygen (DO), specific conductivity, and turbidity measurements were collected. Historical and current DO measurements are summarized in **TABLE 2**. A copy of the Monitoring Well Sampling Log and Calibration Logs are provided in **APPENDIX A**.

At the completion of well purging, the groundwater sample was properly collected, packed with ice, and shipped to Accutest Laboratories, Orlando, Florida (Accutest) for analysis by EPA Method 8021B (BTEX/MTBE), EPA Method 8310 (PAHs), and FLORIDA-PRO (TPH). A copy of the Technical Report for Groundwater is provided in **APPENDIX B**.

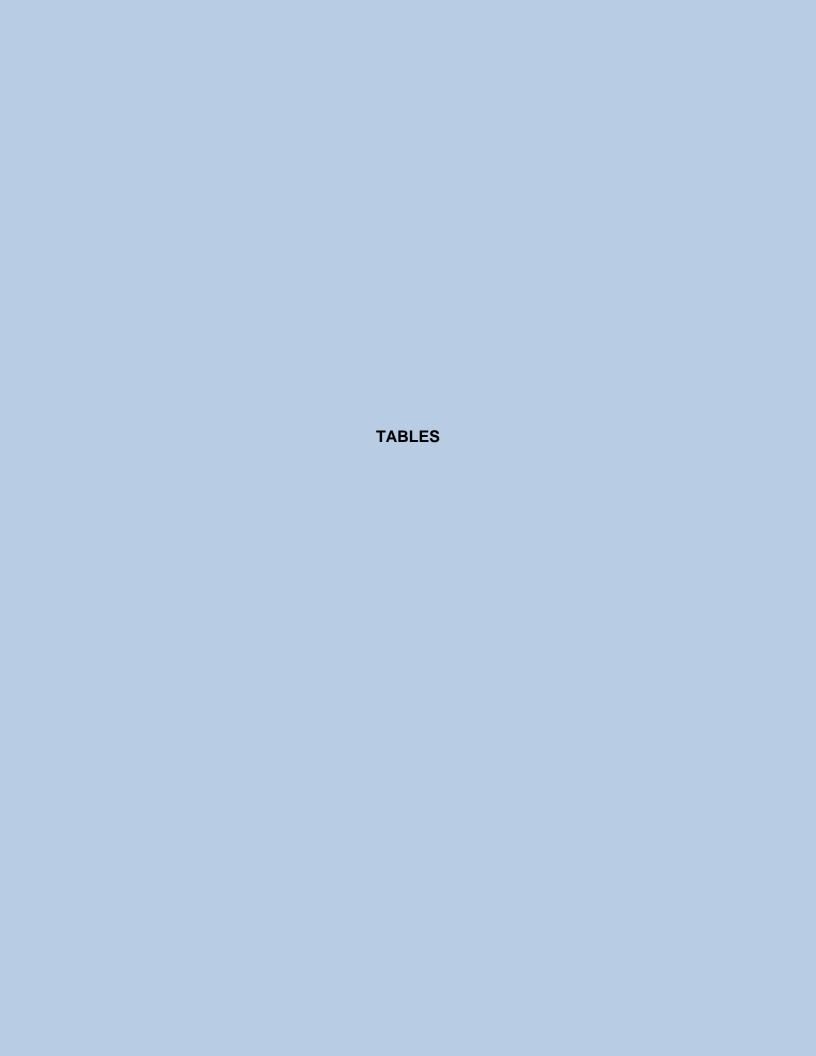
Laboratory analysis of the groundwater samples collected indicates all COC were below Groundwater Cleanup Target Levels (GCTLs) and/or laboratory method detection limits (MDLs); no COC tested above Natural Attenuation Default Concentrations (NADCs). Specifically, toluene, ethylbenzene, total xylenes, naphthalene, 2-methylnaphthalene, and TPH were reported above the laboratory's MDLs. Naphthalene and 2-methylnaphthalene were reported with an "I" qualifier (above the MDL but less than the Practical Quantitation Limit (PQL)). Groundwater analytical data are summarized in **TABLE 3** and depicted on **FIGURE 3**.



5.0 CONCLUSIONS / RECOMMENDATIONS

- The remediation system last operated in July 2013 for approximately three days; final shut down was July 11, 2013.
- MW-1 was abandoned and a replacement monitoring well, MW-1R, was installed August 6, 2014. Groundwater sampling of the replacement monitoring well was completed on August 8, 2014 and September 3, 2014. Laboratory results from the August sampling indicated benzene was above its NADC. A confirmation sample was then collected on September 3, 2014. No COC were reported above NADCs but, benzene, total xylenes, and naphthalene were reported above GCTLs.
- NAM Sampling was completed on January 7, 2015 and May 29, 2015. Groundwater samples were collected from replacement monitoring well, MW-1R and MW-6 per the NAM Plan Approval letter dated December 31, 2014. All COC were reported below GCTLs and/or the laboratory's MDLs for both sampling events.
- Per the December 31, 2014 NAM Plan Approval letter, comment 2, "Since the noted wells have been sampled for four quarters during Post Active Remediation Monitoring (PARM), at a minimum they are only required to be sampled during NAM until two consecutive clean quarters are achieved." Therefore, No Further Action (NFA) is being requested for the April 11, 2008 discharge.





Facility Name: Quality Petroleum #111
Facility Address: 110 N. Lakeshore Way (Hwy. 92), Lake Alfred, Polk County, FL
05/8501162
All Measurements = Feet
Not Measured = -

WELL NO.		MW-1			MW-2			MW-3			MW-4			MW-5			MW-6		
DIAMETER		2"			2"			2"			2"			2"			2"		
WELL DEPTH		40.00		40.00			45.00			45.00			45.00				45.00		
SCREEN INTERVAL		30'-40'		30'-40'			30'-45'			30'-45'			30'-45'				30'-45'		
TOC ELEVATION		100.00		99.90			99.37			99.88			99.76			100.11			
DATE	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	
2/24/2009	62.35	37.65	-	62.50	37.40	-	62.52	36.85	=										
4/27/2009	60.09	39.91	-2.26	60.31	39.59	-2.19	60.25	39.12	-2.27	61.33	38.55	-	59.83	39.93	-	59.84	40.27	-	
05/12/09	59.89	40.11	-0.20	59.87	40.03	-0.44	59.72	39.65	-0.53	60.82	39.06	-0.51	59.33	40.43	-0.50	59.33	40.78	-0.51	
08/25/09	61.40	38.60	1.51	61.51	38.39	1.64	61.55	37.82	1.83	62.66	37.22	1.84	61.27	38.49	1.94	61.23	38.88	1.90	
11/02/09	62.61	37.39	1.21	62.72	37.18	1.21	62.74	36.63	1.19	NM	NM	-	62.42	37.34	1.15	62.43	37.68	1.20	
05/19/10	63.91	36.09	1.30	64.02	35.88	1.30	64.07	35.30	1.33	NM	NM	-	63.80	35.96	1.38	63.75	36.36	1.32	
12/02/10	65.65	34.35	1.74	65.76	34.14	1.74	65.76	33.61	1.69	NM	NM	-	NM	NM	-	65.37	34.74	1.62	
12/03/10	65.73	34.27	0.08	65.75	34.15	-0.01	65.23	34.14	-0.53	66.73	33.15	4.07	65.46	34.30	1.66	66.43	33.68	1.06	
12/06/10	65.84	34.16	0.11	65.61	34.29	-0.14	65.54	33.83	0.31	66.74	33.14	0.01	65.53	34.23	0.07	66.52	33.59	0.09	
12/16/10	65.77	34.23	-0.07	65.59	34.31	-0.02	64.53	34.84	-1.01	66.69	33.19	-0.05	65.54	34.22	0.01	66.48	33.63	-0.04	
12/22/10	65.78	34.22	0.01	65.61	34.29	0.02	64.57	34.80	0.04	66.71	33.17	0.02	65.55	34.21	0.01	66.53	33.58	0.05	
01/12/11	65.89	34.11	0.11	65.64	34.26	0.03	65.58	33.79	1.01	66.81	33.07	0.10	65.60	34.16	0.05	66.63	33.48	0.10	
02/02/11	65.93	34.07	0.04	65.63	34.27	-0.01	65.53	33.84	-0.05	66.77	33.11	-0.04	65.58	34.18	-0.02	66.58	33.53	-0.05	
03/09/11	63.23	36.77	-2.70	63.08	36.82	-2.55	63.12	36.25	-2.41	63.29	36.59	-3.48	62.46	37.30	-3.12	62.38	37.73	-4.20	
03/15/11	63.30	36.70	0.07	63.15	36.75	0.07	63.19	36.18	0.07	63.35	36.53	0.06	62.53	37.23	0.07	62.49	37.62	0.11	
04/06/11	63.31	36.69	0.01	63.25	36.65	0.10	63.17	36.20	-0.02	64.08	35.80	0.73	62.61	37.15	0.08	62.75	37.36	0.26	
05/17/11	63.52	36.48	0.21	64.07	35.83	0.82	63.86	35.51	0.69	64.82	35.06	0.74	63.52	36.24	0.91	64.58	35.53	1.83	
06/08/11	62.73	37.27	-0.79	62.90	37.00	-1.17	62.96	36.41	-0.90	64.15	35.73	-0.67	62.63	37.13	-0.89	62.22	37.89	-2.36	
07/19/11	61.92	38.08	-0.81	62.35	37.55	-0.55	61.82	37.55	-1.14	62.26	37.62	-1.89	61.73	38.03	-0.90	61.68	38.43	-0.54	
08/03/11	62.02	37.98	0.10	62.41	37.49	0.06	61.87	37.50	0.05	62.36	37.52	0.10	61.81	37.95	0.08	61.75	38.36	0.07	
09/06/11	62.47	37.53	0.45	62.32	37.58	-0.09	63.67	35.70	1.80	64.75	35.13	2.39	62.92	36.84	1.11	61.85	38.26	0.10	
10/03/11	63.14	36.86	0.67	60.00	39.90	-2.32	63.07	36.30	-0.60	63.21	36.67	-1.54	62.27	37.49	-0.65	62.30	37.81	0.45	
11/15/11	65.28	34.72	2.14	65.06	34.84	5.06	62.34	37.03	-0.73	64.78	35.10	1.57	64.98	34.78	2.71	63.26	36.85	0.96	
12/02/11	62.77	37.23	-2.51	62.49	37.41	-2.57	63.75	35.62	1.41	64.79	35.09	0.01	63.00	36.76	-1.98	61.97	38.14	-1.29	
12/13/11	64.56	35.44	1.79	64.68	35.22	2.19	64.73	34.64	0.98	-	-			-	-	64.37	35.74	2.40	
03/22/12	61.79	38.21	-2.77	-	-	-	62.01	37.36	-2.72		-			-	-	61.71	38.40	-2.66	
06/18/12	60.40	39.60	-1.39	60.37	39.53	-4.31	60.97	38.40	-1.04	61.07	38.81	-3.72	59.56	40.20	-3.44	59.56	40.55	-2.15	
09/17/12	63.29	36.71	2.89	63.40	36.50	3.03	63.47	35.90	2.50	64.16	35.72	3.09	63.15	36.61	3.59	63.11	37.00	3.55	

Facility Name: Quality Petroleum #111

Facility ID#:

All Measurements = Feet

Facility Address: 110 N. Lakeshore Way (Hwy. 92), Lake Alfred, Polk County, FL

05/8501162

Not Measured = -

WELL NO. MW-1 / MW-1R MW-2 cont. MW-3 cont. MW-4 cont. MW-5 cont. MW-6 cont. DIAMETER 2" 2" 2" 2" WELL DEPTH 40' / 45' 40.00 45.00 45.00 45.00 45.00 SCREEN INTERVAL 30'-40' / 30'-45' 30'-40' 30'-45' 30'-45' 30'-45' 30'-45' TOC ELEVATION 100.00 99.90 99.37 99.88 99.76 100.11 DATE **ELEV** DTW Diff. ELEV DTW Diff. ELEV DTW Diff. ELEV DTW Diff. **ELEV** DTW Diff. **ELEV** DTW Diff. 10/11/12 63.54 36.46 0.25 63.96 35.94 0.56 63.48 35.89 0.01 64.62 35.26 0.46 63.36 36.40 0.21 65.06 35.05 1.95 11/14/12 63.02 36.98 -0.52 63.08 36.82 -0.88 62.99 36.38 -0.49 64.15 35.73 -0.4762.73 37.03 -0.63 63.19 36.92 -1.87 12/10/12 62.37 -0.48 37.63 -0.6562.52 37.38 -0.56 62.53 36.84 -0.4663.67 36.21 62.66 37.10 -0.0762.77 37.34 -0.4201/04/13 61.93 62.33 37.57 -0.59 -0.68 -0.33 38.07 -0.44-0.19 61.94 37.43 62.99 36.89 61.60 38.16 -1.06 62.44 37.67 03/08/13 60.43 39.57 -1.50 60.58 39.32 -1.75 60.59 38.78 -1.35 61.68 38.20 -1.31 60.40 39.36 -1.20 60.21 39.90 -2.23 04/29/13 60.20 39.80 -0.2360.13 39.77 -0.45 60.01 39.36 -0.58 61.15 38.73 -0.5359.88 39.88 -0.52 60.05 40.06 -0.16 05/29/13 -0.04 -0.75 60.16 39.84 -0.0460.09 39.81 59.28 40.09 -0.7360.40 39.48 58.87 40.89 -1.01 59.06 41.05 -0.9960.09 -0.15 40.76 -0.18 06/11/13 39.91 -0.07 59.94 39.96 59.31 40.06 0.03 59.92 39.96 -0.4859.00 0.13 58.88 41.23 09/12/13 4.58 35.10 34.51 33.95 35.28 35.67 64.67 35.33 64.80 4.86 64.86 5.55 65.93 6.01 64.48 5.48 64.44 5.56 12/18/13 64.23 35.77 -0.44 64.45 35.45 -0.35 64.47 34.90 -0.39 34.32 -0.37 63.99 35.77 64.01 -0.43 65.56 -0.49 36.10 03/06/14 62.54 37.46 -1.69 62.75 37.15 -1.70 62.77 36.60 -1.70 63.90 35.98 -1.66 62.34 37.42 -1.65 62.36 37.75 -1.65 06/12/14 63.14 36.86 0.60 63.29 36.61 0.54 63.32 36.05 0.55 64.42 35.46 0.52 62.93 36.83 0.59 62.91 37.20 0.55 08/08/14 NM 36.01 0.85 09/03/14 35.40 0.61 64.70 35.20 1.41 64.73 34.64 34.07 1.39 64.35 35.41 1.42 64.36 35.75 1.45 NM 1.41 65.81 01/07/15 67.29 32.71 2.69 67.49 32.41 2.79 67.75 31.62 3.02 68.52 31.36 2.71 67.03 32.73 2.68 67.00 33.11 2.64 05/29/15 66.28 33.72 -1.01 66.00 34.11 -1.00

Facility Name: Quality Petroleum #111
Facility Address: 110 N. Lakeshore Way (Hwy. 92), Lake Alfred, Polk County, FL
05/8501162
All Measurements = Feet
Not Measured = -

WELL NO.		MW-7			DW-1			MW-8			MW-9			PZ-1				
DIAMETER		2"			2"			2"			1"			2"				
WELL DEPTH		45.00			57.00			45.00			45.00			45.00				
SCREEN INTERVAL		30'-45'			52'-57'			30'-45'			30'-45'			35'-45'				
TOC ELEVATION		100.65		100.01			100.21			100.32			99.90					
DATE	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.
04/27/09	60.15	40.50	-	60.15	39.86	-												
05/12/09	59.65	41.00	-0.50	58.88	41.13	-1.27												
08/25/09	61.45	39.20	1.80	60.83	39.18	1.95	61.02	39.19	-				61.34	38.56	-			
11/02/09	-	-	-	62.28	37.73	1.45	-	-	-				62.54	37.36	1.20			
11/12/09	-	-	-	-	-	-	-	-	-	61.87	38.45	-	-	=	=			
05/19/10	-	-	-	-	-	-	63.56	36.65	2.54	-	-	-	63.88	36.02	1.34			
12/02/10	-	-	-	-	-	-	65.19	35.02	1.63	-	-	-	64.86	35.04	0.98			
12/03/10	65.86	34.79	4.41	66.07	33.94	3.79	65.38	34.83	0.19	65.12	35.20	3.25	66.49	33.41	1.63			
12/06/10	65.80	34.85	-0.06	66.41	33.60	0.34	65.43	34.78	0.05	65.17	35.15	0.05	66.85	33.05	0.36			
12/16/10	65.79	34.86	-0.01	66.35	33.66	-0.06	65.38	34.83	-0.05	65.15	35.17	-0.02	66.79	33.11	-0.06			
12/22/10	65.80	34.85	0.01	66.37	33.64	0.02	65.39	34.82	0.01	65.12	35.20	-0.03	66.81	33.09	0.02			
01/12/11	65.89	34.76	0.09	66.47	33.54	0.10	65.45	34.76	0.06	65.24	35.08	0.12	66.89	33.01	0.08			
02/02/11	65.88	34.77	-0.01	66.45	33.56	-0.02	65.42	34.79	-0.03	65.21	35.11	-0.03	66.84	33.06	-0.05			
03/09/11	62.75	37.90	-3.13	62.99	37.02	-3.46	62.91	37.30	-2.51	62.33	37.99	-2.88	62.31	37.59	-4.53			
03/15/11	62.83	37.82	0.08	62.06	37.95	-0.93	62.99	37.22	0.08	62.44	37.88	0.11	62.98	36.92	0.67			
04/06/11	63.15	37.50	0.32	64.19	35.82	2.13	62.42	37.79	-0.57	62.17	38.15	-0.27	63.67	36.23	0.69			
05/17/11	64.00	36.65	0.85	62.84	37.17	-1.35	63.53	36.68	1.11	63.14	37.18	0.97	-	-	-			
06/08/11	62.89	37.76	-1.11	62.66	37.35	-0.18	62.35	37.86	-1.18	62.35	37.97	-0.79	62.05	37.85	-1.62			
07/19/11	62.36	38.29	-0.53	61.86	38.15	-0.80	61.73	38.48	-0.62	61.59	38.73	-0.76	65.23	34.67	3.18			
08/03/11	61.95	38.70	-0.41	61.92	38.09	0.06	61.82	38.39	0.09	61.69	38.63	0.10	65.33	34.57	0.10			
09/06/11	63.48	37.17	1.53	62.94	37.07	1.02	61.77	38.44	-0.05	62.68	37.64	0.99	62.00	37.90	-3.33			
10/03/11	62.65	38.00	-0.83	61.99	38.02	-0.95	62.83	37.38	1.06	62.28	38.04	-0.40	62.81	37.09	0.81			
11/15/11	64.98	35.67	2.33	65.01	35.00	3.02	64.61	35.60	1.78	64.51	35.81	2.23	64.49	35.41	1.68			
12/02/11	63.56	37.09	-1.42	63.02	36.99	-1.99	61.83	38.38	-2.78	62.77	37.55	-1.74	62.10	37.80	-2.39			
12/13/11	-	-	-	-	-	1	64.18	36.03	2.35	-	-	-	64.55	35.35	2.45			
03/22/12	-	-	-	-	-	-	61.41	38.80	-2.77	-	-	-	61.78	38.12	-2.77			
06/18/12	59.90	40.75	-3.66	59.82	40.19	-3.20	59.33	40.88	-2.08	59.21	41.11	-3.56	59.75	40.15	-2.03			
09/17/12	63.33	37.32	3.43	63.14	36.87	3.32	62.88	37.33	3.55	62.74	37.58	3.53	63.23	36.67	3.48			

Facility Name: Quality Petroleum #111
Facility Address: 110 N. Lakeshore Way (Hwy. 92), Lake Alfred, Polk County, FL
05/8501162
All Measurements = Feet
Not Measured = -

WELL NO.	M	IW-7 con	t.	D	W-1 con	t.	N	1W-8 con	t.	N	1W-9 con	t.	F	PZ-1 cont	•			
DIAMETER		2"			2"			2"			1"			2"				
WELL DEPTH		45.00			57.00			45.00			45.00			45.00				
SCREEN INTERVAL		30'-45'			52'-57'			30'-45'			30'-45'			35'-45'				
TOC ELEVATION		100.65			100.01			100.21			100.32			99.90				
DATE	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.
10/11/12	63.74	36.91	0.41	64.06	35.95	-0.92	64.48	35.73	-1.60	63.26	37.06	-0.52	61.88	38.02	-1.35			
11/14/12	62.99	37.66	-0.75	62.47	37.54	-1.59	62.43	37.78	-2.05	62.36	37.96	-0.90	63.21	36.69	1.33			
12/10/12	63.34	37.31	0.35	63.72	36.29	1.25	61.96	38.25	-0.47	62.48	37.84	0.12	62.35	37.55	-0.86			
01/04/13	62.27	38.38	-1.07	61.97	38.04	-1.75	61.70	38.51	-0.26	61.33	38.99	-1.15	62.64	37.26	0.29			
03/08/13	60.51	40.14	-1.76	60.48	39.53	-1.49	60.01	40.20	-1.69	59.87	40.45	-1.46	60.39	39.51	-2.25			
04/29/13	60.43	40.22	-0.08	59.94	40.07	-0.54	59.27	40.94	-0.74	59.11	41.21	-0.76	59.63	40.27	-0.76			
05/29/13	59.29	41.36	-1.14	59.19	40.82	-0.75	58.70	41.51	-0.57	58.52	41.80	-0.59	59.34	40.56	-0.29			
06/11/13	59.84	40.81	0.55	60.05	39.96	0.86	58.66	41.55	-0.04	59.18	41.14	0.66	59.08	40.82	-0.26			
09/12/13	64.69	35.96	4.85	62.86	37.15	2.81	64.21	36.00	5.55	64.06	36.26	4.88	64.60	35.30	5.52			
12/18/13	64.34	36.31	-0.35	64.26	35.75	1.40	63.76	36.45	-0.45	63.59	36.73	-0.47	64.20	35.70	-0.40			
03/06/14	62.72	37.93	-1.62	62.99	37.02	-1.27	62.09	38.12	-1.67	61.94	38.38	-1.65	62.55	37.35	-1.65			
06/12/14	63.24	37.41	0.52	62.91	37.10	-0.08	62.69	37.52	0.60	62.54	37.78	0.60	63.10	36.80	0.55			
09/03/14	64.65	36.00	1.41	63.92	36.09	1.01	64.15	36.06	1.46	63.98	36.34	1.44	64.52	35.38	1.42			
01/07/15	67.43	33.22	2.78	66.84	33.17	2.92	66.86	33.35	2.71	66.64	33.68	2.66	-	-	-			

TABLE 2: DISSOLVED OXYGEN SUMMARY

Facility Name: Quality Petroleum #111 Facility ID#: 110 N. Lake Shore Way (Hwy. 92), Lake Alfred, Polk County, FL 53/8623713

DATE	Dissolved Oxygen (mg/L)													
DATE	MW-1 / 1R	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	PZ-1	DW-1			
12/02/10	0.32	0.36	0.38	2.57	3.67	2.02	2.32	4.23	3.21	3.60	5.30			
12/03/10	0.57	0.50	0.49	2.14	2.88	1.99	2.01	3.70	3.14	3.12	4.96			
12/06/10	0.68	0.47	0.51	2.61	2.91	2.05	2.12	3.96	3.29	3.44	5.17			
12/16/10	0.76	0.52	0.66	2.06	2.70	1.96	1.90	3.02	2.51	3.14	4.96			
12/22/10	0.73	0.58	0.64	2.00	2.16	1.94	1.44	2.81	2.77	4.79	-			
01/12/11	0.76	0.53	0.67	1.97	2.13	2.12	1.81	2.99	2.78	3.05	3.14			
02/02/11	0.83	0.60	0.74	1.44	2.08	1.91	1.68	2.96	2.41	3.13	3.07			
06/08/11	2.90	3.10	2.98	3.09	2.99	3.29	2.41	3.20	3.01	3.40	1.90			
09/06/11	3.10	2.90	2.76	2.97	2.94	2.40	2.36	2.32	2.94	2.98	1.87			
10/03/11	2.18	2.67	2.29	2.78	2.87	2.34	2.31	2.33	2.61	2.83	1.61			
11/15/11	2.86	2.61	2.30	2.24	2.80	2.08	2.17	2.12	2.67	2.83	1.18			
12/02/11	2.91	2.81	2.44	2.83	2.90	2.22	2.39	2.29	2.80	2.91	1.26			
12/15/11	1.69	1.55	1.29	-	-	1.37	-	1.51	-	1.41	-			
03/22/12	4.02	-	1.74	-	-	5.30	-	3.04	-	5.42	-			
06/18/12	-	-	0.42	-	-	0.97	-	0.68	-	1.32	-			
09/17/12	1.33	1.25	0.31	-	-	0.89	-	0.80	-	1.39	-			
10/11/12	1.13	1.39	1.67	1.91	1.61	1.36	1.66	1.41	1.19	1.96	1.19			
12/10/12	3.20	1.67	2.34	1.96	1.77	6.50	1.84	3.65	1.31	5.95	1.12			
01/04/13	2.61	2.44	2.12	2.70	2.81	2.12	2.19	2.17	2.63	2.72	1.13			
03/08/13	-	-	1.03	-	-	8.08	-	0.59	-	7.09	-			
05/29/13	-	-	1.47	4.65	1.41	5.40	5.33	2.39	3.30	5.85	4.08			
06/11/13	-	-	5.75	4.79	1.67	7.61	4.81	4.77	3.16	8.11	5.56			
07/08/13	-	-	2.11	2.27	1.09	4.55	3.17	2.83	2.02	2.74	-			
09/12/13	1.40	1.38	1.25	-	-	1.31	-	1.41	-	1.36	-			
12/18/13	0.34	1.08	0.82	-	-	0.70	-	0.62	-	0.81	-			
03/06/14	0.51	1.50	1.44	-	-	1.46	-	1.33	-	1.42	-			
06/12/14	0.60	0.93	1.35	-	-	1.18	-	1.37	-	0.80	-			
08/08/14	2.80	-	-	-	-	-	-	-	-	-	-			
09/03/14	1.39	-	-	-	-	-	-	-	-	-	-			
01/07/15	0.94	-	-	-	-	1.03	-	-	-	-	-			
05/29/15	0.38		-	-	-	0.99	-	-	-	-	-			

TABLE 3: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY

Facility Name: Quality Petroleum #111

Facility ID#:

Below Reporting Limit = <RL Analytical Results = μg/l

110 N. Lake Shore Way (Hwy. 92), Lake Alfred, Polk County, FL

53/8623713

** = As provided in Chapter 62-550, F.A.C.

K= Key W	/ell		NADC's GCTL's	100 1	400 40	300 30	200 20	NA NA	200 20	50,000 5,000	140 14	280 28	280 28	150 15**	2 0.02**
Location	Screen Int.	Date	DTW	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Total VOA	MTBE	TRPH	Naphtha- lene	Methyl nap, 1	Methyl nap, 2	Total Lead	EDB 1,2- dibromoeth ane
MW-1	30' - 40'	02/24/09	37.65	120	15 U	2,200	7,300	9,620	2.5 U	20,000	560	48	100		
		08/25/09	38.60	55	36,000	1,800	8,200	46,055	2.5 U	19,000	230	20	34		
		05/19/10	36.09	26	10,000	630	2,900	13,556	1.4	42,000	50	1.6	3.7		
		12/02/10	34.35	50 U	18,800	2,430	11,100	32,330	85 U	33,500	302	48.5	92.7		
		03/09/11	36.77	25 U	3,070	25 U	2,090	5,160	25 U	-	-	-	ı		
		06/08/11	37.27	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>0.78 U</td><td>0.39 U</td><td>0.39 U</td><td></td><td></td></rl<>	0.50 U	-	0.78 U	0.39 U	0.39 U		
		09/06/11	37.53	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>0.76 U</td><td>0.38 U</td><td>0.38 U</td><td></td><td></td></rl<>	0.50 U	-	0.76 U	0.38 U	0.38 U		
		12/13/11	35.44	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>0.78 U</td><td>0.39 U</td><td>0.39 U</td><td></td><td></td></rl<>	0.50 U	-	0.78 U	0.39 U	0.39 U		
collecte	ed at 40'	03/22/12	38.21	1.8	298	180	2,310	2,790	0.50 U	-	95.4	9.7	21.4		
		09/17/12	36.71	0.50 U	21.9	38.4	151	211	0.50 U	-	21.2	2.0	3.0		
		12/10/12	37.63	0.50 U	0.55 l	0.70 l	1.7 l	3.0	0.50 U	1,520	0.77 U	0.38 U	0.38 U		
		09/12/13	35.33	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>1,300</td><td>0.75 U</td><td>0.37 U</td><td>0.37 U</td><td></td><td></td></rl<>	0.50 U	1,300	0.75 U	0.37 U	0.37 U		
		12/18/13	35.77	0.50 U	0.50 U	0.50 U	15.4	15.4	0.50 U	5,740	0.82 I	9.7	4.7		
		03/06/14	37.46	0.50 U	12.0	15.7	157	185	0.50 U	9,700	106	31.5	37.0		
		06/12/14	36.86	0.50 U	60.6	23.1	121	205	0.50 U	5,680	80.9	38.1	46.6		
MW-1R	30' - 45'	08/08/14	36.01	0.50 U	141	11.9	147	300	0.50 U	1,480	12.5	2.2	7.1		
		09/03/14	35.40	0.50 U	83	8.1	90	181	0.50 U	1,000	22.1	8.0	14.2		
		01/07/15	32.71	0.50 U	1.5	0.99 I	7.3	9.7	0.50 U	2,400	0.75 U	0.92 I	0.46 I	1.3 I	0.0088 U
		05/29/15	33.72	0.50 U	7.1	5.7	16.5	29.3	0.50 U	875	0.76 U	0.38 U	0.38 U		

TABLE 3: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY

Facility Name: Quality Petroleum #111

Facility ID#:

Below Reporting Limit = <RL
Analytical Results = µg/l

110 N. Lake Shore Way (Hwy. 92), Lake Alfred, Polk County, FL

53/8623713

** = As provided in Chapter 62-550, F.A.C.

K= Key W	/ell		NADC's GCTL's	100 1	400 40	300 30	200 20	NA NA	200 20	50,000 5,000	140 14	280 28	280 28	150 15**	2 0.02**
Location	Screen Int.	Date	DTW	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Total VOA	МТВЕ	TRPH	Naphtha- lene	Methyl nap, 1	Methyl nap, 2	Total Lead	EDB 1,2- dibromoeth
MW-2	30' - 40'	02/24/09	37.40	5 U	1,100	210	980	2,290	2.5 U	16,000	66	110	240		ane
		08/25/09	38.39	3.9	380	230	880	1,494	0.38 I	14,000	43	72	150		
		05/19/10	35.88	0.1 U	2.5	3.8	9.1	15.4	0.05 U	600	0.69	1.8	3.4		
		12/02/10	34.14	0.20 U	4.0	0.60 I	1.8 l	4.0	0.34U	140 U	0.38 U	0.38 U	0.38 U		
		03/09/11	36.82	0.50 U	0.50 U	0.50 U	10.6	10.6	0.50 U	-	-	-	-		
		06/08/11	37.00	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		09/06/11	37.58	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		12/13/11	35.22	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		09/17/12	36.50	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		12/10/12	37.38	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>444</td><td>0.78 U</td><td>3.3</td><td>7.4</td><td></td><td></td></rl<>	0.50 U	444	0.78 U	3.3	7.4		
		09/12/13	35.10	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>140 U</td><td>0.75 U</td><td>0.37 U</td><td>0.37 U</td><td></td><td></td></rl<>	0.50 U	140 U	0.75 U	0.37 U	0.37 U		
		12/18/13	35.45	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>140 U</td><td>0.75 U</td><td>0.38 U</td><td>0.38 U</td><td></td><td></td></rl<>	0.50 U	140 U	0.75 U	0.38 U	0.38 U		
		03/06/14	37.15	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		06/12/14	36.61	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		

Facility Name: Quality Petroleum #111

Facility ID#:

Below Reporting Limit = <RL
Analytical Results = µg/l

110 N. Lake Shore Way (Hwy. 92), Lake Alfred, Polk County, FL

53/8623713

K= Key W	/ell		NADC's GCTL's	100 1	400 40	300 30	200 20	NA NA	200 20	50,000 5,000	140 14	280 28	280 28	150 15**	2 0.02**
Location	Screen Int.	Date	DTW	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Total VOA	MTBE	TRPH	Naphtha- lene	Methyl nap, 1	Methyl nap, 2	Total Lead	EDB 1,2- dibromoeth ane
MW-3	30' - 45'	02/24/09	36.85	5 U	870	530	2,500	3,900	2.5 U	7,900	110	27	49		
		08/25/09	37.82	7.6	630	220	1,300	2,158	0.37 I	4,100	48	12	18		
		05/19/10	35.30	24	2,700	590	2,300	5,614	0.55	11,000	38	11	22		
		12/02/10	33.61	2.2	144	106	607	859	0.68 U	4,010	23.8	12.5	25.7		
		03/09/11	36.25	0.50 U	2.5	3.8	27.0	33.3	0.50 U	-	-	-	-		
		06/08/11	36.41	0.50 U	0.50 U	1.0	14.0	15.0	0.50 U	-	-	-	-		
		09/06/11	35.70	0.50 U	0.50 U	1.3	6.5	7.8	0.50 U	-	-	-	-		
		12/13/11	34.64	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		03/22/12	37.36	1.0 U	1.4	24.3	138	164	0.50 U	-	-	-	-		
		06/18/12	38.40	1.1	1.5	26.8	103	132	4.2	-	-	-	-		
		09/17/12	35.90	0.50 U	0.50 U	0.95 I	1.0 U	0.95	0.50 U	-	-	-	-		
		12/10/12	36.84	0.50 U	0.50 U	6.5	25.6	32.1	0.50 U	651	2.8	2.0	6.8		
		03/08/13	38.78	0.0	0.77 I	8.3	42.9	51.2	0.0	143	4.8	4.7	8.6		
		06/11/13	40.06	0.50 U	0.50 U	3.1	5.8	8.9	0.50 U	224 I	0.78 U	0.41 I	0.39 U		
		09/12/13	34.51	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>140 U</td><td>0.74 U</td><td>0.37 U</td><td>0.37 U</td><td></td><td></td></rl<>	0.50 U	140 U	0.74 U	0.37 U	0.37 U		
		12/18/13	34.90	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>140 U</td><td>0.75 U</td><td>0.38 U</td><td>0.38 U</td><td></td><td></td></rl<>	0.50 U	140 U	0.75 U	0.38 U	0.38 U		
		03/06/14	36.60	0.50 U	0.50 U	0.84 l	1.4 l	2.2	0.50 U	-	-	-	-		
		06/12/14	36.05	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
MW-4	30' - 45'	04/27/09	38.55	0.1 U	0.3 U	0.2 U	0.4 U	<rl< td=""><td>0.05 U</td><td>74</td><td>0.031 U</td><td>0.028 U</td><td>0.025 U</td><td></td><td></td></rl<>	0.05 U	74	0.031 U	0.028 U	0.025 U		
MW-5	30' - 45'	04/27/09	39.93	0.1 U	0.3 U	0.2 U	0.4 U	<rl< td=""><td>0.05 U</td><td>65</td><td>0.031 U</td><td>0.028 U</td><td>0.025 U</td><td></td><td></td></rl<>	0.05 U	65	0.031 U	0.028 U	0.025 U		
		05/19/10	35.96	0.1 U	0.3 U	0.2 U	0.4 U	<rl< td=""><td>0.05 U</td><td>46 U</td><td>0.031 U</td><td>0.028 U</td><td>0.025 U</td><td></td><td></td></rl<>	0.05 U	46 U	0.031 U	0.028 U	0.025 U		

Facility Name: Quality Petroleum #111

Facility ID#:

Below Reporting Limit = <RL Analytical Results = μg/l

110 N. Lake Shore Way (Hwy. 92), Lake Alfred, Polk County, FL

53/8623713

			NADC's	100	400	300	200	NA	200	50,000	140	280	280	150	2
K= Key W	Vell		GCTL's	1	40	30	20	NA	20	5,000	14	28	28	15**	0.02**
Location	Screen Int.	Date	DTW	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Total VOA	МТВЕ	TRPH	Naphtha-	Methyl nap, 1	Methyl nap, 2	Total Lead	EDB 1,2- dibromoeth
MW-6	30' - 45'	04/27/09	40.27	0.1 U	85	140	600	825	<0.05		22	2.1	•	Lead	ane
IVIVV-O	30 - 45		-	2.7	870	680			0.05 U	4,700			5.4		
		05/19/10	36.36			69.0	1,500 246	3,053		5,000	66	11	22		
		12/02/10	34.74	0.20 U	10.4		_	325	0.34 U	1,390	19.7	4.4	8.7		
		03/09/11	37.73	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		06/08/11	37.89	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		09/06/11	38.26	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		12/13/11	35.74	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		03/22/12	38.40	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		06/18/12	40.55	0.50 U	0.50 U	0.50 U	4.0	4.0	0.50 U	-	-	-	-		
		09/17/12	37.00	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		12/10/12	37.34	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>140 U</td><td>0.78 U</td><td>0.39 U</td><td>0.39 U</td><td></td><td></td></rl<>	0.50 U	140 U	0.78 U	0.39 U	0.39 U		
		03/08/13	39.90	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>1,330</td><td>0.78 U</td><td>0.39 U</td><td>0.39 U</td><td></td><td></td></rl<>	0.50 U	1,330	0.78 U	0.39 U	0.39 U		
		06/11/13	41.23	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>140 U</td><td>0.78 U</td><td>0.39 U</td><td>0.39 U</td><td></td><td></td></rl<>	0.50 U	140 U	0.78 U	0.39 U	0.39 U		
		09/12/13	35.67	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>140 U</td><td>0.75 U</td><td>0.37 U</td><td>0.37 U</td><td></td><td></td></rl<>	0.50 U	140 U	0.75 U	0.37 U	0.37 U		
		12/18/13	36.10	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>258</td><td>0.75 U</td><td>0.38 U</td><td>0.38 U</td><td></td><td></td></rl<>	0.50 U	258	0.75 U	0.38 U	0.38 U		
		03/06/14	37.75	0.50 U	0.50 U	0.50 U	1.2 l	1.2	0.50 U	-	-	-	-		
		06/12/14	37.20	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		01/07/15	33.11	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>140 U</td><td>0.75 U</td><td>0.38 U</td><td>0.38 U</td><td></td><td></td></rl<>	0.50 U	140 U	0.75 U	0.38 U	0.38 U		
		05/29/15	34.11	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>140 U</td><td>0.93 I</td><td>0.38 U</td><td>0.50 l</td><td></td><td></td></rl<>	0.50 U	140 U	0.93 I	0.38 U	0.50 l		
MW-7	30' - 45'	04/27/09	40.50	0.1 U	0.3 U	0.2 U	0.4 U	<rl< td=""><td>0.05 U</td><td>50</td><td>0.031 U</td><td>0.028 U</td><td>0.025 U</td><td></td><td></td></rl<>	0.05 U	50	0.031 U	0.028 U	0.025 U		
DW-1	52' - 57'	04/27/09	39.86	0.1 U	1.9	0.2 U	1.8	3.7	0.05 U	200	0.47	0.091	0.16		

Facility Name: Quality Petroleum #111

Facility ID#:

Below Reporting Limit = <RL Analytical Results = µg/l

110 N. Lake Shore Way (Hwy. 92), Lake Alfred, Polk County, FL

53/8623713

K= Key W	/ell		NADC's GCTL's	100 1	400 40	300 30	200 20	NA NA	200 20	50,000 5,000	140 14	280 28	280 28	150 15**	2 0.02**
Location	Screen			_		Ethyl	Total	Total			Naphtha-	Methyl	Methyl	Total	EDB 1,2- dibromoeth
	Int.	Date	DTW	Benzene	Toluene	Benzene	Xylenes	VOA	MTBE	TRPH	lene	nap, 1	nap, 2	Lead	ane
MW-8	30' - 45'	08/25/09	39.19	0.33 I	1.7	46	4.6	53	0.05 U	580	7.9	3.9	4.5		
		05/19/10	36.65	0.1 U	0.3 U	6.8	0.4 U	6.8	0.05 U	230 I	0.091 I	0.028 U	0.025 U		
		12/02/10	35.02	0.20 U	0.82 I	5.1	0.52 U	5.1	0.34 U	172 I	2.4	0.39 I	0.67 I		
		03/09/11	37.30	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		06/08/11	37.86	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		09/06/11	38.44	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		12/13/11	36.03	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		03/22/12	38.80	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		06/18/12	40.88	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		09/15/12	37.33	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		12/10/12	38.25	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		03/08/13	40.20	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		06/11/13	41.55	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		09/12/13	36.00	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		12/18/13	36.45	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		03/06/14	38.12	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		06/12/14	37.52	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		

Facility Name: Quality Petroleum #111

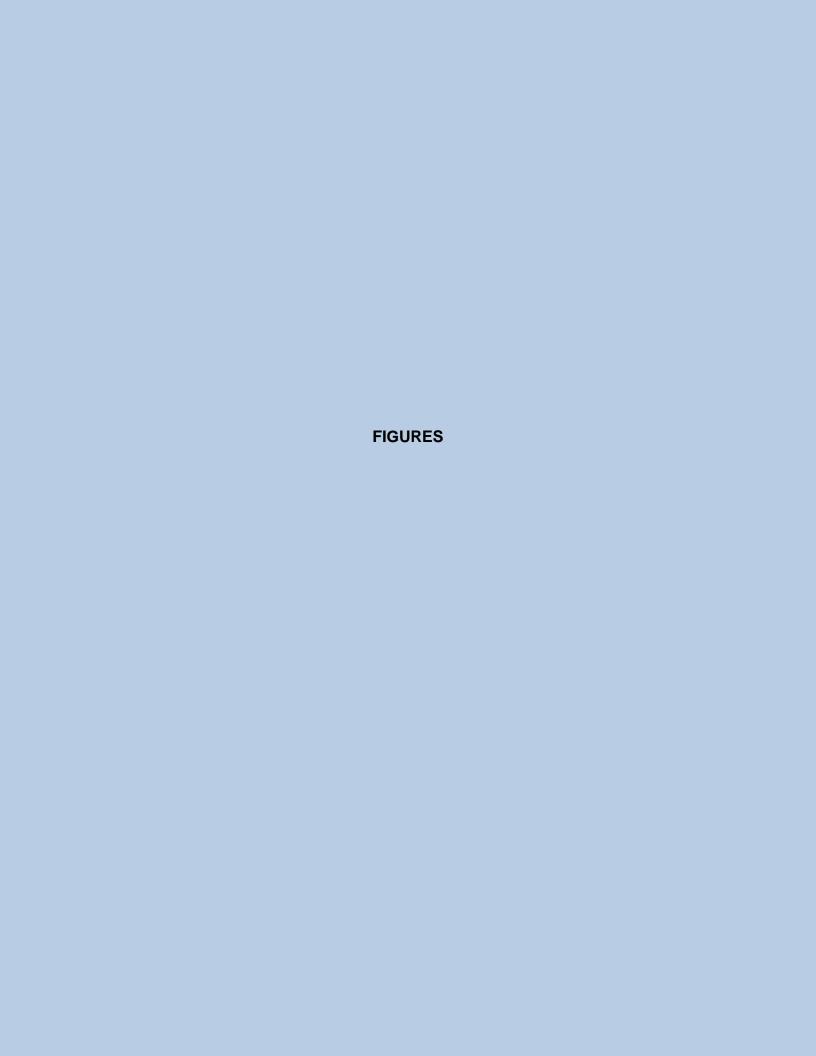
Facility ID#:

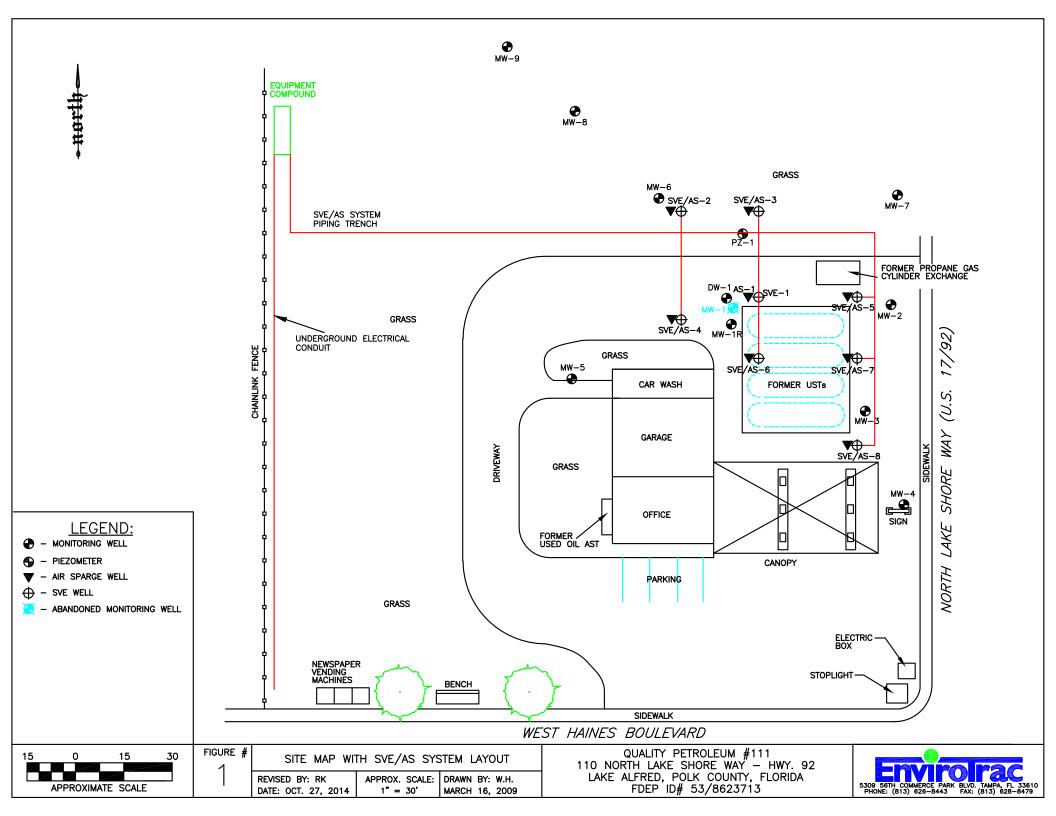
Below Reporting Limit = <RL Analytical Results = μg/l

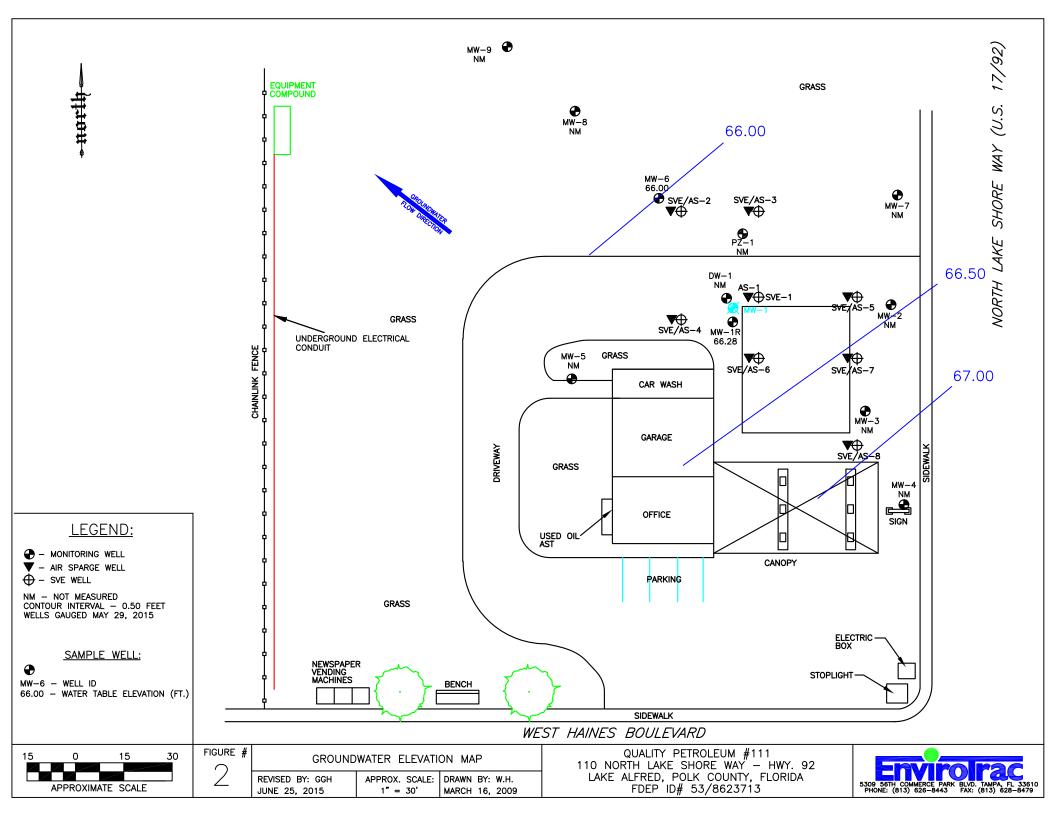
110 N. Lake Shore Way (Hwy. 92), Lake Alfred, Polk County, FL

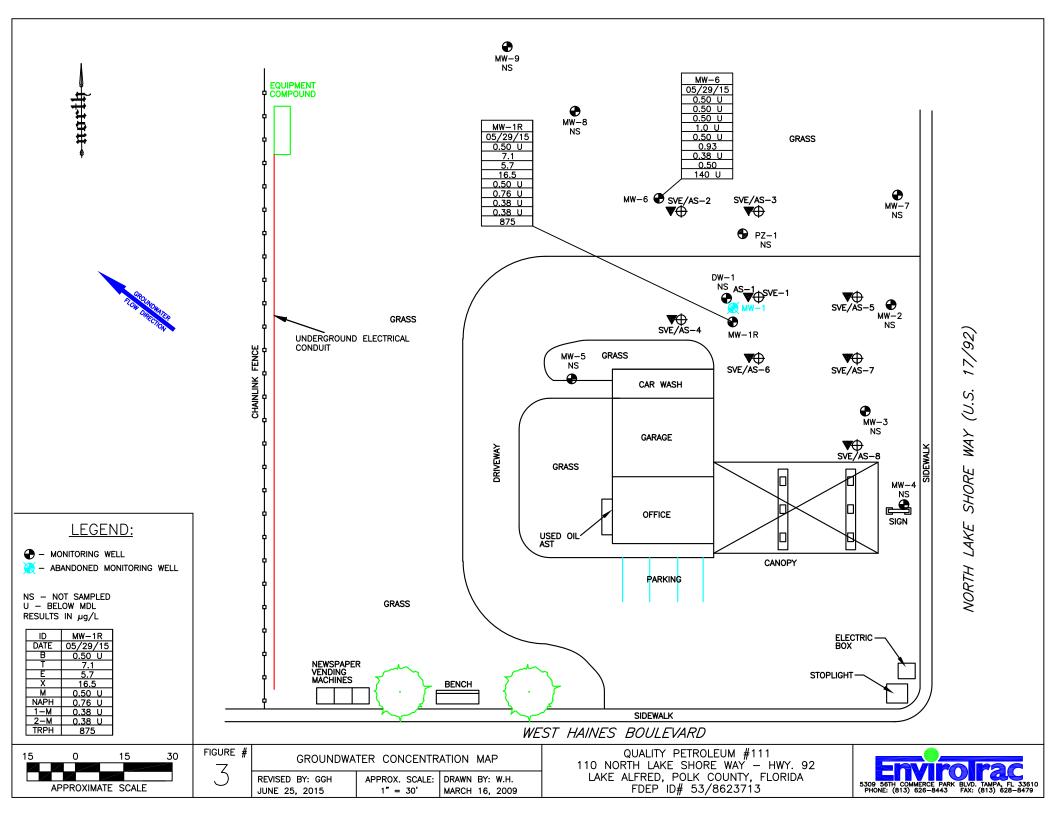
53/8623713

K= Key W	/ell		NADC's GCTL's	100 1	400 40	300 30	200 20	NA NA	200 20	50,000 5,000	140 14	280 28	280 28	150 15**	2 0.02**
Location	Screen Int.	Date	DTW	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Total VOA	MTBE	TRPH	Naphtha- lene	Methyl nap, 1	Methyl nap, 2	Total Lead	EDB 1,2- dibromoeth ane
PZ-1	35' - 45'	08/25/09	38.56	1.4	570	730	4,500	5,801	0.05 U	8,200	92	11	17		
		05/19/10	36.02	1.4	480	370	1,700	2,551	0.05 U	3,000	24	2.8	3.8		
		12/02/10	35.04	0.20 U	1.5	1.8	8.5	11.8	0.34 U	140 U	0.42 l	0.38 U	0.38 U		
		03/09/11	37.59	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		06/08/11	37.85	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		09/06/11	37.90	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		12/13/11	35.35	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
		03/22/12	38.12	0.50 U	0.50 U	0.50 U	12.0	12.0	0.50 U	-	-	-	-		
		06/18/12	40.15	0.50 U	0.50 U	34.0	45.9	79.9	0.50 U	-	-	-	-		
		09/17/12	36.67	0.50 U	0.50 U	34.7	44.1	78.8	0.50 U	-	-	-	-		
		12/10/12	37.55	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>154 I</td><td>0.77 U</td><td>0.38 U</td><td>0.38 U</td><td></td><td></td></rl<>	0.50 U	154 I	0.77 U	0.38 U	0.38 U		
		03/08/13	39.51	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>150 U</td><td>0.77 U</td><td>0.38 U</td><td>0.38 U</td><td></td><td></td></rl<>	0.50 U	150 U	0.77 U	0.38 U	0.38 U		
		06/11/13	40.82	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>140 U</td><td>0.78 U</td><td>0.39 U</td><td>0.39 U</td><td></td><td></td></rl<>	0.50 U	140 U	0.78 U	0.39 U	0.39 U		
		09/12/13	35.30	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>140 U</td><td>0.76 U</td><td>0.38 U</td><td>0.38 U</td><td></td><td></td></rl<>	0.50 U	140 U	0.76 U	0.38 U	0.38 U		
		12/18/13	35.70	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>354</td><td>0.76 U</td><td>0.38 U</td><td>0.38 U</td><td></td><td></td></rl<>	0.50 U	354	0.76 U	0.38 U	0.38 U		
		03/06/14	37.35	0.50 U	0.50 U	1.3	5.9	7.2	0.50 U	-	-	-	-		
		06/12/14	36.80	0.50 U	0.50 U	0.50 U	1.0 U	<rl< td=""><td>0.50 U</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></rl<>	0.50 U	-	-	-	-		
MW-9	35' - 45'	11/12/09	38.45	0.1 U	0.3 U	0.2 U	0.4 U	<rl< td=""><td>0.05 U</td><td>46 U</td><td>0.031 U</td><td>0.028 U</td><td>0.025 U</td><td></td><td></td></rl<>	0.05 U	46 U	0.031 U	0.028 U	0.025 U		









Mission:

To protect, promote & improve the health of all people in Florida through integrated state, county & community efforts.



Vision: To be the Healthiest State in the Nation

1

Rick Scott Governor

John H. Armstrong, MD, FACS State Surgeon General & Secretary

October 14, 2015

Mr. Steve Weeks Quality Petroleum Corp PO Box 3889 Lakeland, FL 33802

Subject:

Natural Attenuation Monitoring Report Approvals

Quality #111

110 N Lake Shore Way- Hwy 17-92

Lake Alfred, Polk County FDEP Facility ID# 538623713

Discharge Date: April 11, 2008 (Non-program)

Dear Mr. Weeks:

The Florida Department of Health in Polk County Petroleum Cleanup Program (FDOH-Polk), on behalf of the Florida Department of Environmental Protection (FDEP), has reviewed the Natural Attenuation Monitoring Reports (Reports), dated March 2, 2015 (received March 3, 2015), July 13, 2015 (received July 21, 2015) and Supplemental Soil Assessment Information received March 3, 2015 via email from EnviroTrac. The Reports are acceptable and meet the requirements set forth in Chapter 62-780.690, Florida Administrative Code (FAC).

FDOH-Polk agrees that the site meets the requirements for No Further Action Status. A Site Rehabilitation Completion Order (SRCO) for the discharge date(s) above will be issued under separate cover. If you have any questions about this review, you may contact me at (863) 519-8330 ext 12141, by e-mail at Carol.Cassels@flhealth.gov, or at the letterhead address.

Sincerely,

Carol Cassels

Environmental Specialist II

Reviewed by:

Gerald Robinson, P.E.

Professional Engineer #60967

Date

cc: FDOH-Polk File

ec:

Ben Crider, P.O. Box 1178, Lake Alfred, FL 33850 Ron Kiely, EnviroTrac Ltd., ronk@envirotrac.com

FDEP - PRP File

(B)/4/5

	DS Form 3900 Availab 3008
	or PC Lakeland, FL 33815
	1625 George Jenkins Blvd.
	Sent
	Tota Mr. R. Stephen Weeks
	Restricted Delivery Fee (Endorsement Required)
Postmark Here	Return Receipt Fee (Endorsement Required)
	Certified Fee
	Postage \$
SUSE	S38623713
t www.usps.com	For delivery information visit our website at www.usps.coma
EIPT verage Provided)	CERTIFIED MAIL _{TM} RECEIPT (Domestic Mail Only; No Insurance Coverage Provided)
	U.S. Postal Service TH

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- For an additional fee, a Return Receipt may be requested to provide proof of delivery. To obtain Return Receipt service, please complete and attach a Return Receipt (PS Form 3811) to the article and add applicable postage to cover the fee. Endorse malipiece "Return Receipt Requested". To receive a fee waiver for a duplicate return receipt, a USPS_® postmark on your Certified Mail receipt is required. ■ NO INSURANCE COVERAGE IS PROVIDED with Certified Mail. For valuables, please consider insured or Registered Mail.
- For an additional fee, delivery may be restricted to the addressee or addressee's authorized agent. Advise the clerk or mark the mailpiece with the endorsement 'Restricted Delivery'.
- If a postmark on the Certified Mail receipt is desired, please present the article at the post office for postmarking. If a postmark on the Certified Mail receipt is not needed, detach and affix label with postage and mail.

IMPORTANT: Save this receipt and present it when making an inquiry.

PS Form 3800, August 2006 (Reverse) PSN 7530-02-000-9047

PS Form 3811, July 2013	Article Number (Transfer from service label)	■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. ■ Print your name and address on the reverse so that we can return the card to you. ■ Attach this card to the back of the mailpiece or on the front if space permits. 1. Article Addressed to: 53%6237/13 Mr. R. Stephen Weeks Weeks Family Properties 1625 George Jenkins Blvd. Lakeland, FL 33815	
Domestic Return Receipt	6949 JSEE TOOO 0522 ETOL	complete sired. X D Wal Collect Name) e mailpiece, B Received by (Printed Name) D. Is delivery address different from item 1? Yes If YES, enter delivery address below: 3. Service Type Registered Registered Insured Mail Collect on Delivery 4. Restricted Delivery? (Extra Fee) A gent A gent Addressee Addressee Addressee Addressee Address different from item 1? Yes Yes A Signature Addressee	

UNITED STATES POSTAL SERVICE • Sender: Please print your name, address, and ZIP+4® in this box• FLORIDA DEP BOB MARTINEZ CENTER 2600 BLAIRSTONE ROAD MS 4540 FALLAHASSEE, FLORIDA 32399-2400 First-Class Mail Postage & Fees Paid USPS Permit No. G-10



Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Rick Scott Governor

Carlos Lopez-Cantera Lt. Governor

Jonathan P. Steverson Secretary

May 16, 2016

CERTIFIED MAIL #[7013 2250 0001 3357 8469] RETURN RECEIPT REQUESTED

Mr. R. Stephen Weeks Weeks Family Properties 111 LLC 1625 George Jenkins Blvd. Lakeland, FL 33815

Subject: <u>Site Rehabilitation Completion Order</u>

Quality #111

130 Lake Shore Way N Lake Alfred, Polk County FDEP Facility ID# 538623713

Discharge Date: April 11, 2008 (Non-program)

Dear Mr. Weeks:

The Florida Department of Health in Polk County Petroleum Cleanup Program (FDOH-Polk), on behalf of the Florida Department of Environmental Protection (Department) has reviewed the Site Rehabilitation Completion Report (SRCR) and No Further Action Proposal (NFAP) dated July 13, 2015 (received July 21, 2015), for the petroleum product discharge referenced above. Documentation submitted with the SRCR/NFAP confirms that criteria set forth in Subsection 62-780.680(1), Florida Administrative Code (F.A.C.)., have been met. Please refer to the attached map of the source property and analytical summary tables, Exhibits A and B respectively and hereby incorporated by reference. The SRCR/NFAP is hereby incorporated by reference in this Site Rehabilitation Completion Order (Order). Therefore, you are released from any further obligation to conduct site rehabilitation at the facility for petroleum product contamination associated with the discharge referenced above, except as set forth below.

- (1) In the event concentrations of petroleum products' contaminants of concern increase above the levels approved in this Order, or if a subsequent discharge of petroleum or petroleum product occurs at the facility, the Department may require site rehabilitation to reduce concentrations of petroleum products' contaminants of concern to the levels approved in the SRCR/NFAP or otherwise allowed by Chapter 62-780, F.A.C.
- (2) Additionally, you are required to properly plug and abandon all monitoring wells, injection wells, extraction wells, and sparge wells within 60 days of receipt of this Order unless these wells are otherwise required for compliance with a local ordinance or another cleanup. The wells must be

Mr. R. Stephen Weeks FDEP Facility ID# 538623713 Page 2 May 16, 2016

plugged and abandoned in accordance with the requirements of Subsection 62-532.500(5), F.A.C. A Well Plugging Report shall be submitted within 30 days of well plugging. Other State, county or city requirements for well abandonment may also apply.

Legal Issues

The Department's Order shall become final unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, Florida Statutes (F.S.), within 21 days of receipt of this Order. The procedures for petitioning for an administrative hearing are set forth below.

Persons affected by this Order have the following options:

- (A) If you choose to accept the Department's decision regarding the SRCR/NFAP you do not have to do anything. This Order is final and effective on the date filed with the Clerk of the Department, which is indicated on the last page of this Order.
- (B) If you choose to challenge the decision, you may do the following:
- (1) File a request for an extension of time to file a petition for an administrative hearing with the Department's Agency Clerk in the Office of General Counsel within 21 days of receipt of this Order; such a request should be made if you wish to meet with the Department in an attempt to informally resolve any disputes without first filing a petition for an administrative hearing; or
- (2) File a petition for an administrative hearing with the Department's Agency Clerk in the Office of General Counsel within 21 days of receipt of this Order.

Please be advised that mediation of this decision pursuant to Section 120.573, F.S., is not available.

How to Request an Extension of Time to File a Petition for an Administrative Hearing

For good cause shown, pursuant to Subsection 62-110.106(4), F.A.C., the Department may grant a request for an extension of time to file a petition for an administrative hearing. Such a request must be filed (received) by the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from Weeks Family Properties 111 LLC, shall mail a copy of the request to Weeks Family Properties 111 LLC at the time of filing. Timely filing a request for an extension of time tolls the time period within which a petition for an administrative hearing must be made.

How to File a Petition for an Administrative Hearing

A person whose substantial interests are affected by this Order may petition for an administrative hearing under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) by the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from Weeks Family Properties 111 LLC, shall mail a copy of the petition to Weeks Family Properties 111 LLC at the time of filing. Failure to file a petition within this

Mr. R. Stephen Weeks FDEP Facility ID# 538623713 Page 3 May 16, 2016

time period shall waive the right of anyone who may request an administrative hearing under Sections 120.569 and 120.57, F.S.

Pursuant to Subsection 120.569(2), F.S. and Rule 28-106.201, F.A.C., a petition for an administrative hearing shall contain the following information:

- (a) The name, address, and telephone number of each petitioner; the name, address, and telephone number of the petitioner's representative, if any; the facility owner's name and address, if different from the petitioner; the FDEP facility number, and the name and address of the facility;
- (b) A statement of when and how each petitioner received notice of the Department's action or proposed action;
- (c) An explanation of how each petitioner's substantial interests are or will be affected by the Department's action or proposed action;
- (d) A statement of the disputed issues of material fact, or a statement that there are no disputed facts;
- (e) A statement of the ultimate facts alleged, including a statement of the specific facts the petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the Department's action or proposed action; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the Department to take with respect to the Department's action or proposed action.

This Order is final and effective on the date filed with the Clerk of the Department, which is indicated on the last page of this Order. Timely filing a petition for an administrative hearing postpones the date this Order takes effect until the Department issues either a final order pursuant to an administrative hearing or an Order Responding to Supplemental Information provided to the Department pursuant to meetings with the Department.

Judicial Review

Any party to this Order has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days after this Order is filed with the Department's clerk (see below).

Questions

Any questions regarding the FDOH-Polk's review of the SRCR/NFAP should be directed to Carol Cassels at (863) 519-8330, extension 12141. Questions regarding legal issues should be referred to the Department's Office of General Counsel at (850) 245-2242. Contact with any of the above does not

Mr. R. Stephen Weeks FDEP Facility ID# 538623713 Page 4 May 16, 2016

constitute a petition for an administrative hearing or a request for an extension of time to file a petition for an administrative hearing.

The FDEP Facility Number for this facility is 538623713. Please use this identification on all future correspondence with the Department.

Sincerely,

Diane D. Pickett Program Administrator

Petroleum Restoration Program

DDP/crc

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to \$120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

(or Deputy Clerk)

Exhibits: A: map of the source property; B: updated analytical summary tables

cc: Mr. Benjamin C. Crider, P.O. Box 1178, Lake Alfred, FL 33850

ec: Yanisa Angulo, FDEP Southwest District Office – yanisa.angulo@dep.state.fl.us
Carol Cassels, FDOH-Polk – Carol.Cassels@flhealth.gov
Ron Kiely, EnviroTrac Ltd. – ronk@envirotrac.com
David Arnold, Southwest Florida Water Management District – davidn.arnold@watermatters.org
File

P.E. CERTIFICATION

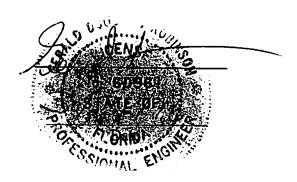
The Site Rehabilitation Completion Report and No Further Action Proposal, titled as a Natural Attenuation Monitoring Report dated July 13, 2015 (received July 21, 2015) for Quality #111 requested no further action without conditions for the petroleum discharge discovered on April 11, 2008. This facility is located at 130 N Lake Shore Way, Lake Alfred, Polk County, Florida, and the facility number for this site is 538623713.

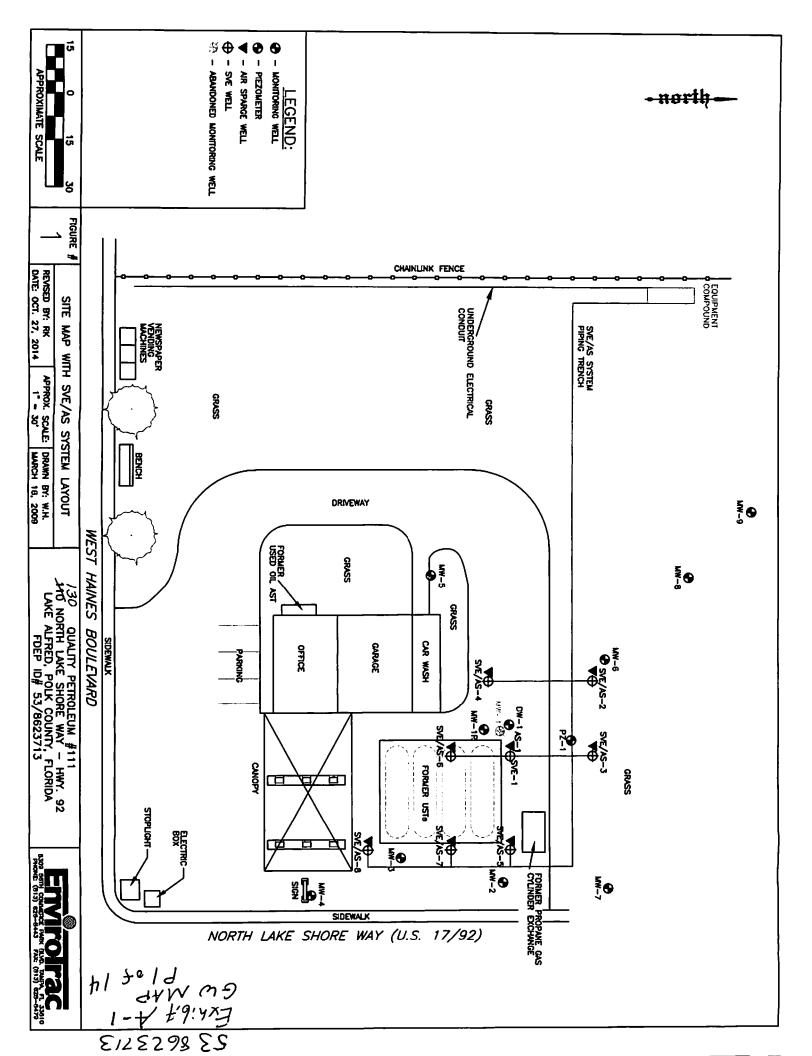
I hereby certify that in my professional judgment, the components of this Site Rehabilitation Completion Report and No Further Action Proposal satisfy the requirements set forth in Chapter 62-780, Florida Administrative Code (F.A.C.), and that the conclusions in this report provide reasonable assurances that the objectives stated in Chapter 62-780, F.A.C., have been met.

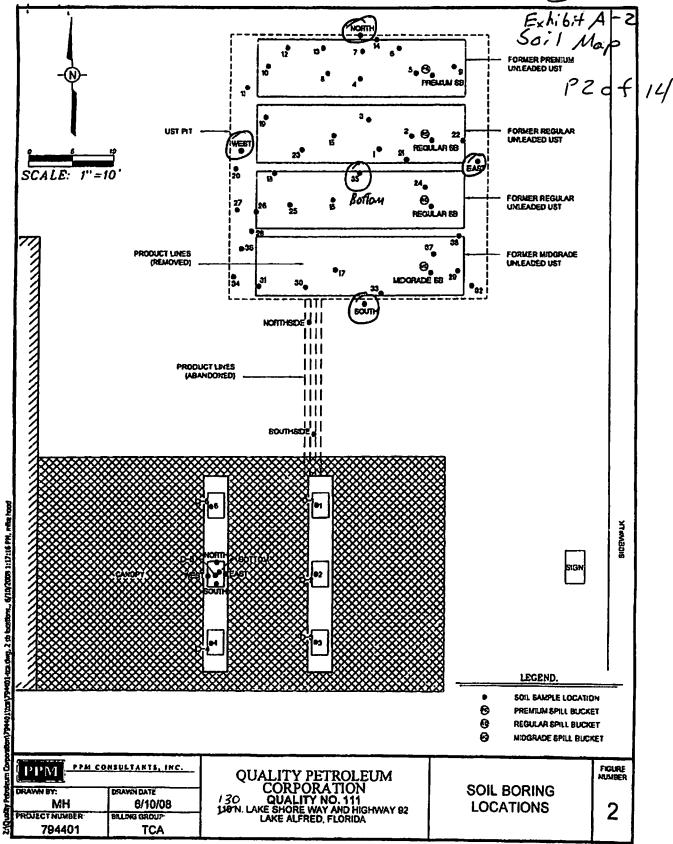
____ I personally completed this review.

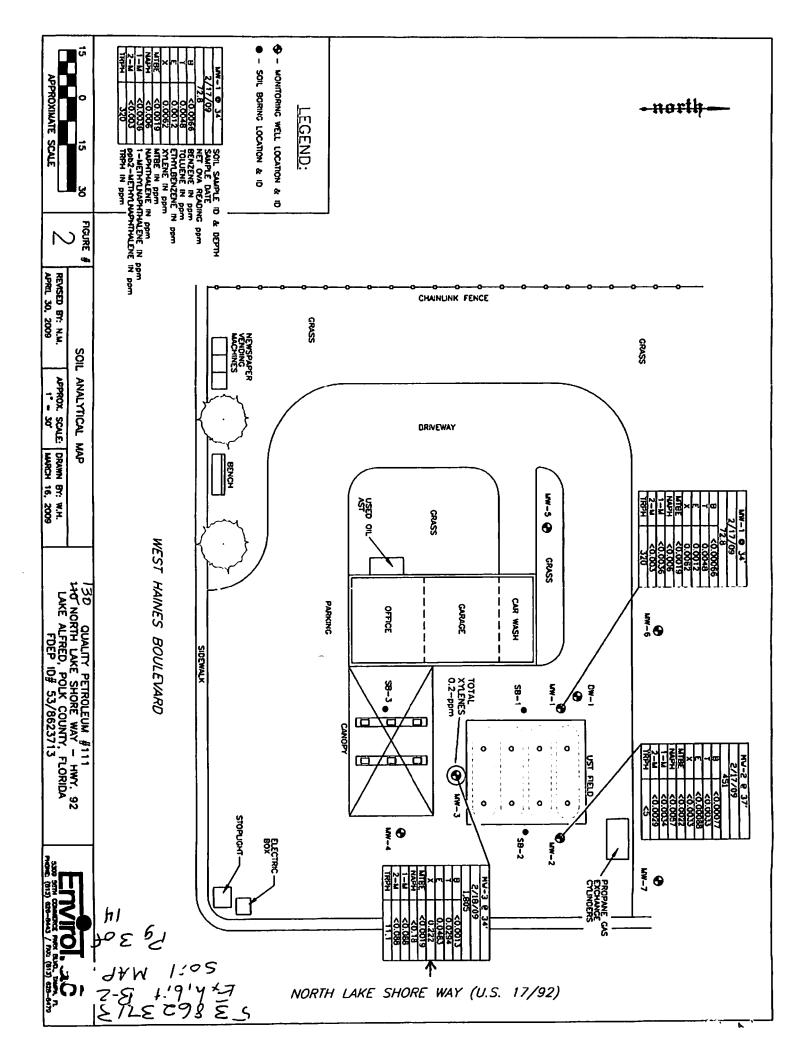
X This review was conducted by <u>Carol Cassels</u> working under my direct supervision.

Gerald D Robinson, P.E. Professional Engineer No. 60967 Florida Department of Health in Polk County









Facility Name: Quality Petroleum #111 146'N. Lake Shore Way (Hwy. 92), Lake Alfred, Polk County, FL 130

Facility ID#: 53/8623713

Below Reporting Limit = <RL Analytical Results = µg/l

** = As provided in Chapter 62-550, F.A.C.

Location	ÇΙ		GCILS		ŧ	Ethyl	Total		Total		;	z	Naphtha-	Naphtha- Methyl
	Int.	Date	WTO	Benzene	Toluene	Benzene	Xylenes		VOA	VOA MTBE	3.	MTBE	MTBE TRPH	MTBE TRPH lene
MW-1	30' - 40'	02/24/09	37.65	120	15 U	2,200	7,300	ı	9,620	9,620 2.5 U		2.5 ∪ 20,000	2.5 U 20,000 560	2.5 U 20,000 560
· i		08/25/09	38.60	55	36,000	1,800	8,200		46,055			2.5 U	2.5 U 19,000	2.5 U 19,000 230
		05/19/10	36.09	26	10,000	630	2,900		13,556	13,556 1.4		1.4	1.4 42,000 50	1.4 42,000 50
		12/02/10	34.35	50 U	18,800	2,430	11,100		32,330			85 U	85 U 33,500	85 U 33,500 302 48.5
		03/09/11	36.77	25 U	3,070	25 U	2,090		5,160	5,160 25 U			25 U	25 U
		06/08/11	37.27	0.50 U	0.50 U	0.50 U	1.00		₽.	<rl 0.50="" td="" u<=""><td></td><td></td><td>0.50 ∪</td><td>0.50 U - 0.78 U</td></rl>			0.50 ∪	0.50 U - 0.78 U
		09/06/11	37.53	0.50 ∪	0.50 U	0.50 U	1.0 U		∱ RL				0.50 U -	0.50 U - 0.76 U
		12/13/11	35.44	0.50 ∪	0.50 U	0.50 U	1.0 U		Ŕ	<rl 0.50="" td="" u<=""><td></td><td></td><td>0.50 U -</td><td>0.50 U - 0.78 U 0.39 U</td></rl>			0.50 U -	0.50 U - 0.78 U 0.39 U
collected at 40'	d at 40'	03/22/12	38.21	1.8	298	180	2,310		2,790				0.50 U - 95.4	0.50 U - 95.4 9.7
		09/17/12	36.71	0.50 ∪	21.9	38.4	151		211			0.50 U -	0.50 U - 21.2	0.50 U - 21.2 2.0
		12/10/12	37.63	0.50 U	0.551	0.701	1.71		3.0			0.50 บ	0.50 U 1.520	0.50 U 1.520 0.77 U
		09/12/13	35.33	0.50 U	0.50 U	0.50 U	1.0 U		æ		0.50 U	0.50 U	0.50 U 1.300 0.75 U	0.50 U 1.300 0.75 U 0.37 U
	:	12/18/13	35.77	0.50 U	0.50 U	0.50 U	15.4		15.4	15.4 0.50 U	<u> </u>	0.50 U	0.50 U 5,740 0.821	0.50 U 5,740 0.821
	i	03/06/14	37.46	0.50 U	12.0	15.7	157		185		0.50 U	0.50 U	0.50 U 9,700 106	0.50 9,700 106 31.5
		06/12/14	36.86	0.50 U	60.6	23.1	121		205	<u> </u>	0.50 U	0.50 U	0.50 U 5,680 80.9	0.50 5,680 80.9 38.1
MW-1R	30' - 45'	08/08/14	36.01	0.50 U	141	11.9	147		300			0.50 U	0.50 ∪ 1.480	0.50 U 1.480 12.5
		09/03/14	35.40	0.50 U	83	8.1	90		181			0.50 U	0.50 U 1,000 22.1	0.50 U 1,000 22.1
		01/07/15	32.71	0.50 U	1.5	0.991	7.3		9.7			0.50 U	0.50 U 2.400 0.75 U	0.50 U 2.400 0.75 U
		•			1	7	100		29.3	_	0.50	29.3 0.50 U 875 0.76 U	0.50 875	0.5011 975 07611

* Source well used for site closure /NFA determination.

1-81-19:45 509:2009 1-81-19:45 51252885

Page 1 of 6

TABLE 3: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY

Facility Name: Quality Petroleum #111 140 N. Lake Shore Way (Hwy. 92), Lake Alfred, Polk County, FL $_{130}^{\circ}$

Facility ID#: 53/8623713

Below Reporting Limit = <RL Analytical Results = µg/l

** = As provided in Chapter 62-550, F.A.C.

		190													
			NADC's	100	400	300	200	AN	200	50,000	140	280	280	150	2
K= Key Well	ell		GCTL's	-	6	36	20	NA	20	5,000	14	28	28	15**	0.02**
Location	Screen					Ethyi	Total	Total			Naphtha-	Methyl	Methyl	Total	EDB 1,2-
	Int.	Date	WIG	Benzene	Toluene	Bonzene	Xylenes	VOA	MTBE	TRPH	lene	nap, 1	nap, 2	Lead	ane
MW-2	30' - 40'	02/24/09	37.40	50	1,100	210	980	2,290	2.5 U	16,000	66	110	240		
<u> </u>		08/25/09	38.39	3.9	380	230	880	1,494	0.381	14,000	43	72	160		
		05/19/10	35.88	0.1 U	2.5	3.8	9.1	15.4	0.05 U	600	0.69	1.8	3.4		
	!	12/02/10	34.14	0.20 U	4.0	0.601	1.8.	4.0	0.34U	140 U	0.38 ∪	0.38 U	0.38 U		
		03/09/11	36.82	0.50 U	0.50 U	0.50 U	10.6	10.6	0.50 U		•	•			
<u> </u>	i	06/08/11	37.00	0.50 U	0.50 ∪	0.50 U	1.0 U	\$	0.50 U	•			•		
! 		09/06/11	37.58	0.50 U	0.50 U	0.50 U	1.0 U	2	0.50 U	•					
 		12/13/11	35.22	0.50 U	0.50 U	0.50 U	1.0 U	<u>۾</u>	0.50 U	•	•		•		
 	i	09/17/12	36.50	0.50 U	0.50 U	0.50 U	1.0 U	<u>\$</u>	0.50 U	•	. •	•	•		!
!		12/10/12	37.38	0.50 U	0.50 U	0.50 U	1.0 U	2	0.50 U	444	0.78 U	3.3	7.4		
· 		09/12/13	35.10	0.50 U	0.50 U	0.50 U	1.0 U	Æ	0.50 U	140 U	0.75 U	0.37 U	0.37 U		
 		12/18/13	35.45	0.50 U	0.50 บ	0.50 U	1.0 U	æ	0.50 U	140 U	0.75 บ	0.38 U	0.38 U		
		03/06/14	37.15	0.50 U	0.50 U	0.50 U	1.0 U	æ	0.50 U	•			•		ĺ
		06/12/14	36.61	0.50 U	0.50 U	0.50 U	1.0 U	₽	0.50 U	•	•		•		
		_							_						_

Page 2 of 6

11 20 5 8 17 17 17 19 (19) 1-81 4:9:45 1885 3 1885 3

Facility Name: Quality Petroleum #111 ガ N. Lake Shore Way (Hwy. 92), Lake Alfred, Polk County, FL

Facility ID#: 53/8623713

Below Reporting Limit = <RL Analytical Results = µg/l

** = As provided in Chapter 62-550, F.A.C.

	_	130					1								,
			NADC's	100	400	300	200	N P	200	50,000	140	280	280	150	
<= Key Well	ell		GCTL's	1	40	30	20	NA	20	5,000	14	28	28	15**	0.02**
ocation	Screen					Ethyl	Total	Total			Naphtha-	Methyl	Methyl	Total	EDB 1,2-
	Int.	Date	WTO	Benzene Toluene Benzene Xylones	Toluene	Benzene	Xylones	VOA	MTBE	TRPH	lene	nap, 1	nap, 2	Lead	
2	201 451 2012/20 2025	2000							2511			2.7	•		

•	MW-5	MW-4		!		-	ļ				•									MW-3		Location	K= Key Well	
	30' - 45'	30' - 45'	:		: 		:	!	 	! 	i i	:	 				!			30' - 45'	Int.	Screen	ell	
05/19/10	04/27/09	04/27/09	06/12/14	03/06/14	12/18/13	09/12/13	06/11/13	03/08/13	12/10/12	09/17/12	06/18/12	03/22/12	12/13/11	09/06/11	06/08/11	03/09/11	12/02/10	05/19/10	08/25/09	02/24/09	Date			
35.96	39.93	38.55	36.05	36.60	34.90	34.51	40.06	38.78	36.84	35.90	38.40	37.36	34.64	35.70	36.41	36.25	33.61	35.30	37.82	36.85	WTO		GCTL's	NADC's
0.1 U	0.1 U	0.1 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.0	0.50 U	0.50 U	=======================================	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	2.2	24	7.6	0 g	Benzene		_	100
0.3 U	0.3 U	0.3 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.771	0.50 U	0.50 U	1.5	1.4	0.50 U	0.50 U	0.50 U	2.5	4	2,700	630	870	Toluene		40	400
0.2 U	0.2 U	0.2 U	0.50 U	0.84	0.50 U	0.50 U	ω ⊐	& 	6.5	0.951	26.8	24.3	0.50 U	1.3	1.0	3.8	106	590	220	530	Benzene	Ethyl	30	300
0,4 U	0.4 U	0.4 U	1.0 U	1.4	1.0 U	1.00	5.8	42.9	25.6	1.00	103	138	1.0 U	6.5	14.0	27.0	607	2,300	1,300	2,500	Xylones	Total	20	200
æ	ź	₽L	\$	2.2	2	<u>چ</u>	8.9	51.2	32.1	0.95	132	164	â	7.8	15.0	33.3	859	5,614	2,158	3,900	VOA	Total	NA	AN
0.05 U	0.05 U	0.05 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.0	0.50 U	0.50 U	4.2	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.68 U	0.55	0.371	2.5 U	MTBE	_	20	200
46 U	65	74			140 U	140 U	224 1	143	651	•	•	. •	: , • 	 	 •	· i •	4,010	11,000	4,100	7,900	TRPH		5,000	50,000
0.031 U	0.031 U	0.031 U	•	•	0.75 U	0.74 U	0.78 U	4.8	2.8	 .	.	•	• •	ļ.	•	 	23.8	38	48	13	lene	Naphtha-	14	140
0.028 U	0.028 U	0.028 U	•	•	0.38 U	0.37 U	0.411	4.7	2.0	•			•		· •	·	12.5	3	ಸ	27	nap, 1	Methyl	28	280
0.025 U	0.025 U	0.025 U	•	:	0.38 U	0.37 U	0.39 U	8.6	6.8	•			•	 			25.7	22	18	49	nap, 2	Methyl	28	280
				!		! - 		• -						 	; :		•			, 	Lead	Total	15**	150
				:														!			ane	EDB 1,2-	0.02**	2

4170 967 F

Facility Name:

*

Quality Petroleum #111 116'N. Lake Shore Way (Hwy. 92), Lake Alfred, Polk County, FL 130

Facility ID#: 53/8623713

Below Reporting Limit = <RL Analytical Results = µg/l

= As provided in Chapter 62-550, F.A.C.

DW-1	MW-7		:							İ							İ			MW-6		Location	K= Key Well	
52' - 57'	30' - 45'		!		† 				 		<u>-</u>		<u>-</u>	 	<u> </u>				<u>. </u>	30' - 45'	Ę	Screen	/ell	
04/27/09	04/27/09	05/29/15	01/07/15	06/12/14	03/06/14	12/18/13	09/12/13	06/11/13	03/08/13	12/10/12	09/17/12	06/18/12	03/22/12	12/13/11	09/06/11	06/08/11	03/09/11	12/02/10	05/19/10	04/27/09	Date			
39.86	40.50	34.11	33.11	37.20	37.75	36.10	35.67	41.23	39.90	37.34	37.00	40.55	38.40	35.74	38.26	37.89	37.73	34.74	36.36	40.27	WTO		GCTL's	
0.1 U	0.1 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.20 U	2.7	0.1 U	Benzene		-	*
1.9	0.3 U	0.50 U	0.50 บ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	10.4	870	85	Toluene		40	***
0.2 U	0.2 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 ∪	0.50 U	69.0	680	140	Benzene	Ethyl	30	300
1.8	0.4 U	1.0 U	1.0 U	1.0 U	1.21	1.00	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0	1.0 U	1.00	1.0 U	1.0 U	1.00	246	1,500	600	Xylones	Total	20	2
3.7	₽	æ	ź	â	1.2	æ	æ	슏	æ	Æ	Æ	4.0	Æ	æ	æ	æ	æ	325	3,053	825	VOA	Total	N Z	<u> </u>
0.05 U	0.05 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 บ	0.50 U	0.50 ∪	0.50 U	0.50 U	0.34 U	0.05 U	<0.05	MTBE		200	3
200	50	140 U	140 U	•		258	140 U	140 U	1.330	140 U	•	•	•	•	•	•	•	1,390	5,000	4,700	TRPH		5,000	40 000
0.47	0.031 U	0.93	0.75 U	•		0.75 U	0.75 U	0.78 U	0.78 U	0.78 U	 				•	•	•	19.7	66	22	lone	Naphtha-	14	5
0.091	0.028 U	0.38 U	0.38 U		•	0.38 U	0.37 U	0.39 U	0.39 U	0.39 U	· ·			•	ļ,		•	4.4	=	2.1	nap, 1	Methyl	28	200
0.16	0.025 U	0.501	0.38 U	•		0.38 ∪	0.37 U	0.39 ∪	0.39 U	0.39 U		•	! •	•		 - 	•	8.7	22	5.4	nap, 2	Methyl	28	300
			!	!			İ	:		 						:		:] - 		Lead	Total	15**	<u> </u>
			i i					· —					!								ane	EDB 1,2-	0.02**	.

H1 +0 L SI B -1

Ex 47.674 B -1

F3 8623115

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* Downgradient well used for site closure /NFA determination.

Facility Name:

Facility ID#: 53/8623713

			NADC's	100	400	300	200	Š	200	50.000	140	780	782	5
K= Key Well	/ell		GCTL's	_	6	30	20	N	20	5,000	14	28	28	15**
Location	Screen					Ethyl	Total	Total			Naphtha-	Methyl	Mothyl	Total
	Int.	Date	WTG	Benzene	Toluene	Bonzene	Xylenes	VOA	MTBE	TRPH	lene	nap, 1	nap, 2	Lead
MW-8	30' - 45'	08/25/09	39.19	0.331	1.7	46	4.6	53	0.05 บ	580	7.9	3.9	4.5	
		05/19/10	36.65	0.1 U	0.3 U	6.8	0.4 U	6.8	0.05 U	230 1	0.091	0.028 U	0.025 U	
		12/02/10	35.02	0.20 U	0.821	5.1	0.52 U	5.1	0.34 U	1721	2.4	0.391	0.671	
		03/09/11	37.30	0.50 U	0.50 U	0.50 U	1.00	æ	0.50 U	•	•	•		
		06/08/11	37.86	0.50 U	0.50 ∪	0.50 U	1.0 U	æ	0.50 U	•	•	•		:
!		09/06/11	38.44	0.50 U	0.50 U	0.50 U	1.0 U	<u>څ</u>	0.50 U	•				
ļ :		12/13/11	36.03	0.50 U	0.50 ∪	0.50 U	1.00	æ	0.50 U	•		,		!
] 		03/22/12	38.80	0.50 U	0.50 U	0.50 U	1.0 U	유	0.50 U	'				
<u> </u>		06/18/12	40.88	0.50 U	0.50 U	0.50 U	1.0 U	유	0.50 U		•			1
		09/15/12	37.33	0.50 U	0.50 U	0.50 U	1.00	Æ	0.50 U	•				
1		12/10/12	38.25	0.50 U	0.50 U	0.50 U	1.0 U	₽	0.50 U	•				
	• 	03/08/13	40.20	0.50 U	0.50 U	0.50 U	1.00	á	0.50 U	•			· 	
! 		06/11/13	41.55	0.50 U	0.50 U	0.50 U	1.0 U	ź	0.50 U	. • I	•		•	İ
į .	• —	09/12/13	36.00	0.50 U	0.50 U	0.50 U	1.0 U	Ŕ	0.50 U	•	•	•	•	i
İ	İ	12/18/13	36.45	0.50 U	0.50 U	0.50 U	1.0 U	â	0.50 U	•			•	
<u> </u>		03/06/14	38.12	0.50 U	0.50 U	0.50 U	1.0 U	<u>م</u>	0.50 บ	•	•		•	
		06/12/14	37.52	0.50 U	0.50 U	0.50 U	1.0 U	<u>ئ</u>	0.50 U	•	•		•	

Page 5-of-6-

1-8 49 8 8 1-8 41.64 1-8 41.64 175238 52

TABLE 3: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY

Facility Name: 130

Facility ID#: 53/8623713

Below Reporting Limit = <RL Analytical Results = µg/l

** = As provided in Chapter 62-550, F.A.C.

K= Key Well	1€		GCTL's	-	8	30	20	NA	20	5,000	1	14	╀
Location	Screen					Ethyl	Total	Total				Naphtha-	Naphtha- Methyl
	Int.	Date	WTa	Benzone	Toluene	Benzene	Xylenes	VOA		MTBE	MTBE TRPH		TRPH
PZ-1	35' - 45'	08/25/09	38.56	1.4	570	730	4,500	5,801		0.05 U	0.05 U 8,200		8,200 92
		05/19/10	36.02	1.4	480	370	1,700	2,551	,	0.05 U	_	3,000	3,000
† 		12/02/10	35.04	0.20 U	1.5	1.8	8.5	11.8		0.34 U	0.34 U 140 U	_	140 U
i	 	03/09/11	37.59	0.50 U	0.50 U	0.50 U	1.0 U	_ج و		0.50 U	-	-	-
		06/08/11	37.85	0.50 U	0.50 U	0.50 U	1.0 U	æ	_	L 0.50 U			
		09/06/11	37.90	0.50 U	0.50 U	0.50 U	1.0 U	^RL	۳,	RL 0.50 U			
		12/13/11	35.35	0.50 U	0.50 U	0.50 ∪	1.00		æ	RL 0.50 U			
	† · · - 	03/22/12	38.12	0.50 U	0.50 U	0.50 U	12.0	.	12.0	2.0 0.50 U			
	! -	06/18/12	40.15	0.50 U	0.50 U	34.0	45.9	7,	79.9	:	:	:	:
	•	09/17/12	36.67	0.50 U	0.50 U	34.7	4.1	78	· œ	.8 0.50 U	-	-	-
:	 	12/10/12	37.55	0.50 U	0.50 U	0.50 U	1.0 U	i â		• -	• -	0.50 U 154 I	0.50 U 1541 0.77 U
	† - 	03/08/13	39.51	0.50 U	0.50 U	0.50 U	1.00	ź		ר 0.50 ח	0.50 U	0.50 U	0.50 U 150 U
· 	!	06/11/13	40.82	0.50 U	0.50 U	0.50 U	1.0 U	Э	_	L 0.50 U	0.50 U	0.50 U	0.50 U 140 U
	<u>.</u>	09/12/13	35.30	0.50 ∪	0.50 U	0.50 U	1.0 U	Æ.		L 0.50 U	•	0.50 U	0.50 U 140 U
:	: :	12/18/13	35.70	0.50 U	0.50 U	0.50 U	1.00	ź	<u> </u>	2L 0.50 U	0.50 U	0.50 U	0.50 U 354
	İ	03/06/14	37.35	0.50 U	0.50 U	1.3	5.9	7.	2	2 0.50 U	: 	: 	:
		06/12/14	36.80	0.50 U	0.50 U	0.50 U	1.0 U	<u></u> 2	~	ער 0.50 U	· 	· 	·
6-AAW	35' - 45'	11/12/09	38.45	0.10	0.3 U	0.2 U	0.40	<u>ڳ</u>	٣	ע 0.05 ט		0.05 U	0.05 U 46 U

-Page 6-of-6

1170 6 5 1-5 1:9:45 1-5 1:9:45 27.8 238 ES

TABLE 2A: SOIL ANALYTICAL SUMMARY - BTEX, MTBE, & TRPH

Facility Name: Quality # 111 FDEP Facility No. 538623713

											721		<			727						
FDEP Residential Direct Exposure-Based SCTL	FDEP Leachability-Based SCTL	Line North	Disp 6	Disp 5 West	Disp 5 Bottom	Disp 5 South	Disp 5 North	Disp 5 East	Disp 5	Disp 2	55-35 BotTon	SS-38	TP East	TP North	TP South	TP West	SB- Mid Grade	SB-Reg South	SB-Reg North		8	Boring
mct Exposu	ased SCTL	4/2/08	4/1/08	4/2/08	4/2/08	4/2/08	4/2/08	4/2/08	4/1/08	4/1/08	4/1/08	4/1/08	4/2/08	4/2/08	4/2/08	4/2/08	4/1/08	4/1/08	4/1/08		Collecte	Date
re-Based S		N	AN A	NA	¥	ž	N.	NA.	NA	N A	NA	NA	AN	¥.	NA	AN	NA	NA	NA	Water	ಕ	Depth
2		4.	0-1	6.	7	Q.	οį	0 1	0-1	2-3	11'	:0	8'	8.	8	8.	2-3	1-2	2-3'	(fbls)	Depth	Sample
		0.7	20.0	10.0	11.7	12.5	4.2	8.3	4,726.9	33.3	0.0	0.0	1		***		4,580.1	428.0	4,576.3	(ppm)	Reading	Sample Net OVA
1.2	0.007	ND (0.00016)	ND (0.00016)	0.0011	0.0011	ND (0.00016)	0.0018	0.00068	5.4	0.0010	ND (0.00016)	0.00063	0.00020	ND (0.00016)	ND (0.00016)	ND (0.00016)	ND (0.0016)	ND (0.00082)	ND (0.016)	(mqq)	Benzene	
7,500	0.5	ND (0.0016)	ND (0.0016)	0.0070	0.0045 i	ND (0.0016)	0.015	0.0020 i	140	0.010	ND (0.0016)	0.0044 i	ND (0.0016)	ND (0.0016)	ND (0.0016)	ND (0.0016)	ND (0.0061)	ND (0.0082)	ND (0.16)	(ppm)	Toluene	
1,500	0.6	ND (0.00016)	0.00026 i	0.0017	0.00081	ND (0.00016)	0.0028	0.00027	ន្ទ	0.0093	ND (0.00016)	0.00067	ND (0.00016)	ND (0.00016) ND (0.000	ND (0.00016) ND (0.00050) ND (0.00033)	ND (0.00016) ND (0.00050) ND (0.00033)	ND (0.0011)	ND (0.00082)	0.29	(ppm)	benzene	Ethyi-
130	0.2	0.00058 i	0.0010 i	0.016	0.0063	0.0012 i	0.026	0.0025	270	0.059	ND (0.00050)	0.0041	0.00064 1	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.0023)	ND (0.0025)	39	(ppm)	Xylenes	Total
4,400	0.09	ND (0.00033)	ND (0.00033)	ND (0.00033)	ND (0.00033)	ND (0.00033)	ND (0.00033)	ND (0.00033)	1.11	0.00073 i	50) ND (0.00033)	0.00054 i	ND (0.00033)	50) ND (0.00033)	ND (0.00033)	ND (0.00033)	ND (0.0014)	ND (0.0016)	ND (0.033)	(ppm)	MTBE	
460	340	ND (3.3)	ND (3.3)	ND (3.3)	ND (3.3)	ND (3.3)	ND (3.3)	3.9 i	1,800	3.91	ND (3.3)	ND (3.3)	ND (3.3)	ND (3.3)	ND (3.3)	ND (3.3)	ND (3.3)	ND (3.3)	1,400	(ppm)	TRPHs	

Notes:

fbts = feet below land surface

OVA = organic vapor analyzer

ppm = parts per million (milligrams per kilogram [mg/kg])

MTBE = Methyl tert-butyl ether

TRPHs = Total Recoverable Petroleum Hydrocarbons

i= (EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration. Bold type indicates that the concentration exceed FDEP Soil Cleanup Target Level SCTL = FDEP Soil Cleanup Target Level per Chapter 62-777 of the Florida Administrative Code

NA = Water table not encountered

Disp 5- excavated

HI to 01 & 5015 275 2-8 4.4.4.4.79 EILE 298ES

Olsp 5 North Olsp 5 South Olsp 5 Bottom Olsp 5 West Othp 6 Une North	Otep 5 North Otep 5 South Otep 5 Bettor Otep 5 West Otep 6	Olsp 5 North Olsp 5 South Olsp 5 Bottom Olsp 5 West	Otsp 5 North Otsp 5 South Otsp 5 Bettor	Olsp 5 North	Otsp 5 North		Disp 5 East	Otep S	Disp 2	UST SS-35 BOTTOM	SS-38	TP East	TP North	TP South	US T TO WEST	SB-Wid Grade	SB-Reg South	SB-Reg North			
4/2/08		411/08	4/2/08	4/2/08	4/2/08	4/2/08	4/2/08	471,708	4/1/08	7039 4TT 08	4/1/08	4/2/08	4/2/08	4/2/08	4/2/08	4/1/08	471/08	471,708		Collected	
	<u>₹</u>	Š	š	NA	NA	NA	¥.	₹	*	₹	NA	¥	NA	NA	NA	NA	NA	NA	Water	8	
ľ	٠,	0-1.	G.	7	6	6	ę	Q-1°	2.3	=	10	8	8	B.	8	2-3"	1-2	2-3"	(1945)		
	.	20.0	10.0	11.7	125	4.2	8.3	4,725.9	33,3	g	0.0			-	_	4,580.1	428.0	4,576.3	(ppm)	Reading	2
1 (5,50)	T C C C C C	0.0141	NO (0.0017)	0.0121	ND (0.0017)	ND (0.0017)	ND (0.0017)	24 (0.089	ND (0.0017)	ND (0.0017)	0.00361	MD (0.0017)	ND (0.0017)	ND (0.0017)	ND(0.0020)	ND (0.0017)	26	(ppm)	Nephtralone	
	ND (0.0027)	ND (0.0027)	ND (0.0027)	0.053	ND (0.0027)	ND (0.0027)	ND (0 0027)	28 L	0.10	NO (0.0027)	ND (0.0027)	ND (0.0027)	ND (0.0027)	ND (0.0027)	ND (0.0027)	ı	ND (0.0027)	191	(ppm)	onoichbigan	1.Marthy's
100 (0.00.0)		ND (0.0015)	ND (0.0015)	0.092	NO (0.0015)	ND (0.0015)	ND (0.0015)	27 L	0.20	ND (0.0015)	ND (0.0015)	0.0141	ND (0.0015)	ND (0.0015)	ND (0.0015)		ND (0.0015)	131	(ppm)	naphthalene	2.86athw/L
	ND (0,0037)	ND (0.0037)	ND (0.0037)	ND (0.0037)	ND (0.0037)	ND (0.0037)	NO (0.0037)	ND (0.0037)	ND (0.0037)	ND (0.0037)	NO (0.0037)	ND (0.0037)	ND (0.0037)	ND (0.0037)	MD (0.0037)		ND (0.0037)	ND (0.0037)	(mad)	Aconophthene	
	. (9100TD) ON	ND (0.0016)	अक (चळाड)	ND (0.0016)	ND (0.0016)	ND (0.0015)	ND (0.0016)	ND (0.0016)	ND (0.0018)	ND (0.0016)	ND (0.0016)	ND (0.0016)	ND (0.0016)	(B10070) CIN	ND (0.0016)	1	HD (0.0015)	ND (0.0016)	(ppm)	Aconaphthylone	
	ND (0.0042)	ND (0.0042)	ND (0.0042)	ND (0.0042)	NO (0.0042)	ND (0.0042)	ND (0.0042)	ND (0.0042)	ND (0.0042)	ND (0.0042)	ND (0.0042) J	ND (0.0042)	ND (0.0042)	ND (0,0042)	NO (0.0042)	1	ND (0.0042)	ND (0.0042)	(mgg)	Anthracene	
	ND (0.0028)	ND (0.0028)	ND (0.0028)	ND (0.0028)	ND (0.0028)	ND (0.0028)	NO (0.0028)	0.14	ND (0.0028)	ND (0.0028)	ND (0.0028) J3	(820070) ON	NO (0.00Z8)	ND (0.0028)	ND (0.0028)	ŧ	ND (0.0028)	ND (0.0028)	(ppm)	enthracene	Barron (a)
	ND (0.0027)	ND (0.0027)	ND (0.0027)	(ZD0.03 CM	ND (0.0027)	ND (0.0027)	ND (0.0027)	0.071	ND (0.0027)	אם (מבססבית)	NO (0.0027) J3	ND (0.0027)	ND (0.0027)	ND (0.0027)	ND (0.0027)		NO (0.0027)	NO (0.0027)	(ppm)	District (a)	Borress (a)
	NO (0.0023)	ND (0.0023)	KD (0.0023)	ND (0.0023)	ND (0.0023)	ND (0.0023)	ND (0.0023)	0.025	ND (0.0023)	ND (0.0023)	CJ (CZ00.0) DN	ND (0.0023)	ND (0.0023)	ND (0.0023)	ND (0.0023)		ND (0.0023)	ND (0.0023)	(ppm)	fluoranthene	Roman (N

Stage 1 of 2

538623713 EXA,6,7 B-2 EXA,6,7 B-2 507276605

FORF	Facility
ociny r	Name:
to. 5386	Augud Augud
23713	111

											750	•.	4	_	_	75	_	_			
PDEP Residendal Direct Exposure-Gesed SCTL	FDEP Leadublity-Based SCIL	Line North	Disp 6	Disp 5 West	Disp 5 Bottom	Disp 5 South	Disp 5 North	Disp 5 East	Disp 5	Disp 2	55-35 BOTTOM	85-38	TP East	TP North	TP South	TP West	SB-Mid Grade	S8-Reg South	SB-Reg North		Boring
d Diposuna.	ed SCIL	4/2/08	4/1/08	4/2/08	4/2/08	4208	4/2/08	4/2/08	41708	471/08	80/1/8	41708	4/2/08	4/2/08	4/2/08	4/2/08	4/1/08	4/1/08	4/1/08		Collected
A SCT		×.	NA	₹	š	ž	×	3	ž	ž	ž	₹	ξ	₹	NA	NA	NA	NA	NA	Water (R)	to Depth
,		41	٠ <u>٠</u>	oj.	7	9	a	o,	5	24	=	ā	æ	e,	8'	g	2-3	1-2	2-3	(BG)	Depth
		0.7	20.0	ō	11.7	12.5	4.2	83	4,726.9	33.3	g	0.0	,	ı	ı	1	4,580.1	428.0	4,576.3	(ppm)	Depth Reading
258	32,000	ND (0.0051)	0.050	ND (0.0051)	ND (0.0051)	ND (0.0051)	ND (0.0051)	0.043	0.066	NO (0.0051)	ND (0.0051)	ND (0.0051) J3	ND (0.0051)	ND (0.0051)	NO (0.0051)	NO (0.0051)	1	ND (0.0051)	ND (0.0051)	(mgq)	penytene (g,n,ı)
•	24	ND (0.0019)	ND (0.0019)	ND (0.0019)	ND (0.0019)	ND (0.0019)	ND (0.0019)	ND (0.0019)	0.022	ND (0.0019)	ND (0.0019)	ND (0.0019) j3	ND (0.0019)	ND (0.0019)	ND (0.0019)	ND (0.0019)	,	ND (0.0019)	NO (0.0019)	(ppm)	fluoranthene
•	77	ND (0.0023)	ND (0.0023)	ND (0.0023)	ND (0.0023)	ND (0.0023)	ND (0.0023)	ND (0.0023)	0.087	NO (0.0023)	ND (0.0023)	NO (0.0023) j3	ND (0.0023)	NO (0.0023)	ND (0.0023)	ND (0.0023)	1	ND (0.00Z3)	ND (0.0023)	(mqq)	Chrysene
•	0.7	ND (0.004Z)	NO (0.0042)	ND (0.0042)	ND (0.0042)	ND (0.0042)	ND (0.004Z)	ND (0.0042)	ND (0.0042)	ND (0.0042)	ND (0.0042)	ND (0.0042) J3	ND (0.0042)	ND (0.0042)	ND (0.0042)	ND (0.0042)	1	ND (0.0042)	ND (0.0042)	(ppm)	anthrooms
3,200	1,200	ND (0.0035)	ND (0.0035)	ND (0.0035)	ND (0.0035)	ND (0.0035)	ND (0.0035)	ND (0.0035)	ND (0.0035)	ND (0.0035)	NO (0.0035)	ND (0.0035) 13	ND (0.0035)	ND (0 0035)	ND (0.0035)	ND (0.0035)	1	ND (0.0035)	ND (0.0005)	(ppm)	Fluoranthene
2.600	160	ND (0.0022)	ND (0.0022)	NO (0.0022)	ND (0.0022)	ND (0.0022)	ND (0.0022)	ND (0.0022)	NO (0.0022)	NO (0.0022)	ND (0.0022)	ND (0.0022)	ND (0.0022)	ND (0.0022)	ND (0.0022)	NO (0.0022)	1	NO (0.0022)	ND (0.0022)	(ppm)	Fluorene
•	6.6	ND (0.0048)	ND (0.0048)	ND (0.0048)	ND (0.0048)	ND (0.0048)	ND (0.0048)	ND (0.0048)	0.046	NO (0.0048)	ND (0.0048)	NO (0.0048) J3	NO (0.0048)	ND (0.0048)	ND (0.0048)	ND (0.0048)	ı	ND (0.0048)	ND (0.0048)	(ppm)	byrene (1,2,5,00)
UNE C	250	ND (0.0021)	ND (0.0021)	ND (0.0021)	ND (0.0021)	ND (0.0021)	ND (0.0021)	ND (0,0021)	ND (0.0021)	ND (0.0021)	NO (0.0021)	ND (0.0021) J3	ND (0.0021)	ND (0.0021)	ND (0.0021)	ND (0.0021)		ND (0.0021)	ND (0.0021)	(ppm)	Phenanthrene
Ì	340	ND (0.0062)	ND (0.0082)	ND (0.008Z)	ND (0.0062)	ND (0.006Z)	ND (0.0082)	ND (0.0082)	ND (0.0062)	ND (0.008Z)	ND (0.0062)	ND (0.0062) j3	ND (0.0062)	ND (0.0062)	NO (0.0062)	ND (0.0062)	ı	ND (0.0062)	NO (0.0062)	(ppm)	Pyreno

Notes:

this a feet bettow land surface

OVA = organic vapor analyzer

OVA = organic vapor analyzer

OVA = organic vapor analyzer

OVA = organic vapor analyzer

OVA = organic vapor analyzer

OVA = organic vapor analyzer

Dents per militan (militigranis per kitogram (mp/kg))

)3 = The associated batch Cic was outside the established quality control range for precision.

L = Achail value is known to be greater than upper calibration limit.

Bold typo indicates that the concentration exceed FDEP Soil Clearup Target Level

SCTL = FDEP Soil Clearup Target Level per Chapter 62-777 of the Florids Administrative Code

" = Concentrations must be convented to Berox (a) pyrene equivalents and compared to the direct exposure CTL for Berox (a) pyrene.

- = Not analyzed

2-8+:9:4×3 11 fo 21 8d 5997L 7LDS E1LE 298ES

538623713 Exhibit 13-2 Soil SCTL Tables Pg 13 of 14

Cassels, Carol R

From:

Ronald Kiely < ronk@envirotrac.com>

Sent:

Tuesday, March 03, 2015 11:11 AM

To:

Cassels, Carol R

Subject:

RE: 538623713, Quality #111, NAMP Approval Letter

Attachments:

Soil Backup.pdf

Pdf attached.

From: Ronald Kiely

Sent: Tuesday, March 03, 2015 11:08 AM

To: 'Cassels, Carol R'

Subject: RE: 538623713, Quality #111, NAMP Approval Letter

Carol -

NAM Report will be submitted later today.

Per the NAM Plan Approval letter (12/31/14), additional groundwater analysis were completed this sampling event.

With regards to soil contamination a short summary is provided...

- The June 10, 2008 UST Closure Assessment (submitted by PPM Consultants, Inc.) indicated 18 cubic yards of contaminated soil was removed from the UST & Dispense #5 areas. Sidewall and bottom soil samples were collected. No Further Action was recommended.
- 2. August 13, 2008: Polk County indicated DRF to be submitted.
- 3. EnviroTrac initiated Site Assessment; report submitted June 15, 2009. EnviroTrac collected soil samples for laboratory analysis during the installation of MW-1, -2, and -3. Total xylenes were reported at 0.222 mg/kg (target level is 0.2 mg/kg). Using the November 17, 2011 Memorandum From Jorge Caspary...as this result is rounded down, the target level of 0.2 is met. With that, is a confirmatory soil sample required to be collected adjacent to MW-3 at a depth of 34' below land surface? In addition, due to the depth of the soil sample (34') collected and the water table elevation at the time (36.85' seven days after the soil sample was collected), it is believed that total xylenes reported in the soil sample were caused by contaminants in the groundwater and were part of the smear zone.
- 4. Future assessment work focused on the groundwater plume.

Based on the soil data provided from PPM and subsequent soil investigation as part of monitoring well installations, soil contamination does not appear present at the site. A copy of the Closure Report from PPM was included with EnviroTrac's SAR 2009. Only select pages are included on the attached pdf. Pages 1-4 are from PPM Closure Report; pages 5-7 are from EnviroTrac SAR.

Let me know if you'd like to discuss and/or need any additional information. Thanks.

From: Cassels, Carol R [mailto:Carol.Cassels@flhealth.gov]

Sent: Tuesday, January 06, 2015 2:13 PM



To: Ronald Kiely

Subject: 538623713, Quality #111, NAMP Approval Letter

Ron,

Please see the attached Approval Letter for the above referenced site for your records. This is the only copy you will receive. <u>Please note comments.</u>

Feel free to call if you have any questions.

Carol R. Cassels

ES II / Site Manager Florida Department of Health in Polk County Env Eng Div / Petroleum Cleanup Program 2090 East Clower Street, Bartow, FL 33830 PH: 863.519.8330 ext 12141 FX: 863.534.0245

EMAIL: Carol.Cassels@fihealth.gov

Please Note: Florida has a very broad public records law. Most written communications to or from state officials regarding state business are public records available to the public and media upon request. Your e-mail communications may be subject to public disclosure.

Ronald Kiely | Senior Project Manager | EnviroTrac Ltd. | 5309 56th Commerce Park Blvd., Tampa FL 33610 813.626.8443 (Office) | 813.628.8479 (Fax) | 813.478.0076 (Cell) | ronk@envirotrac.com

Solutions in Action - http://www.envirotrac.com



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TABLE 4: SOIL ANALYTICAL SUMMARY

13d N. Lakeshore Way (Hwy 92), Lake Alfred Facility Name: Quality Petroleum #111

Facility ID#:

53/8623713

Analyte detected in the associated Method Blank above Rep. Limit = V Analyte detected but could not be quantified with certainty = I Less Than Reporting Limit = <RL

	Sample	•		OVA									
Soil	Date	Depth	Sample	AAO 10N			Ethyl-	Total		Naph-	1-Mothyi	2-Mothy1	
Sample	Collected	ਫ	interval	Reading	Bonzono	Toluene	benzeno	Xylenes	MTBE	thalone	naphthalono	alono	TRPHS
		Water (ft)	(BLS)	(mqq)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
MW-1	02/17/09	-35.5 ft	34.	72.8	<0.00066	0.0048	0.0012	0.0062	<0.0019	<0.006	<0.0036	<0.003	320
MW-2	02/17/09	-38.5 ft	37'	451	<0.00077	<0.0033	<0.00088) 0.0033	<0.0022	<0.0057	<0.0034	<0.0029	<u>ራ</u>
MW-3	02/18/09	-38.5 ft	34.	1.805	<0.0013	0.0294	0.0483	(0.222)	<0.0019	<0.18	<0.088	<0.088	11.1
Soil Cleanup	Soil Cleanup Target Levels (April 17, 2005)	(April 17, 20	05)		0.007	0.5	0.6	/ 0.2	0.09	1.2	3.1	8.5	340
Residential D	Residential Direct Exposure (April 17, 2005)	e (April 17, 2	005)		1.2	7,500	1,500	130	4,400	55	200	210	460
Industrial Din	ndustrial Direct Exposure (April 17, 2005)	April 17, 200)5)		1.7	60,000	9,200 /	700	24,000	300	1,800	2,100	2,700

OTW ON 2/24/2009 @ MW-3 = 36.85

Standard is 0.2. Rounding is not above target level.

3/15/16

p1 +° h1 61 2-51+-19:17×7 2-51+-19:17×7 5162-898 ES

Page 1 of 1

Old Dixie Trail PD&E Study FPID No: 435391-1-22-01 Contamination Screening Evaluation Report



Map ID 16: Callaway & Son Drum Service

Callaway Drum



GROUNDWATER INVESTIGATION

REPORT NO. 86 - 15

CONSERVE AND PROTECT

BUREAU OF GROUNDWATER PROTECTION -

LAKE ALFRED FUEL SPILL POLK COUNTY

DECEMBER 1986

MICHAEL R. CLARK
WILLIAM A. MARTIN, JR.
JOHN GLASSCOCK

FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION 2600 BLAIRSTONE RD., TALLAHASSEE, FLORIDA 32301

LAKE ALFRED FUEL SPILL POLK COUNTY

DRA 1 100)

December 1986

Operation Response Team I

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Executive Summary

In December 1985 a gasoline pipeline ruptured and spilled approximately 40,000 gallons of unleaded fuel on property owned by Callaway Drum Reconditioning, Inc., in Lake Alfred, Polk County, Florida. The pipeline company hired specialists to clean up the spilled product. Ground water monitoring results obtained by the consultant for the property owner during the clean up indicated to DER personnel that there could be sources of water contamination other than from the pipeline spill. In January 1986 DER's Southwest Florida District Office requested a field investigation by the Tallahassee Operation Response Section to resolve the matter. The investigation was conducted in March 1986 by Operation Response Team #1.

Based on water level measurements from eight monitoring wells, the flow direction in the shallow aquifer was determined to be from west to east across the site. Water quality analyses of samples from the wells indicated that there was remarkably little gasoline contamination in the shallow ground water despite the large amount of gasoline that was lost. The analytical data also showed that there is an area of shallow ground water at the site contaminated by the metals lead and chromium. It was concluded that the metals contamination was probably from the upgradient Lake Alfred Sewage Treatment Plant and not due to the gasoline spill or the drum cleaning activities at the site.

It was recommended that the City of Lake Alfred generate an approved ground water monitoring plan for the sewage treatment plant in accordance with provisions of Chapter 17-4.245(6)(b). The plan should include the installation of shallow monitor wells and the analysis of the ground water for relevant parameters.

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Lake Alfred Fuel Spill

Polk County

1.0 Introduction

In December 1985 a gasoline pipeline ruptured and spilled gasoline adjacent to and on property owned by Callaway Drum Reconditioning, Inc., in Lake Alfred, Polk County, Florida. The pipeline company hired specialists to cleanup the spilled product. Ground water monitoring results obtained by Callaway Drum's consultant during the clean-up phase indicated to DER personnel that there could be sources of water contamination other than from the pipeline spill. In January 1986 DER's Southwest Florida District Office requested the assistance of an Operation Response Team from DER Tallahassee to resolve the issue. The investigation was conducted in March 1986 by Operation Response

1.1 Site Location

The pipeline/drum reconditioning facility is located at latitude 28° 05' 52" north and longitude 81° 42' 54" west in the northeast quarter of the northeast quarter of the northwest quarter of Section 33, Township 27S, Range 26E in Polk County, Florida. The street address is 890 East Alfred Drive, Lake Alfred, Florida 33850 (see Figure 1).

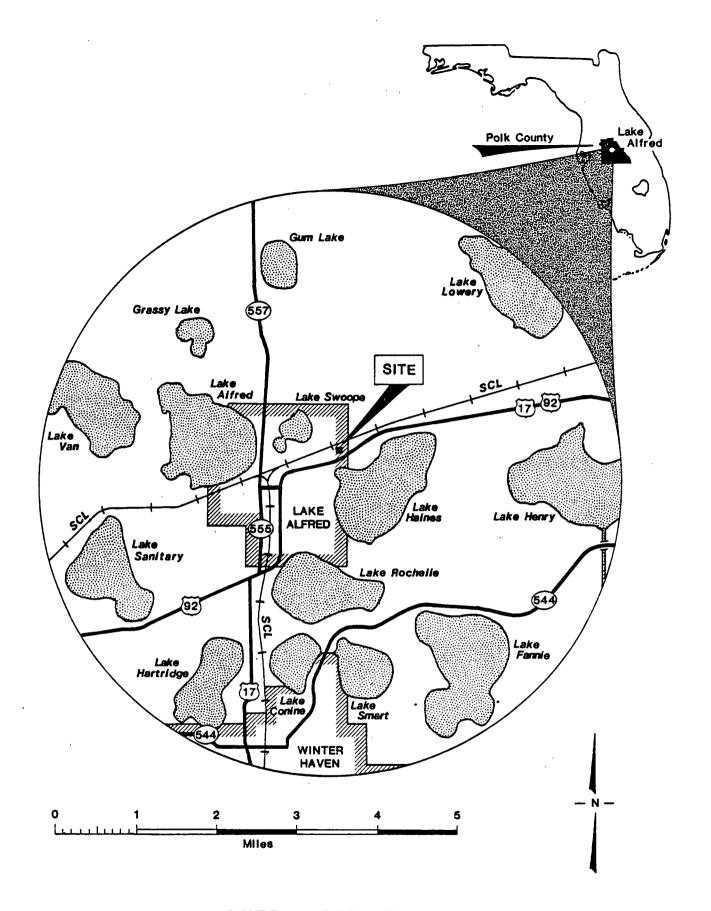


FIGURE 1. SITE LOCATION MAP FUEL SPILL, HWY 17-92 LAKE ALFRED, POLK COUNTY

1.2 Site Operation and History

Callaway Drum has operated a drum reconditioning facility on the site since 1977. Figure 2 shows a map of the site which covers an area of approximately 9.5 acres. The facility itself was the subject of a ground water contamination investigation by DER in March 1984 (Watts et. al. 1984). Minor amounts of organic contamination were detected in the on-site surface water and ground water. As a result of the investigation Callaway Drum was required by DER to install three shallow monitor wells and sample these periodically.

As noted in the introduction, on December 4, 1985 a rupture occurred in an underground gasoline pipeline that runs adjacent to the Seaboard System railroad track north of the Callaway Drum property. The pipeline carries gasoline between Tampa and Orlando. According to Central Florida Pipeline Corporation, which owns the pipeline, about 890 barrels (~40,000 gallons) of unleaded gasoline were lost. The gasoline flowed into a swampy area adjacent to the railroad track. The swampy area is drained via a ditch that flows south on Callaway property along the eastern property boundary. It runs via a culvert underneath Highway 92 and eventually flows into Lake Haines.

Cleanup of the floating product was initiated by O. H. Materials, Inc., specialists hired by the pipeline company the day after the discovery of leak. Because the pipeline rupture was in a swampy location and inaccessible to repair vehicles, fill dirt was trucked in to construct a road to the leaking pipe and create a second berm to prevent contaminated water flowing south. To prevent large amounts of gasoline from reaching Lake Haines, the drainage ditch was bermed with

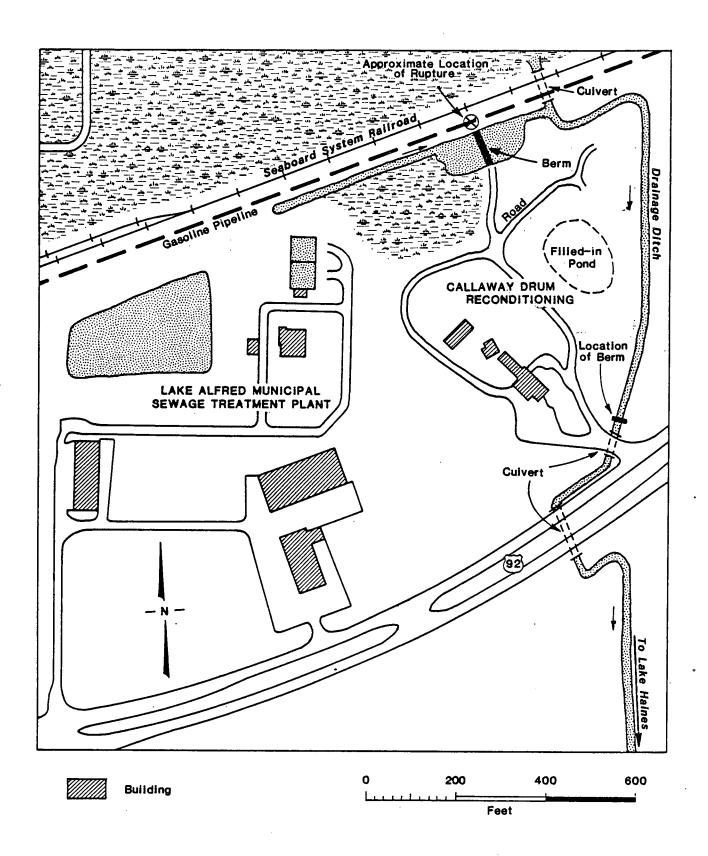


FIGURE 2. CALLAWAY DRUM/PIPELINE SITE MAP

fill dirt at the culvert just before it flows underneath Highway 92 (see Figure 2). This allowed the gasoline product to be skimmed off using a floating boom. The berm, however, created a temporary lake that inundated much of the low lying northeastern quarter of the site. Figure 3 shows the approximate area affected by the temporary lake. Before the cleanup operation had been completed, the berm had been breached twice by the rising water level, allowing gasoline contaminated water to flow in Lake Haines (Novak 1986).

A number of soil and water samples were taken by the consultant for Callaway Drum Reconditioning as a consequence of the fuel spill (see Figure 3 for sample locations). Samples were analyzed by a private laboratory for lead and the volatile organic compounds benzene, toluene and xylene. The results are presented in Table 1.

Two soil samples obtained at an unknown depth from the temporary pond and the drainage ditch showed trace amounts of lead and significant concentrations of benzene, toluene and xylene. The Callaway top phase refers to the gasoline product obtained from the floating boom at the Highway 92 culvert. The bottom phase is a sample of the water beneath the boom going to Lake Haines. Unfortunately the only parameter analyzed was lead. The hydrocarbon content of the water entering Lake Haines was not determined. The lead content measured in the floating gasoline (544 ppb) is well within the limit (<2000 ppb) set for unleaded gasolines.

According to Callaway's consultant (Novak 1986), the temporary lake had submerged two of the three monitor wells and gasoline contaminated water infiltrated into the wells. For this reason,

Table 1

Analytical Results*

Callaway Drum Site Samples

0 1.	G 1 -	Analytical Results (ppb)			
Sample ID #	Sample Date	lead	benzene	toluene	xylene
Soil Samples					
Ditch	12/18/85	10	543	10,900	3,030
Pond	12/18/85	16	61.7	335	443
Water Samples					
Monitor well C-SE	12/18/85	181	<1	<1	<1
Monitor well	12/18/85	3	<0.5	<0.1	<0.5
Monitor well C-M	12/18/85	369	<1	<1	<1
Monitor well	12/18/85	16	<0.5	<0.1	<0.5
Monitor well	12/18/85	197	<1	<1	<1
Monitor well	12/18/85	5	<0.5	<0.1	<0.5
Callaway Top Phase	12/13/85	544			
Callaway Bottom Phase	12/13/85	9			

⁻⁻ Not analyzed

^{*} Sampled and analyzed by personnel from Flowers Chemical Laboratories, Altamonte Springs, Florida.

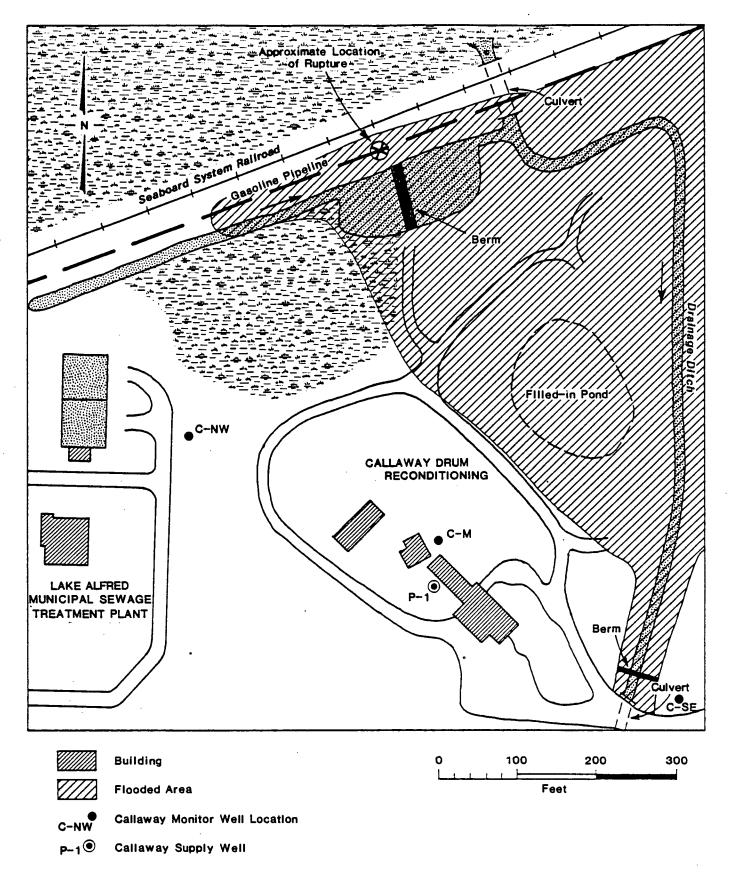


FIGURE 3. CALLAWAY DRUM/PIPELINE SITE APPROXIMATE LIMITS OF FLOODED AREA

the monitor wells were sampled twice on the same day. The first set of analyses in Table I represents the water quality in the well prior to development and the second is the water quality after extensive pumping of the wells.

2.0 Site Conditions

2.1 Site Topography and Drainage

Lake Alfred is located on the Winter Haven Ridge of Central Florida Highlands in an area where rolling sand hills separate numerous small internally drained basins. Many of these basins contain small to medium-sized, near-circular lakes thought to be sinkholes. The site is located on the southern slope of a slight saddle which separates a marshy area from Lake Haines. Elevations in the general area range from 180 feet to 125 feet and from 145 feet to 130 feet (AMSL) on the Callaway property. The site receives an average of fifty-two inches of rainfall per year (Stewart, 1966). As noted in Section 1.2 surface drainage is to a swampy area which flows eastward along the Seaboard Railroad tracks, turning southward at the eastern boundary of the Callaway property, and eventually discharging into Lake Haines. The marshy area to the north of the railroad tracks drains into the ditch by way of a culvert passing underneath the railroad tracks. The ditch also receives final discharge from the Lake Alfred Municipal sewage treatment plant located adjacent to the site.

2.2 Geology

Figure 4 shows a stratigraphic section along line D-D' running east to west through Central Polk County taken from Stewart, 1966. The local stratigraphic section of specific interest to this study consists of sediments from Eocene to Holocene age, represented by the Avon Park Formation (Eocene), Williston Formation (Eocene), Crystal River Formation (Eocene), the Hawthorn Group (Miocene), and overlying undifferentiated clastics (Miocene-Recent). Lithologic logs from two deep wells near the Callaway site were compared to infer depths and thicknesses of geologic units not drilled in this investigation (Bishop, 1956 and Coleman 1976). USGS monitor well (W951) and University of Florida irrigation well (W407) are located approximately 1/2 mile southwest and 1/3 mile north of the site respectively. A natural gamma log for well W951, obtained from Watts - 1984 appears in Figure 5.

The Avon Park Formation is a dark brown to cream, very hard to soft, granular to chalky to finely crystalline, highly fossiliferous limestone, which normally contains a thick dolomitized zone near its top. Permeability of the formation ranges from very low in clayey layers to very high in cavernous limestone. Average permeability is high (Stewart, 1966). Most public supply wells in the vicinity of Lake Alfred are completed in the Avon Park limestone which underlies the site at approximately 200 feet (BLS).

The Ocala Group limestones overlie the Avon Park, are formally divided into the Inglis, Williston, and Crystal River Formations. All three formations may not be present at the site. The Ocala Group is

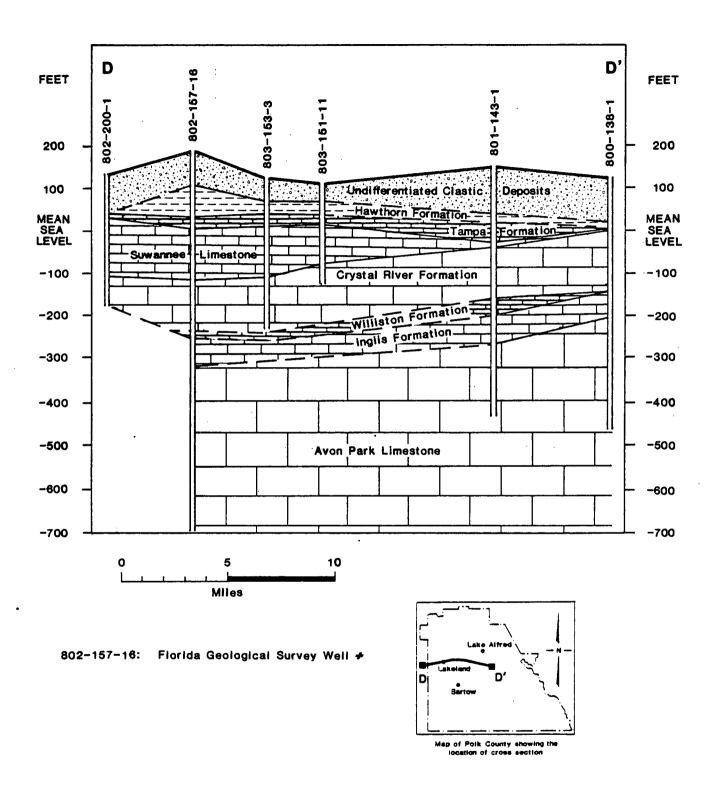


FIGURE 4. GEOLOGIC SECTIONS ALONG LINE D-D'

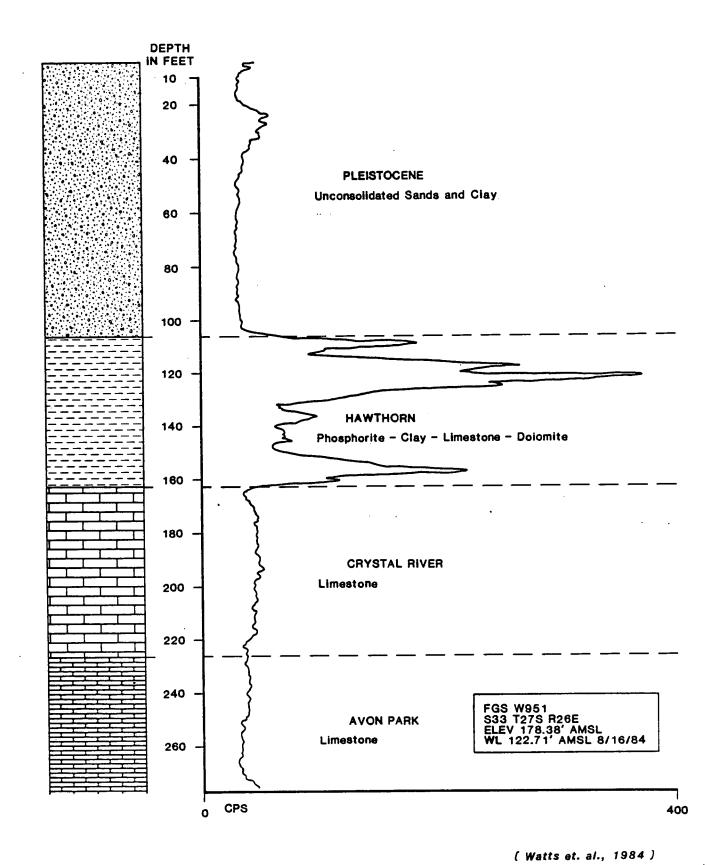


FIGURE 5. GAMMA LOG FOR W951 USGS MONITOR WELL

represented by generally coarse granular, soft to hard, fossiliferous, variously dolomitized limestones (Stewart, 1966). Permeability in these limestones is variable with some zones capable of providing significant contributions to overall water production capacities.

The Hawthorn Group unconformably overlies the Ocala Group consisting mostly of sandy clays, fossilifereous limestones and dolomites, which characteristically contain phosphorite grains and phosphasized fossils. Thickness of the Hawthorn Group at the site is unknown but comparison of logs from W404 and the USGS monitoring well suggests a range from 10 to 60 feet.

Overlying the Hawthorn Group is a sequence of unconsolidated clastics consisting primarily of sands and clayey sands. Well W407 was drilled from a similar elevation recording 70 feet of mostly quartz sand (Figure 5).

2.3 Ground Water Occurrence

Four distinct aquifers exist in the Lake Alfred area. The surficial aquifer occupies sands of the undifferentiated clastic section under water-table conditions. The uppermost artesian aquifer consists of phosphate pebble layers near the top of the Hawthorn Group. The secondary artesian aquifer occurs in the limestone section of the lower Hawthorn Group. Yields in the uppermost artesian aquifer and the secondary artesian aquifer are relatively small but much greater than those of the surficial aquifer. The principal ground water source in the Lake Alfred area is the regionally extensive Floridan aquifer which exists in the Tertiary limestones. All major public, industrial, and

irrigation wells draw from the Floridan aquifer. The aggregate thickness of Hawthorn clays confine the Floridan except where they are breached by sinkholes or fractures. The potential for recharge from water stored in the surficial aquifer is high because head differences are as great as 30 feet.

3.0 Field Investigation

3.1 Monitor Well Installation

Using a hollow stem auger drill rig, five shallow monitor wells were installed on the Callaway Drum property. The monitor wells were generally located in the area previously flooded by gasoline contaminated water. Although it would have been advantageous to drill wells in the northwestern part of the site, this area was not accessible to a drill rig because of the swampy nature of the terrain. Figure 6 details the location of all monitor wells.

All monitor well casing material was 2-inch I.D. schedule 40 flush threaded PVC and the screen was 2-inch 0.010 inch slotted PVC. The well screens were gravel packed to just above the top of the screen and an impermeable seal above the gravel pack was obtained by the addition of bentonite pellets. Finally the casing was grouted from top to bottom and a locking metal protective cover added. Table 2 summarizes monitor well completion data.

3.2 Site Shallow Stratigraphy

As the wells were drilled, soil cuttings returned to the surface

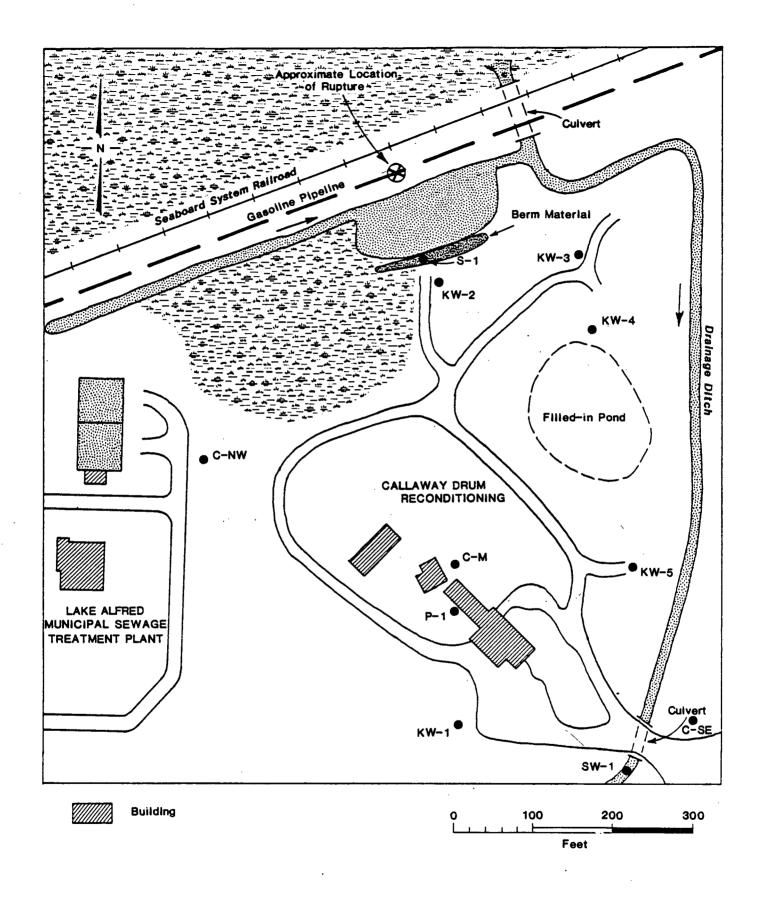


FIGURE 6. LOCATION OF MONITOR WELLS AND SAMPLING POINTS

Table 2

Monitor Well Completion Data

Monitor Well ID #	Total Depth Below Land Surface (feet)	Screened Interval (feet)	Top of Casing Elevation (feet)
KW-1	18.5	8.5 - 18.5	141.91
KW-2	13.5	3.5 - 10.5	134.26
KW-3	13	3 - 13	136.14
KW-4	14	4 - 14	134.28
KW-5	15	5 - 15	135.00
C-NW	13	10 - 13	138.31
C-M	15	10 - 15	134.69
C-SE	15	10 - 15	135.93

by the auger were described by a field geologist. Table 3 gives the lithologic descriptions for wells KW-1, KW-2, KW-3 and KW-5. Monitor well KW-4 is not described because of its proximity to well KW-3.

It will be noted that generally throughout the area covered by the monitor wells there is a layer of organic sand from land surface to approximately 5 feet below land surface (BLS). The soil clay content tends to increase with depth beyond 5 feet BLS down to a depth of approximately 20 feet BLS.

3.3 Site Shallow Aquifer Hydrology

The water table is at a shallow depth ranging from approximately 7 feet BLS in the south central part of the site to about 1 foot BLS towards the north central part of the site. Water level measurements from all eight monitor wells were recorded on two separate occasions (3/6/86 and 3/7/86). The measurements are given in Table 4. Top of casing elevations for each of the wells were measured relative to the top of casing elevation for monitor well KW-5. It was assigned an arbitrary value of 135 feet. Figure 7 depicts the computer derived shallow aquifer water level contours on 3/7/86. The hydraulic gradient appears to be from west to east toward the drainage ditch following, more or less, land surface topography. The water level from monitor well C-SE was not included in the computations since its value appears to be influenced by mounding from the drainage ditch.

3.4 Water and Soil Samples

Prior to sampling all eight existing monitor wells were developed;

Table 3

Callaway Drum Site Shallow Lithology

Well KW-1

	Well KW-1
Depth (feet)	Lithology
0 - 1	surf organics
1 - 2	sand, lt., lamin w/organics, vf-f gr, n. calc.
2 - 3	sand, lt. vf-f gr, n. calc, to low for fines
3 - 5	clayey sand, f-m gr, iron mott
5 - 10	clayey sand, sandy clay, highly mott, n. calc.
10 - 12	sandy clay; as above
12 - 14	sandy clay; as above
14 - 16	clayey sand; as above; wet
16 - 20	clayey sand; as above
	Well KW-2
Depth (feet)	Lithology
0 - 5	sand f-vf gr, organic, blk
5 - 15	clayey sand, 1t. tan - brn, vf-f, tr 1t. gry
	Well KW-3
Depth (feet)	Lithology
0 - 5	sand, organic, f-med gr, sl. clayey n-calc. blk
5 - 8	<pre>sand, organic, lt-med brn, f-med, gr, sl. clayey, n. calc.</pre>
8 - 10	sand, lt brn, med gr, n-calc, sl-mod clayey
10 - 16.5	clayey sand, lt. gry - gry brn, f-med gr, n. calc wet and runny
10 - 16.5	clayey sand, lt. gry - gry brn, f-med gr,
10 - 16.5 Depth (feet)	clayey sand, lt. gry - gry brn, f-med gr, n. calc wet and runny
	clayey sand, lt. gry - gry brn, f-med gr, n. calc wet and runny Well KW-5
Depth (feet)	clayey sand, lt. gry - gry brn, f-med gr, n. calc wet and runny Well KW-5 Lithology
<u>Depth (feet)</u> 0 - 1	clayey sand, lt. gry - gry brn, f-med gr, n. calc wet and runny Well KW-5 Lithology garbage

Table 4
Water Level Data for Callaway Drum Monitor Wells

Well ID#	Depth Below Land Surface (feet)	Date Measured	Water Level BTOC (feet)	Top of Casing Elevation (feet)	Water Level Elevation (feet)
KW-1	18.5	3/6/86	9.73	141.91	132.18
KW-1	18.5	3/7/86	9.76	141.91	132.15
KW-2	13.5	3/6/86	2.43	134.26	131.83
KW-2	13.5	3/7/86	2.74	134.26	131.52
KW-3	13.0	3/6/86	3.92	136.14	132.22
KW-3	13.0	3/7/86	3.88	136.14	132.26
KW-4	14.0	3/6/86	2.56	134.28	131.72
KW-4	14.0	3/7/86	2.42	134.28	131.86
KW-5	15	3/6/86	2.85	135.0	132.15
KW-5	15	3/7/86	3.03	135.0	131.97
CNW	13	3/7/86	4.00	138.31	134.31
СМ	15	3/7/86	2.55	134.69	132.14
CSE	15	3/7/86	2.88	135.93	133.05

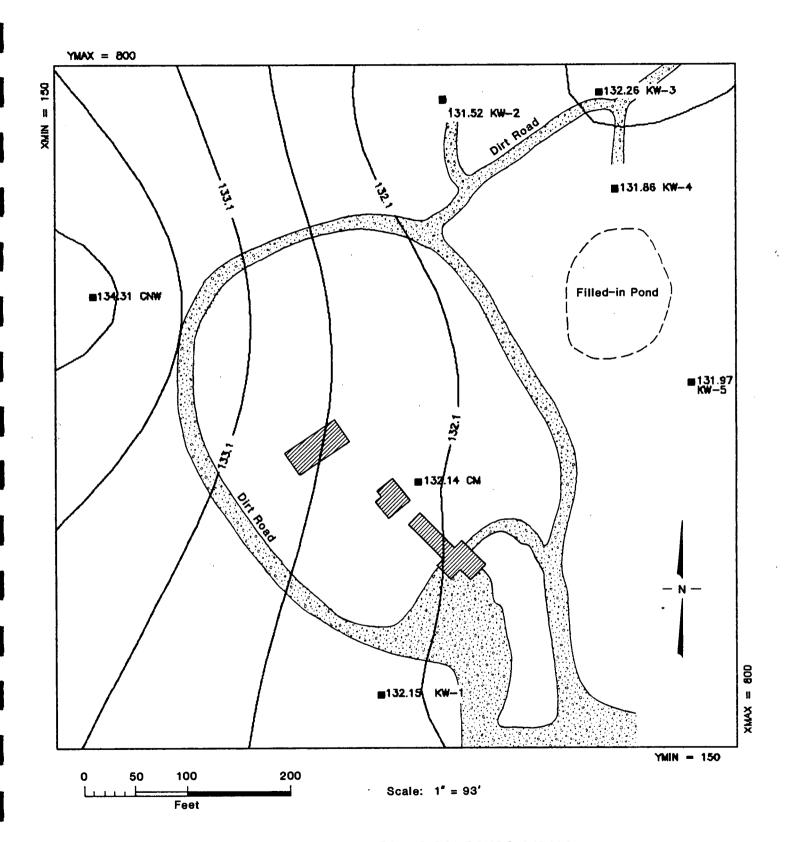


FIGURE 7. WATER TABLE CONTOURS 3/7/86

with multiple well volumes being removed from each well. The three original Callaway wells had sand and clay residues in the lower portion of the well screen. This debris was removed during well development. The on-site production well (P-1 in Figure 6) was also sampled to check for contamination in the deeper zones aquifer. The wells were analyzed for volatile organic compounds (VOCs) and the metals lead and chromium. A surface water sample (SW-1) was obtained at the culvert just before the stream flows beneath U.S. 92. Finally soil sample S-1 was taken from the material used to form the road/berm at the northern end of the site. These samples were also analyzed for VOCs and lead and chromium. The significant analytical results are shown in Table VI. The complete analytical results are presented in Appendix I.

3.5 Analytical Results and Discussion

There are several conclusions to be drawn from the analytical data obtained by Callaway's consultants at the time of the pipeline leak (Table 1), and that generated in this investigation.

Although it is tempting to make the observation that the elevated levels of lead initially (12/18/85) observed in the three Callaway monitoring wells are due to infiltration of gasoline contaminated water, such is clearly not the case. The unleaded gasoline that leaked from the ruptured pipeline contained a minimum amount of lead (554 ppb measured in the Calloway Top Phase i.e. the gasoline recovered from the floating boom). This concentration is too low to produce the lead values detected in the monitor wells. Furthermore, none of the typical gasoline hydrocarons i.e. benzene, toluene and xylene were detected in the well water.

Table 5

Analytical Results - Volatile Organic Compounds and Metals (3/7/86)

	Concentration (ppb)										
Parameter	KW-1.	KW-2	KW-3	KW-4	KW-5	C-SE	С-М	C-NW	P-1	SW-1	S-1
VOCs											
methyl-t-butyl ether	<0.3	<0.3	23.1	2.17	<0.4	<0.4	<0.4	101	<0.5	11.6	<200
xylenes (total)	<1	<1	<0.3	1100	<0.3	<3.0	<1.0	<0.3	<1.5	<3.1	<200
benzene	<0.9	<1.0	<0.3	<0.9	<0.2	<1.1	<1.2	<0.2	<0.3	<0.3	<27.5
ethylbenzene	<1.6	<1.5	<0.4	2380	<0.4	<11.1	<2.0	<0.4	<1.0	<0.5	<61
toluene	<1.1	<1.1	<0.3	1157	<0.3	<1.26	<1.4	<0.3	<0.5	<1.80	<220
Metals											
lead	<24.0	349/	164	60.1	<24.0	<24.0	<24.0	197	<24.0	<24.0	<2.3
chromium	5.4	220	60.6	25.4	3.1	7.0	6.8	130 /	<3.0	<3.0	1.8

Table 6

Analytical Results - Field Parameters

Well ID	Temperature °C	Conductivity umhos/cm	pH S.U.
KW-1	19	120	6.6
KW−2	19	90	5.6
KW-3	19.5	600	9.5
KW-4	18.5	440	6.7
KW-5	21	440	6.1
C-NW	20.5	250	4.3
C-M	19	120	3.3
C-SE	20	95	5.8

It is difficult to explain the changes in the lead values, before and after well development, unless it can be presumed that suspended sediment in the water contributed to the initial lead measurement; (The DER investigation showed that all three wells contained sand and clay residues). Water quality samples taken during the DER investigation in March 1986 showed that Callaway wells C-M and C-SE were below detection (<24 ppb) for the metal. Curiously enough, the lead concentration in the upgradient well C-NW was 197 ppb, exactly the same as that found during the initial (12/18/85) sampling. An elevated concentration of chromium (130 ppb) was also measured. Since chromium is not a gasoline constituent, it is apparent that both the lead and the chromium must be from another source.

Lead and chromium levels above the ground water standard (50 ppb) for these metals were also detected in DER monitor wells KW-2 and KW-3. Well KW-4 showed a violation for lead only. Supply well P-1, drawing water from a deeper zone, had lead and chromium concentrations below the detection limit.

The analytical data indicates that there is an area of shallow ground water at the Callaway site contaminated by metals. Watts et. al. 1984 reported that the Callaway Drum rinse water contained excessive amount of lead and chromium, 2250 and 350 ppb respectively. However, the contaminated wells are in areas used only for drum storage. The well immediately downgradient of the rinse water disposal area (C-M) was clean with respect to lead and chromium. Thus, it appears unlikely that the Callaway operations have contributed substantially to the ground water contamination.

Since ground water flow in the surficial aquifer is due east, the sludge drying beds for the City of Lake Alfred Municipal Sewage

Treatment Plant would be immediately up-gradient of the Callaway property. These are unlined and it is possible for leaching of metals to take place into the shallow ground water. The sewage treatment plant (STP) is currently under enforcement by DER because it effluent discharge has been in violation of the surface water quality standards for copper and zinc.

The water quality results with respect to hydrocarbons show that there is remarkably little gasoline contamination of the shallow aquifer despite the large amount of gasoline that was lost. The most contaminated well was KW-4 with methyl-t-butyl ether (2.17 ppb), total xylenes (1100 ppb), ethylbenzene (2380 ppb) and toluene (115 ppb). The only other wells contaminated were KW-3 and C-NW which contained small amounts of methyl-t-butyl ether (23.1 and 101 ppb respectively). The presence of methyl-t-butyl ether in C-NW is somewhat surprising since this well is upgradient. It is possible that the construction of the path across the stream and the subsequent formation of the temporary pond, allowed the floating product to reach the vicinity of C-NW or more probably, the temporary pond caused a reversal of the hydraulic gradient, allowing methyl-t-butyl ether, the most soluble and mobile component of gasoline, to reach C-NW via subsurface flow. Surface water sample SW-l taken from the drainage ditch just before it enters the culvert under Highway 92, also contained a small amount of methyl-t-butyl ether (11.6 ppb).

3.6 Recommendations

In order to ascertain the source of the metals contamination in the shallow ground water on the Callaway property, it is recommended that the City of Lake Alfred generate an approved ground water monitoring plan for the sewage treatment plant in accordance with Chapter 17-4.245(6)(b), F.A.C. The plan should include the installation of shallow monitor wells both upgradient and downgradient of the sludge drying beds and disposal pond. The set downgradient of the drying beds should include a well at the eastern property boundary. Ground water samples from the wells should be analyzed for metals lead, chromium, zinc, copper, etc., and the inorganic parameters ammonia nitrate, TKN and total coliform.

References

- Bishop, E. W., Florida Bureau of Geology, 1956, Well #407.
- Coleman, C. J., Florida Bureau of Geology, 1976, Well #W951.
- Novak, P. J., 1986, President, Environmental Engineers and Associates, Lakeland, Florida., Personal Communication October.
- Stewart, H. G., Ground Water Resources of Polk County, 1966. Florida Geological Survey RI #44.
- Watts, G. B., Martin, W. A., and Brown N., Callaway and Son Drum Reconditioning, Florida Department of Environmental Regulation, Ground Water Investigation No. 84-11, 1984.



ENVIRONMENTAL SCIENCE AND ENGINEERING, INC.

May 6, 1986

ESE No. 86406 0102

Mr. Doug Jones
Florida Department of Environmental Regulation
2600 Blair Stone Road
Twin Towers Office Building
Tallahassee, Florida 32301-8241

Dear Mr. Jones:

Enclosed are the final analytical results of the nine water samples that were analyzed for volatiles, including xylenes, methyl t-butyl ether, EDB, chromium and lead; the one soil sample that was analyzed for volatiles, MTBE, Cr and Pb; and the one drinking water well sample that was analyzed for EDB, Cr, Pb, MTBE and volatiles. The data have been validated according to the project QA plan. These samples were collected on March 6, 1986 by FDER personnel.

The cost for the analysis of these samples will be billed under a separate mailing.

ESE is pleased to offer this environmental service and we look forward to working with you on the continuation of this project. If you have any questions concerning these data, please feel free to call me.

Sincerely,

Helne In Hale Dilna M. Hale, Ph.D.

Project Coordinator

DMH:kgl Enclosure

cc:

PROJECT NUMBER 85416V0108 FIELD GROUP POLKS

PROJECT NAME POLK COUNTY/DER PROJECT MANAGER LAB COORDINATOR DILNA HALE

PARAMETERS UNITS	STORET # METHOD	S-1 POLKS 1
DATE TIME		03/06/86
ACROLEIN, SED UG/KG- DR	34213	<1100
ACRYLONITRILE, SED UG/KG-DRY	34218	<1100
BENZENE, SED UG/KG- DR	34237	<27.5
EROMOMETHANE, SED UG/KG-DRY	34416 0	<81
BROMODICHLOROMETHAN SD UG/KG-DRY	E 34330	<40
BROMOFORM, SED UG/KG-DRY	,	<160
SED UG/KG-DRY	9	
CHLOROBENZENE, SED WORKG-DRY	0	<33
CHLOROETHANE, SED UG/KG-DRY 2-CHL'ETHYLVINLETHE	Ø	₹240
,SD UG/KG-DRY CHLOROFORM,SED	R 34579 0 34318	<400 405
UG/ KG-DR' CHLOROMETHANE, SED		<35 < 6 3
UG/KG-DRY DIBROMOCHLOROMETHAN	0	\03 (80
SED UG/KG-DRY DICHL'DIFLUO'METHAN	Ø	<100
SED UG/KG-DRY 1,1DICHL'ETHANE,SED	9 34499	<40
VG/KG-DRY 1,2-DICHLOROETHANE,	0 34534	<50
SD / UG/KG-DRY 1,1 DICHL'ETHENE,SE	0 0 34504	<100
UG/KG-DRY T-1,2-DICHLOROETHEN	0 E 34549	<90
SED UG/KG-DRY 1,2-DICHLOROPROPANE	•	<80
SD UG/KG-DRY C1S-1,3-DICH'PROPENI SD UG/KG-DRY	-	₹69
00 VQ/NG=DI(1	, Ø	

PROJECT NUMBER 86416V0108 FIELD GROUP FOLKS

PROJECT NAME POLK COUNTY/DER PROJECT MANAGER LAB COORDINATOR DILNA HALE

		S-1	."
PARAMETERS UNITS	STORET # METHOD	POLKS 1	<i>:</i>
DATE TIME		03/05/86	
T-1,3-DICH'PROPENE, SED UG/KG-DRY		<80	
ETHYLBENZENE, SED UG/KG-DRY	34374	<61	
METHYLENE CHLOR., SEI UG/KG-DRY	D 34426	<277	
1,1,2,2-TET'CH'ETHA	N 34519	<100	
TET'CHL'ETHYLENE,SE	Ø	<114	
1,1,1-TR1CHL'ETHANE SD UG/KG-DRY	. 0	<49.0	
1,1,2-TRICHL'ETHANE SD UG/KG-DRY	Ø	<100	
TRICHLOROETHENE, SED UG/KG-DRY	Ø	<76.1	
TRICHLOROFLUOROMETH SED UG/KG-DRY	Ø	<100 <200	
TOLUENE, SED UG/KG- DR	34483 Y 0 34495	<220 . <90	
VINYL CHLORIDE,SED UG/KG-DRY XYLENE,SED		· (200	
UG/KG-DRY METHYL T BUTYLETHER	. 0	<200	
SED UG/KG-DRY LEAD, SED	0 1052	<2.27	
UG/G-DRY CHROM1UM,SED	0 1029	1.80	*
MOISTURE WG/G- DRY	70320	9.6	
WET WI	Ø	·	

PROJECT NUMBER 86416V0108 FIELD GROUP FOLKP

PROJECT NAME POLK COUNTY/DER PROJECT MANAGER LAB COORDINATOR DILNA HALE

		P−1
	STORET # METHOD	POLKP
DATE TIME		03/05/85
1,2-DIBR'ETHANE(EDB)	77651 0	<0.020
CHROM1UM, TOTAL UG/L	1034	<3.00
LEAD, TOTAL UG/L	1051	<24.0
METHYL-T-BUT'ETHER	98676 98676	<0.450
XYLENES TOTAL UG/L	99649	<1.5
ACROLEIN UG/L	. 34210	<16
ACRYLON1TRILE UG/L	34215	⟨2
BENZENE UG/L	34030	<0.276
BROMODICHLOROMETHANE UG/L	32101	⟨0.59
BROMOFORM UG/L	32104	<1.26
BROMOMETHANE UG/L	34413	<1
CARBON TETRACHLORIDE UG/L	3210 <u>2</u>	<0.9
CHLOROBENZENE UG/L	9 343 01	<0.4
CHLOROETHANE UG/L	34311 0	<1
2-CHL'ETH'VINYLETHER	34576	<1
UG/L CHLOROFORM	32106	<0.515
/ UG/L CHLOROMETHANE	34418 34418	<4
UG/L DIBROMOCHLOROMETHANE	მ 3430 <u>ნ</u>	<0.951
UG/L DICHLORODIFLUOROMETH ANE UG/L	ა 3466 <u>გ</u>	<22
ANE UG/L 1,1-DICHLOROETHANE UG/L	9 34496 0	<0.4

PROJECT NUMBER 85416V0108 FIELD GROUP POLKP

PROJECT NAME POLK COUNTY/DER PROJECT MANAGER LAB COORDINATOR DILNA HALE

	CORET # METHOD	P-1 POLKP 1
DATE TIME		03/06/86
1,2-DICHLOROETHANE UG/L	34531 0	(0.8
1,1-DICHLOROETHYLENE UG/L	34501 0	<1.0
T-1,2-DICHLOROETHENE UG/L	34546 0	(0.948
1,2-DICHLOROPROPANE UG/L	34541	⟨∅.6
C1S-1,3-DICH'PROPENE UG/L	34704 0	<0.4
T-1,3-DICHL'PROPENE UG/L	34699	<1
ETHYLBENZENE UG/L	34371 0	<1.01
METHYLENE CHLORIDE UG/L	34423	₹0.770
1,1,2,2-TE'CH'ETHANE UG/L	34516	<0.5
TETRACHLOROLTHENE UG/L	34475	⟨2
1,1,1-TR1CHL'ETHANE UG/L	34506 a	₹1.0
1,1,2-TRICHLOROETHAN E UG/L	34511	<1.0
TR1CHLOROETHENE UG/L	39180 0	<1.07
TRICHL'FLUOROMETHANE UG/L	•	<0.9
TOLUENE	34010 0	<0.476
VINYL CHLORIDE UG/L	39175 0	<1.08

PROJECT NUMBER 85416V0108 FIELD GROUP POLKW

PROJECT NAME POLK COUNTY/DER PROJECT MANAGER LAB COORDINATOR DILNA HALE

			SAMPLE		· .	
PAKAMETERS UNITS	STORET # METHOD	W-1 POLKW 1	W-2 POLKW 2	W-3 POLKW 3	W-4 FOLKW 4	W-5 POLKW 5
DATE		93/06/86	KW-2-	KW-3	KW-4	₹₩÷ 5
TIME		, v3/v5/ 60;		A3100100	03/06/86	03/06/86
1,2-DIBR'ETHANE(EDE: UG/L	77651	<0.020	<0.020	<0.020	<0.020	<0.020
CHROM1UM, TOTAL	1034	5.39	220	60.6	25.4	3.09
LEAD, TOTAL UG/L	1051 0	<24.0	349	164	60.1	<24.0
METHYL-T-BUT'ETHER	98676	(0.349	<0.331	23.1	2.17	<0.438
XYLENES TOTAL UG/L	99649 99649	<1.0	<1.0	<0.30	1100	<0.30
ACROLEIN UG/L	34210	⟨35	(33	<9	<35	<9
ACRYLON1TR1LE UG/L	34215 0	₹35	<33	<9	<35	<9
BENZENE UG/L	34030	(0.939	<1.00	<0.252	<0.949	<0.235
EROMODICHLOROMETHANE UG/L	32101 0	⟨1.28	<1.2 1	<0.34	<1.29	<0:32
BROMOFORM UG/L	32104	(3.93	<3.72	<1.05	<3.97	<0.99
BROMOMETHANE : UG/L	34413	⟨3	<3	. <0.7	<3	<0.7
CARBON TETRACHLORIDE UG/L	•	<1	<1	<0.4	<1	<⊘.4
CHLOROBENZENE UG/L	3430 <u>1</u>	<0.9	<0.8	<0.2	<0.9	<0.2
CHLOROETHANE UG/L	34311 a	<6	<6	<2	√7	<2
2-CHL'ETH'VINYLETHER UG/L	R 34576	<ε	<5	· <2	<6	<1
CHLOROFORM UG/L	32106 0	<1.09	<1,03	<0.292°	<1.10	<0.274
CHLOROMETHANE UG/L	34418	<2	<2	<0.6	<2	<0.6
DIBROMOCHLOROMETHANE UG/L		<2.45	K2.32	<0.655	<2.47	
DICHLORODIFLUOROMETH ANE UG/L	-	<3.5	<3.3	<0.94	<3.5	<0.88
1,1-DICHLOROETHANE UG/L	34496 Ø	<1	<1	<0.4	<1	<0.4

PROJECT NUMBER 86416V0108 FIELD GROUP POLKW

PROJECT NAME POLK COUNTY/DER PROJECT MANAGER LAB COORDINATOR DILNA HALE

		₩-1	SAMPLE W-2	ID/# W=0	₩ - 4	W-5
PARAMETERS	STORET #	POLKW	POLKW	POLKW	POLKW	POLKW
UNITS	METHOD	1 . KW-1:	2 KW=2	.3 K₩- -9	4 K₩-'4 ''	5 KW-5
DATE TIME		03/0 6/ 86		୦3/୦ ଟି /ଅଟ	03/0Ê786	७3/७ <u>ଚି</u> /ଞ୍ଚ
1,2-DICHLOROETHANE UG/L	34531	<1.	<1	<0.4	<1	<0.4
1,1-DICHLOROETHYLEN	E 34501	<3.3	<3.2	<0.89	<3.4	<0.83
T-1,2-DICHLOROETHEN	E 34546	(2.89	<2.73	<0.773	<2.92	<0.724
1,2-DICHLOROPROPANE	34541	<3	(3	<0.7	<3	<0.7
C1S-1,3-DICH'PROFEN		⟨1	ζ <u>ι</u>	<0.4	<1	<0.4
T-1,3-DICHL'PROFENE UG/L	34699 0	⟨2	<1	<0.4	<2	<0.4
ETHYLBENZENE UG/L	34371 0	<1.65	<1.56	<0.441	2380	<0.413
METHYLENE CHLORIDE UG/L	34423 0	<11.0	(9.00	<2.11	<9.00	<2.00
1,1,2,2-TE'CH'ETHAN	E 34516	<3	⟨3	<0.8	⟨3	<0.7
TETRACHLOROLTHENE UG/L	34475 0	<3	<3	<0.7	<3	<0.7
1,1,1-TRICHL'ETHANE UG/L	34506 0	. <1	₹1	<∅.4	<1	<0.4
1,1,2-TR1CHLOROETHA	N 34511	<3	<3	· <0.8	⟨3	<0.7
TRICHLOROETHENE UG/L	39180 0	<2.39	<2.26	<0.639	<2.41	<0.598
TR1CHL'FLUOROMETHAN UG/L	E 34488 0	<3	- (3	<0.9	<4	<0.9
TOLUENE UG/L	34010 0	<1.15	<1.09	<0.308	115	<0.288
VINYL CHLORIDE UG/L	39175 0	<2.96	<2.80	<0.792	<2.99	<0.741

PROJECT NUMBER 86416V0108 FIELD GROUP POLKW PROJECT NAME PROJECT MANAGER

LAB COORDINATOR DILNA HALE

POLK COUNTY/DER

	A Shann		SAMPLE	ID/#	
	OTALL T. I	₩ - 6		W-8	
PAKAMETERS UNITS	STORET # METHOD		· · · · · · · · · · · · · · · · · · ·	FULKW 8	POLKW 9
		C-9E 03/06/86		C-NW "	SW-1
DATE TIME		03/06/86	03/06/86	03/06/86	03/05/85
1,2-DIBR'ETHANE(EDB) UG/L	77651 0	<0.020	<0.020	<0.020	<0.020
CHROM1UM, TOTAL	1034	7.00	6.76	130	<3.00
UG/L LEAD, TOTAL	1051	<24.0	<24.0	. 197	<24.0
UG/L METHYL-T-BUT'ETHER	98676	<0.383	<0.419	101	11.6
UG/L					11.0
XYLENES TOTAL UG/L	99649 0	⟨3.0	<1.0	<0.30	<3.1
ACROLEIN	34210	<38	<42	⟨9	<11
UG/L ACRYLON1TRILE	34215	(38	<42	(9	<11
UG/L BENZENE	34030	(1.03	K1.13	<0.237	<0.304
DEINZEINE UG/L	34030				NO.304
BROMODICHLOROMETHANE UG/L	32101	<1.40	<1.53	<0.32	<0.41
BROMOFORM	32104	<4.31	<4.72	<0.99	₹1.27
UG/L BROMOMETHANE	9 34413	(3	(3	<0.7	<0.9
UG/L	0	. –		(0.7	NO.5
CARBON TETRACHLORIDE UG/L	32102 0	<2	⟨2	<0.4	<0.5
CHLOROBENZENE UG/L	34301 a	<1.0	~<1	<0.2	<∅.3
CHLOROETHANE	3431 į	<7	<8	⟨2	<2
UG/L 2-CHL'ETH'VINYLETHER	8 34576	<6	⟨7	<1	<2
yG/L	0	44 00		/A >ATE	/A 050
CHLOROFORM UG/L	32106 0	<1.20	<1.31	<0.275	< 0 .353
CHLOROMETHANE UG/L	34418 0	<3	<3	<0.6	<0.8
DIBROMOCHLOROMETHANE	34306	<2.68 [°]	<2.94	<0.617	<0.791
UG/L DICHLORODIFLUOROMETH	0 34668	<3.8	<4.2	<0.88	<1.1
ANE UG/L 1,1-DICHLOROETHANE	9 34496	⟨2	⟨2	<0.4	⟨∅.5
VG/L	0	₹	<i>7.</i> €	₩.₩.₩	e e e e e e e e e e e e e e e e e e e

PROJECT NAME POLK COUNTY/DER PROJECT MANAGER LAB COORDINATOR DILNA HALE

			SAMPLE		*
TANK TERM	ATA: T "	W-6	W−7	W-8.	
PAKAMETERS UNITS	STORET # METHOD	POLKW 6	POLKW 7	POLKW 8	
the state of the s		C-SE	7 C-M)	C-NW-A	
DATE		03/06/86	03/06/86	03/06/86	03/06/86
TIME					
1,2-DICHLOROETHANE UG/L	34531 9	<2	<2	<0.4	<0.5
1,1-DICHLOROETHYLEN		(3.6	<4.0	<0.84	<7.9
UG/L	Ø				
T-1,2-DICHLOROLTHEN	E 34546 0	<3.16	<3.46	<0.728	(0.934
1,2-DICHLOROPROPANE		⟨3⟩	⟨3	<0.7	<0.9
UG/L	0				
C1S-1,3-DICH'PROPENI UG/L	E 34704	⟨2	ζ2	<0.4	<0.5
T-1,3-DICHL'PROPENE	34699	⟨2	<2	<0.4	<0.5
UG/L	0.4074			40 445	
ETHYLBENZENE UG/L	34371	₹11.1	<1.98	<0.415	<0.533
METHYLENE CHLORIDE	34423	<12.0	<6.00	<1.40	K3.00
UG/L	0				
1,1,2,2-TE'CH'ETHAN	E 34516	⟨3	₹3	<0.7	<0.9
TETRACHLOROLTHENE	34475	<3	K 3	<0.7	<0.9
UG/L	Ø				
1,1,1-TRICHL'ETHANE UG/L	34506	<2	<2	√ <0.4	<2
1,1.2-TRICHLOROETHAN	0 N 34511	<3	<4	<0.7	<0.4
E UG/L	0		•		
TRICHLOROETHENE	39180	<2.61	<2.8 6	<0.601	<1.00
UG/L TR1CHL'FLUOROMETHANI	0 34488	<4	<4	.<0.9	<1
UG/L	0		·	•	
TOLUENE	-34010	<1.26	<1.38	< <0.290	<1.86
UG/L VINYL CHLORIDE	9 39175	<3.24	<3.55	<0.745	<0.956
UG/L	. 0	To the Control of the Control			



Florida Department of Environmental Regulation

Southwest District

4520 Oak Fair Boulevard

Tampa, Florida 33610-7347

Lawton Chiles, Governor

813-623-5561

Carol M. Browner, Secretary

October 10, 1991

Ms. Elaine Macinski Central Florida Pipeline Corporation 1904 Hemlock Avenue Tampa, FL 32605

Re: Lake Alfred Pipeline Rupture

Polk County, Florida OGC Case No. 88-0008

Dear Ms. Macinski:

The Department has completed its review of the Preliminary Contamination Assessment Report (PCAR) for the referenced site. Based upon the PCAR, in which no contaminants were detected in excess of the drinking water standards or minimum criteria as established in Chapter 17-3, F.A.C., and our review of the file, the Department has determined that No Further Action is appropriate for the referenced site. This enforcement action is now closed.

If you have any questions or comments, please call Mary Yeargan at extension 376.

Sincerely,

Dane Tromme

William Kutash Administrator

Division of Waste Management

MEY

cc: David Thulman, OGC
 Zoe Kulakowski, BWC
 T. Rigg, GATX
 E. Foster, CFPL
 Robert Wallace, EEC

D.E.R.

State of Florida DEPARTMENT OF ENVIRONMENTAL REGULATION DISTRICT ROUTING SL TO: DIANE TOMMER SOUTHWEST DISTRICTP DATE: 9/4/52 **Northwest District PENSACOLA** Northwest District Branch Office PANAMA CITY Northwest District Branch Office TALLAHASSEE Southwest District TAMPA Central Florida District **ORLANDO** Central Florida District Branch Office MELBOURNE Northeast District JACKSONVILLE Northeast District Branch Office GAINESVILLE South Florida District FORT MYERS South Florida District Branch Office PUNTA GORDA MARATHON South Florida District Branch Office WEST PALM BEACH Southeast Florida District Southeast Florida District Branch Office PORT ST. LUCIE Reply Optional Repty Required Info Onty L Date Due: Date Due:_ DIANC: Enclosed IS A draft Copy

Of The Callaway & Son Drum

Survice SSE Co-dicted by US

Survice SSE Co-dicted by US

A JALOS Eng. I Am Sending to

draft copy due to the high level of

Chlorinated Solvent contant. found is

Chlorinated Solvent contant. found is

Ground warm. I will forward A final is nem forme

FROM:

TEL:

(SUN) 278-0150

Row Callaway - (813) 859-4257 COMMENTS:

FINAL DRAFT

SEP 2 1992

DRAFT COPY SUBJECT TO CHANGE

Jechnical Review Section

PHASE II SCREENING SITE INSPECTION REPORT

D.E.R.

CALLAWAY AND SON DRUM SERVICE LAKE ALFRED, POLK COUNTY, FLORIDA

SEP - 9 1992 SOUTHWEST DISTRICT TAMPA

USEPA SITE IDENTIFICATION NO. FLD 094590916

CONTRACT NO. HW146-29A JEG PROJECT NO. 29-E571-01

Prepared for:

FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION
BUREAU OF WASTE CLEANUP
SITE SCREENING SUPERFUND SUBSECTION
TALLAHASSEE, FLORIDA

Prepared by:

JACOBS ENGINEERING GROUP INC. LAKELAND, FLORIDA

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SECTION 1 INTRODUCTION

This Phase II Screening Site Inspection (SSI) report for the Callaway and Son Drum Service (Callaway) site has been prepared for the Florida Department of Environmental Regulation (FDER) by Jacobs Engineering Group, Inc. (JEG) under Contract No. HW146-29A. The work was completed pursuant to the authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, U.S.C. 9601 et. seq., as amended by the Superfund Amendments and Reauthorization Act, Public Law 99-499, and Florida Statutes, Chapter 403. The purpose of the SSI was to determine the presence, nature, and concentrations of any on-site contamination resulting from a release of hazardous substances into the environment. The results of the SSI will be incorporated into the hazardous ranking evaluation (effective March 1991) of the Callaway site and will be used to determine what, if any, further action is required by the U.S. Environmental Protection Agency (EPA) and/or FDER to address possible contamination at the site.

This SSI report has been developed based on the information provided in the Phase I SSI report prepared by NUS Corporation; the site reconnaissance conducted by FDER and JEG on February 20, 1992; the field investigation conducted by FDER and JEG on June 2 and 3, 1992; and the FDER site file. The reconnaissance of the Callaway site was conducted by Mr. Mike Cain (JEG), Mr. Frank Hicks (JEG) and Mr. Jim McCarthy (FDER) and attended by Mr. Ronald Callaway. The field investigation team consisted of Mr. Mark Giacovelli and Mr. Richard Gardner of JEG, Mr. Jim McCarthy, and employees of American Drilling.

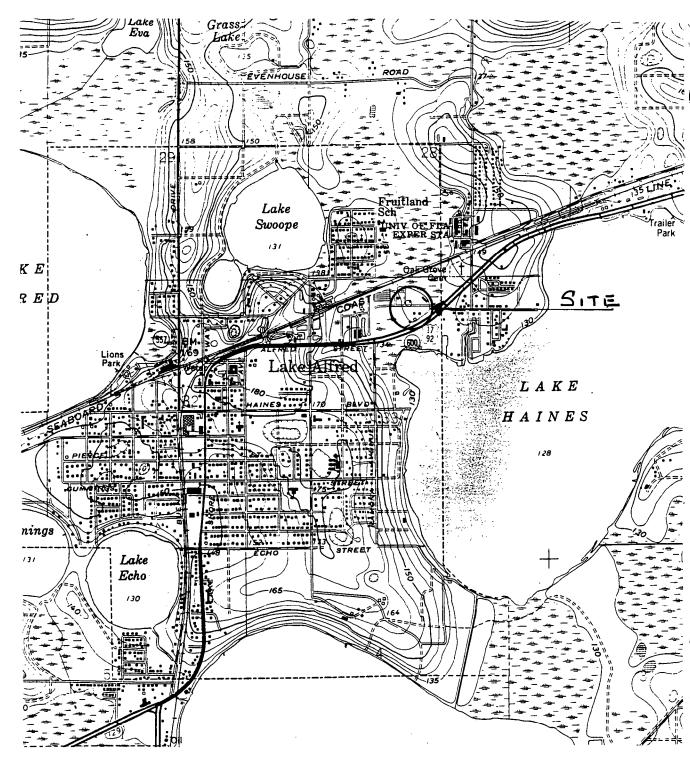
SECTION 2 SITE BACKGROUND

2.1 SITE LOCATION AND DESCRIPTION

The Callaway site is located at 890 East Lake Alfred Drive (U.S. Highway 17-92), Lake Alfred, Polk County, Florida as shown in Figure 2-1. The coordinates for the site are Latitude 28°05'52" North, Longitude 81°42'54" West in the Northeast 1/4 of Northeast 1/4 of Section 33, Township 27 South, Range 26 East [1,2,6,29].

FIGURE 2-1 CALLAWAY AND SON DRUM SERVICE LOCATION MAP





USGS, 1959, Winter Haven, Florida, Topographic Map, Source:

7.5 minute series, photorevised 1980.

The facility occupies an area of approximately 9.5 acres [29]. Drum reconditioning was performed at the site and consisted of a drum cleaning area, a sandblasting and painting area, and a drum storage area. The structures at the site include an office trailer, and two "pole barns". A site map is presented in Figure 2-2. A filled in pond located on the east side of the property was noted as a low area during the JEG site reconnaisance.

2.2 SITE HISTORY

2.2.1 Ownership History

The Callaway site was a family enterprise owned by Mr.Ronald Callaway [2,6]. No prior site ownership is known.

2.2.2 Operation History

The Callaway facility which began operation in mid-1977, refurbished and recycled used 55 gallon drums for resale [2,6,15,29]. The drums came from several locations throughout the state of Florida [6].

The drum reconditioning process utilized a wet cleaning operation before painting [6]. Open-top drums received a dry type cleaning operation before painting [6]. The drums were placed in an inverted position on a rack so that any residuals could drain into a tank [6]. The inside of the drums were then sprayed with a resin cleaner solution, the drippings drained into a tank for reuse [6]. After the drums left the internal flushing station, they were totally submerged in a resin cleaner solution, then dryed on a rack [6]. The excess cleaning solution drained back into the submerssion tank. The drums were then rinsed in a 600 gallon fresh water tank and allowed to air dry on a rack [6]. The rinse tank was drained every two weeks, and the discharged water flowed into the low area on the east side of the site [6,29]. Sometime in late 1982 or 1983, a concrete disposal area (approximately 10' x 20' x 2' deep) was built [3,6,29]. The dryed drums were then moved to the sandblasting area, if needed, to remove any loose paint [6]. In the painting area, drums were painted with industrial grade enamel, then stored for shipment [6]. Open-top drums were not cleaned and rinsed, they were placed on the air drying rack, vacuum cleaned and sand blasted, if needed, before being painted [6].

JE JACOBS ENGINEERING GROUP INC. 29-E571-01 FIGURE 2-2 Prepared By: FSH/JWH CALLAWAY AND SON DRUM SERVICE Date: 8/28/92 SITE MAP Ref: HSCALL **LEGEND** DITCH -RAILROAD EXISTING MONITORING WELL TEMPORARY WELL/GROUNDWATER SAMPLE GAS PIPELINE SOIL SAMPLE (DESTROYED) KW-2 ■ (UNABLE -4 (UNDERWATER 2/92) TO LOCATE (CSS-01) C-1 (DESTROYED) FILLED-IN **←** (CGW-01) POND (CSS-02)DRUM CLEANING AREA **■** C-2 (CSS-03) DRUM STORAGE AREA-KW-5 (CGW-02) DEEP WELL SANDBLASTING -& PAINTING AREA KW-1**OFFICE** 300 APPROXIMATE SCALE IN FEET

fBased on an average day, approximately 20 drums were cleaned, sandblasted and painted [6]. During the citrus season, the facility handled 500 open-top drums per day [6]. The operations were for 8 hours per day, 5 days per week [6].

The operation became inactive sometime after April 26, 1991.

2.2.3 Investigation/Regulatory History

The Callaway site first came to the attention of FDER in October 1982, when they submitted an application to operate an industrial wastewater treatment and disposal system (concrete disposal area mentioned above) [6].

Discharge from the rinse tank was sampled and analyzed in 1983 [1,2,4,29]. The results of analyses showed the presence of oil and grease (1 milligram per liter [mg/l]), total organic carbon (25 mg/l), chromium (0.35 mg/l), and lead (2.25 mg/l) [1,2,4,29].

An FDER Hazardous Waste Compliance Report dated September 8, 1983, noted the handling of the waste stream from the cleaning and rinsing operations into the low area on the eastern edge of the property [3]. The concrete disposal area was being constructed at the time of the inspection [3].

A fire occurred at the site on October 31, 1983 [1,13,29]. Drums containing chemicals reportedly exploded during the fire [1,13,29]. A release of contaminants as a result of the fire was not documented [29].

During the week of March 6, 1984 members of the FDER Operation Response Team (ORT) conducted an investigation of the Callaway site to determine if any groundwater or surface water contamination had occurred at the site as a result of the facility's operation [2]. Groundwater samples were taken from four on site wells (3 shallow and 1 deep well), surface water samples were taken at three locations, and seven private domestic wells in the vicinity of the site were sampled [2]. The results of analyses for the deep well and all of the private wells did not show any contamination [2]. Analyses of the shallow groundwater showed the presence of vinyl chloride (2 micrograms per liter $[\mu g/I]$) at a level equal to the Primary Drinking Water Standard (PDWS) [1,2,29]. In addition, lead (1.6 $\mu g/I$), trans,1,2-dichloroethylene (7 $\mu g/I$), carane (20 $\mu g/I$), and 4,4 dimethyl-2-pentanone (10 $\mu g/I$) were detected [2,29]. Elevated conductivity values were

also noted in the groundwater samples [1,2,29]. Surface water showed the presence of trans,1,2-dichloroethylene (250 μ g/l) and trace amounts of ethylbenzene (9 μ g/l) and methylene chloride (14 μ g/l) [2]. Based on the investigation, FDER recommended that the owner prepare and execute an approved groundwater monitoring plan for the Callaway site [2].

On October 22, 1984, the FDER issued a warning notice to the owner for unauthorized discharge of organic solvents into surface and groundwater and for failure to provide a groundwater monitoring plan [14]. A groundwater monitoring plan was submitted to FDER in January 1985, which proposed the installation of three monitoring wells (C-1, C-2, C-3, see Figure 2-2) [15].

A Potential Hazardous Waste Site Preliminary Assessment (EPA Form 2070-12) dated July 10, 1985 was prepared for the Callaway site. The assessment recommended that the site be given a low priority for inspection [1].

A gasoline pipeline owned by Central Florida Pipeline ruptured north of the Callaway site on December 4, 1985, and spilled approximately 40,000 gallons of unleaded fuel onto the Callaway site [5]. The impact covered the eastern portion of the property [5]. Central Florida Pipeline hired specialists to clean-up the spilled product [5]. Groundwater monitoring results obtained during the clean-up indicated that there could be other sources of water contamination in addition to the gasoline [5].

During follow-up assessment of the remediation of the gasoline spill, soil samples were collected for analysis. The samples contained elevated levels of benzene (543 parts per billion [ppb]), toluene (10,900 ppb) and xylene (3030 ppb) [5].

In January 1986, the local FDER requested a field investigation by the Tallahassee Operation Response Section to resolve the matter [5]. The investigation was conducted in March 1986, during which five groundwater monitoring wells (KW-1, KW-2, KW-3, KW-4, KW-5) in the approximate locations shown on Figure 2-2 were installed and sampled by the FDER [5]. Results of analyses showed lead (349 μ g/l) and chromium (220 μ g/l) above the PDWS [5,29]. In addition, methyl-t-butyl ether (101 μ g/l), total xylenes (1100 μ g/l), ethylbenzene (2380 μ g/l) and toluene (115 μ g/l) were detected [5,29]. The report concluded that the metals contamination was probably from the City

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of Lake Alfred Sewage Treatment Plant, located adjacent to the Callaway site to the west, and not due to the gasoline spill or the drum cleaning activities on site [5,29].

A Phase I SSI Report on the Callaway site dated April 26, 1991, was prepared by Ecology and Environment, Inc. [29]. The report concluded that events and practices at the site may have resulted in contaminant migration from the site and recommended that a Phase II SSI be conducted at the site [29].

SECTION 3 SITE CHARACTERIZATION

3.1 ENVIRONMENTAL SETTING

The area surrounding the Callaway site is one of mixed land use. The City of Lake Alfred municipal sewage treatment facility is west of the plant, a cemetary and residental area are east of the site, University of Florida Agricultural Experiment Station is northeast of the site, a heavily wooded fresh water wetland is north of the site and Lake Haines, a large fresh water lake, is immediately south of East Lake Alfred Drive.

Land surface elevations in the vicinity of the the site range from about 180 feet National Geodetic Vertical Datum (NGVD) approximately one mile north of the site to about 130 feet NGVD near Lake Haines [20]. Surface drainage at and near the site is to Lake Haines. Average annual precipitation in the area is 52 inches [15].

3.2 REGIONAL GEOLOGY AND HYDROGEOLOGY

The Callaway site is located on the Polk Upland in central Florida in an area that is characterized by karst topography and underlain by rock units that include, in ascending order the Avon Park Formation and Ocala Limestone of Eocene age; the Hawthorne Group of Miocene age and undifferentiated surficial deposits. The Hawthorn Group includes the Arcadia and Peace River Formations [31].

These rocks are mostly permeable carbonates, primarily limestones and dolomites. A layer of unconsolidated sand and clay overlies the predominantly carbonate series of rocks in this area [31].

Permeable rocks in this sequence are interbedded with less permeable rocks to form a sequence of three aquifer systems in this area; in ascending order they are the Floridan aquifer system, the intermediate aquifer system and the surficial aquifer system.

The Floridan aquifer system in Polk County includes the Ocala Limestone and Avon Park Formation. This area is a recharge area for the Floridan aquifer [31]. Recharge in this area is facilitated by karst like features that are chatacteristic of the area.

The intermediate aquifer system is both a system of artesian aquifers and the upper confining unit of the Floridan aquifer system. It includes the Arcadia Formation and the Peace River Formation [27]. Leakage through the intermediate aquifer system in this area provides recharge to the Floridan aquifer [31].

The surficial aquifer system includes all the unconsolidated rocks overlying the upper confining unit of the intermediate aquifer [31]. The thickness of the surficial aquifer is variable in this area and ranges from less than 25 feet to more than 50 feet [31]. The top of the surficial aquifer system is at land surface and it is unconfined.

The hydraulic gradient in the Floridan aquifer system in this area is to the southwest [31]. The piezometric surface in the Floridan aquifer system in central Polk County ranges, seasonally and areally, from 10 to 60 feet below the piezometric surface in the overlying intermediate aquifer system in this area [32].

In central Polk County the hydraulic gradient in the intermediate aquifer is from areas of recharge in topographically high areas to areas of discharge in topographically low areas [32]. Recharge to the aquifer in this area is by downward leakage from the overlying surficial aquifer. Discharge is by leakage to the underlying Floridan aquifer, and discharge to surface water bodies through overlying sediments.

The primary source of recharge to the surficial aquifer system in central Polk County is by precipitation. Discharge occurs as leakage to the underlying intermediate aquifer by lateral flow to surface water bodies, evaporation and transpiration.

3.3 SITE HYDROGEOLOGY

The Callaway site is located on the surficial aquifer in the recharge area of the intermediate and Floridan aquifer systems in the headwaters of the Peace River drainage basin. Land surface elevation at the site is about 135 feet NGVD [20].

The east side of the site is a low, seasonally inundated area. A drainage ditch enters the site on its north side, traverses the east side of the site and exits the site at its southeast corner. Water from the ditch flows through a culvert under U.S. Highway 17-92 south to Lake Haines [2]. Surface runoff at the site is directed to the drainage ditch along its east side.

Two temporary monitoring wells (CGW-01 and CGW-02) were constructed at the site during the field investigation (June 2, 3, 1992) at the approximate locations shown on Figure 2-2. [Section 3 of this report discusses the field methodology]. Drill cuttings indicate that the surficial aquifer at the site is vari-colored discontinuous clay in fine brown red, gray and white sand (Appendix C).

Well parameters and water levels measured in the temporary wells and existing wells during the field investigation (June 3, 1992) are as follows:

Well No.	Elevation of Land Surface (feet)	Depth of Well (feet)	Elevation of Top of Casing (TOC) (feet)	Depth of Water Below TOC (feet)	Elevation of Water Surface (feet)
CGW-01	134.67	14.1	135.57	3.16	132.41
CGW-02	134.45	14.5	136.35	4.27	132.08
*KW-01		18.5	141.91	10.07	131.84
*C-2		15.0	134.98	1.57	133.41

Note: Elevations in NGVD

As shown, water levels measured in these monitoring wells in the surficial aquifer ranged from 1 to 8 feet below land surface. These data indicate that the hydraulic gradient, and flow in the surficial aquifer is to the southwest, however, heavy rains

^{*} Existing well elevation [5]

occurred at the site during the field investigation and water levels in these wells may have been affected by rain. Previous investigations had concluded that flow in the surficial aquifer was east to the drainage ditch [2].

SECTION 4 FIELD INVESTIGATION

4.1 INVESTIGATION PROTOCOL

FDER and JEG identified two media, soil and groundwater, to be sampled in order to fulfill Hazard Ranking System (HRS) evaluation and site characterization requirements. Continuous air monitoring was conducted during fieldwork activities, but no air sampling was performed.

All samples were analyzed for all Target Compound List organics, and all Target Analyte List inorganics (and cyanide). Metal samples were not filtered (i.e., total metal analyses was performed). Analyses were conducted by Pace Laboratories, Inc. in accordance with the EPA's Contract Laboratory Program (CLP) protocol. The resultant analytical data were subsequently submitted to the EPA, Region IV for a quality assurance review.

All field sampling quality assurance/quality control protocol was performed in accordance with the JEG Comprehensive Quality Assurance Plan No. 900099G, approved May 15, 1992 (JEG CompQAP) and the FDER approved Phase II SSI Work Plan for the Callaway site.

All sample containers were furnished by the analytical laboratory with preservatives as required.

4.2 SOIL HEADSPEACE SURVEY

A soil headspace survey was conducted to locate areas of potential soil contamination at the Callaway site. The purpose of the survey was to assist in the selection of monitoring well placement.

Soil samples for field headspace analyses were collected directly from the bucket of the stainless steel hand auger immediately after the auger was removed from the borehole. The sample was trimmed and approximately 8 ounces of soil was placed in a new 16

ounce glass sample container. The sample container was immediately covered with aluminum foil and secured to prevent the circulation of air into or out of the sample container.

Samples collected for field headspace analysis were allowed to stabalize a minimum of 20 minutes after being placed in the sample container before the field headspace analysis was performed. After the sample had stabilized the field headspace analysis was performed by inserting the probe of a calibrated OVA into the sample container through the foil cover.

4.3 SAMPLE LOCATIONS AND RATIONALE

Three soil and two groundwater samples, plus two sampling equipment rinsate sample were collected at the approximate locations shown on Figure 2-2. The designations, locations, and rationale for each of the samples are as follows:

Soil CSS-01 Northwest corner of sitee/background location Soil CSS-02 North of drum cleaning area/potential source area Soil CSS-03 Former drum storage area/		Sample Media	Sample <u>Designation</u>	Location/Rationale
Soil CSS-01 Northwest corner of sitee/background location Soil CSS-02 North of drum cleaning area/potential source area Soil CSS-03 Former drum storage area/		Groundwater	CGW-01	
Soil CSS-02 North of drum cleaning area/potential source area Soil CSS-03 Former drum storage area/		Groundwater	CGW-02	Center of drum processing area/ potential source area
potential source area Soil CSS-03 Former drum storage area/		Soil	CSS-01	·
The second secon	,	Soil	CSS-02	
potential source area	1	Soil	CSS-03	Former drum storage area/ potential source area
Rinsate (soil) CSR-01 Not Applicable/JEG CompQAP		Rinsate (soil)	CSR-01	Not Applicable/JEG CompQAP
Rinsate (water) CGWR-01 Not Applicable/JEG CompQAP		Rinsate (water)	CGWR-01	Not Applicable/JEG CompQAP

4.4 SOIL SAMPLING

Three soil samples (CSS-01, CSS-02 and CSS-03) were collected at the approximate locations shown in Figure 2-2. At each location, the sample was collected at a depth of 0.5 to 1 foot below land surface, using decontaminated, stainless steel Hand operated

augers. All samples, except those collected for VOC analysis, were mixed/composited in equal volume in a stainless steel bowl to yield the samples. Samples for VOC analysis were collected directly into the sample containers from the auger bucket to avoid volatilization.

4.5 TEMPORARY MONITORING WELL INSTALLATION/ABANDONMENT

Two surificial aquifer system temporary monitoring wells (CGW-01 and CGW-02) were installed at the approximate locations shown on Figure 2-2. The temporary wells were constructed in boreholes drilled with 6-inch ID hollow stem augers. Well construction data and boring logs are presented in Appendix C. Boreholes were advanced to a depth of 3 or more feet below the water surface in the surficial aquifer. Two-inch diameter stainless steel, wire wound, 0.010-inch slot screen was inserted into the hollow stem auger and sufficient 2-inch diameter stainless steel casing was attached to the screen to lower the screen to the plug in the auger bit with 1 to 3 feet of casing above land surface. The plug was unlatched from the auger bit and clean quartz sand was placed in the annulus between the screen/casing string. The sand pack was introduced to the annulus until the top of the sand pack was 1 to 2 feet above the top of the screen; the augers were then removed from the borehole.

After placing the sand pack, the wells were developed with a suction lift pump until 3 to 5 well volumes had been removed and until the temperature, pH and specific conductance had stabilized.

After sampling, the temporary monitoring wells were abandoned by removing the casing and screen and plugging the hole with a bentonite/cement grout. The grout mix was pumped through a tremie pipe to the bottom of the borehole until grout reached land surface.

4.6 GROUNDWATER SAMPLING

Groundwater samples were collected from the newly installed temporary stainless steel monitoring wells (CGW-01 and CGW-02). Samples were collected with a Teflon bailer directly into the sample containers. The temperature, pH, and specific conductance of the groundwater from each well was measured in the field.

SECTION 5 RESULTS OF FIELD INVESTIGATION

5.1 SOIL HEADSPACE SURVEY

A soil headspace survey was conducted on samples collected at near surface depths of from 0 to 2 feet below land surface. Organic vapors were detected at concentrations of 6.2 and 6.6 ppm from sample CSS-03 which was collected just west of the drum cleaning area, in the former drum storage area.

5.2 FIELD PARAMETERS FOR WATER SAMPLES

Temperature, pH, and specific conductance readings from groundwater well samples are as follows:

Sample	Temperature (°c)	рН	Specific conductance (µmhos/cm)
CGW-01	25.2	4.7	223
CGW-02	24.1	5.0	142

The temperature and specific conductance values are in order with background levels. The pH in both samples, however, appears to be depressed and indicates reducing conditions in the groundwater.

5.3 SOIL SAMPLES

Tables 5-1, 5-2, and 5-3 present the detected levels of organics, inorganics, and pesticides/PCBs, respectively, in soil samples. CSS-01, taken in the northwest corner of the site, is the background sample.

5.3.1. Organics

Examination of the data from Table 5-1 illustrates that significant contamination of some soils by organics has occurred. The organics mostly present in significant concentrations are derivatives of coal tar (fluorene, phenanthrene, anthracene, pyrene, and related isomers) and other chlorinated and non-chlorinated organic solvents.

TABLE 5-1

SUMMARY OF DETECTION OF ORGANICS IN SOIL AND RINSATE SAMPLES

CALLAWAY SITE

		SOIL (µg/kg)			ANKS (µg/l)
Analyte	CSS-01	CSS-02	CSS-03	GCWR-01	CSR-02
Acetone	9BJ	140B	82B		590BE
4-Methyl-2-Pentanone		13	30		
Xylene (total)		2J	900E		
4-Methylphenol		86J	190J		
Toluene			30		
2,4-Dimethylphenol			34J		
Naphthalene		42J	75J		
4-Chloro-3-Methylphenol			65J		
2-Methylnaphthalene		300J	96J		
Fluorene		340J	44J		
Phenanthrene		350J	370J		
Anthracene			54J		
Di-n-butylphthalate		30J	62J	0.6BJ	
Pyrene		160J	120J		
Bis(2-ethylhexyl)phthalate		1,400	4,100E		
Chloroform		2J			
Ethylbenzene		13			
Isophorone		25J			
Acenaphthene		120J			
Dibenzofuran		90J			
Butylbenzylphthalate		260J			

These organics were detected in samples CSS-02 and CSS-03 at concentrations from one to two orders of magnitude higher than background levels. Both samples were taken in the vicinity of the drum cleaning area. Detection of these organic compounds at the levels reported indicate that solvents were either used to clean the drums or were present in drums being washed. The detection of acetone is probably due to sample contamination; bottle the detections of di-n-butylphthalate and bis(2ethylhexyl)phthalate-(Ethylhexyl) phthalate are difficult to explain, especially in light of the very high values for the latter contaminant (1,400 and 4,100 micrograms per kilogram [μg/kg]).

5.3.2. Inorganics

The detected inorganics shown in Table 5-2 are primarily the mineral-type metals (e.g. aluminum, calcium, iron, magnesium, sodium) which occur naturally in soils typical of the site. Detections significantly higher than background levels include lead (6.2 to 68.9 mg/kg) and chromium (13.2 mg/kg). Arsenic and copper were also detected but were present in the sample blanks as well.

5.3.3. Pesticides

A number of pesticides were detected from all soil samples including the background sample as shown in Table 5-3. Significant detections include 4,4'-DDE (3.5 to 9.0 mg/kg), 4,4'-DDT (2.0 mg/kg), and gamma-chlordane (2.3 to 10.0 mg/kg).

5.3.4 PCBs

No PCBs were detected in soil samples.

TABLE 5–2

SUMMARY OF DETECTION OF INORGANICS IN SOIL SAMPLES (mg/kg)

CALLAWAY SITE

Analyte	CSS-01	CSS-02	CSS-03
Aluminum	1,130	3,630	751
Arsenic	0.95B	0.98B	
Barium	6.4B	8.0B	6.4B
Calcium	2,530	576B	6,950
Chromium		13.2	13.2
Copper	3.0B		2.5B
Iron	460	3,960	1,070
Lead	6.2	9.1	68.9
Magnesium	46.0B	50.0B	111B
Manganese	2.4B	1.4B	10.9
Potassium		306B	
Selenium	0.61B	0.59B	0.50B
Sodium	32.4B	797B	770B
Vanadium		27.5	
Zinc	12.1	3.7B	44.9

TABLE 5-3

SUMMARY OF DETECTION OF PESTICIDES IN SOIL SAMPLES (mg/kg)

CALLAWAY SITE

Analyte	CSS-01	CSS-02	CSS-03
Heptachlor	0.95P	0.43PJ	
delta-BHC		0.35PJ	
Heptachlor epoxide	0.13PJ	0.57PJ	
Dieldrin			0.88PJ
4,4'-DDE	3.5J	5.3P	9.0P
4,4'-DDT	2.0PJ		
alpha-chlordane	0.45PJ		4.4
gamma-chlordane	2.3	4.4P	10.0

5.4 GROUNDWATER SAMPLES

Tables 5-4 and 5-5 present the detections of organics and inorganics, respectively, in groundwater samples.

5.4.1. Organics

The data in Table 5-4 illustrate that organics are present above background levels in sample CGW-02. Acetone and di-n-butylphthalate were also detected in sample blanks and are considered to be the result of sample bottle contamination. Similarly, the detection of bis(2-ethylhexyl)phthalate is suspected to arise from laboratory contamination as it frequently is detected in samples from this particular contract laboratory in samples from very different locations throughout the southeastern United States. Contaminants of concern are vinyl chloride (33 μ g/l), 1,2-dichloroethane (160 μ g/l), trichloroethene (110 μ g/l), and tretrachloroethene (770 μ g/l). The Florida Groundwater Guidance Concentrations (FGWGC) for vinyl chloride, 1,2-dichloroethane, and trichloroethene are 1, 3, and 3 μ g/l, respectively [33]. These compounds are commonly used solvents and are considered carcinogenic.

5.4.2 Inorganics

From Table 5-5 it becomes clear that sample CGW-01, the background well, is contaminated by metals. Iron (5,500 and 7,150 μ g/l) was detected above the Safe Drinking Water Standard of 300 μ g/l. Chromium (22.6 μ g/l) and sodium (16,000 and 15,800 μ g/l) were detected but at levels below the Safe Drinking Water Standards. Arsenic, barium, copper, manganese, vanadium, and lead were detected in sample blanks also and are considered to be sample contaminants.

5.4.3 Pesticides

No pesticides were detected in groundwater samples.

5.4.4 PCBs

No PCBs were detected in groundwater samples.

TABLE 5–4

SUMMARY OF DETECTION OF ORGANICS IN GROUNDWATER SAMPLES (µg/l)

CALLAWAY SITE

Analyte	CGW-01	CGW-02
Acetone	6BJ	
Di-n-butylphthalate	1BJ	
Bis(2-ethylhexyl)phthalate	3BJ	
Vinyl Chloride		33
1,2-Dichloroethane (total)		160
Trichloroethene		110
Tetrachloroethene		770

TABLE 5-5

SUMMARY OF DETECTION OF INORGANICS IN GROUNDWATER SAMPLES (μ g/I)

CALLAWAY SITE

Analyte	CGW-01	CGW-02
Alexander	14.000	0.100
Aluminum	14,000	2,160
Arsenic	2.8B	· 2.5B
Barium	160B	44.1B
Calcium	7,290	1,470
Chromium	22.6	
Copper	9.7B	
Iron	5,500	7,150
Magnesium	50.5	7.2B
Manganese	4,960B	2,200B
Nickel	14.7B	
Potassium	7,120	
Sodium	16,000	15,800
Vanadium	17.7B	
Zinc	122	36
Lead		2.5B

SECTION 6 EXPOSURE/MIGRATION EVALUATION

6.1 SOIL PATHWAY

Soils at the site have been contaminated by a variety of known carcinogens and mutagens including solvents, heavy metals, and pesticides. Some of these contaminants are present in sufficient concentrations so that dermal contact, ingestion, or inhalation of contaminated soil particles could induce an acute toxic response in the receptor organism. Long term exposure to the contaminated soil may result in damage to the liver, kidneys, heart, and central nervous system in targeted humans.

The routes of exposure for contaminated soil include direct contact at the site and sorption of the contaminants through the skin and the eyes, inhalation of airborne soil particles, contact with soil entrained in stormwater runoff, and ingestion of soil contaminated runoff. The potential for contamination can be geographically amplified if the contaminated soil is removed from the site and dispersed to other locations.

Target organisms include humans, plants, and other animals, both terrestrial and aquatic. Potential human receptors include visitors to the site, persons in the immediate vicinity of the site (sorption and inhalation of contaminated soil particles), persons at other locations coming in contact with the contaminated soil which has been removed from the site, and individuals contacting soil contaminated runoff while immersed in surface water (e.g. swimmers, jet skiers, etc.). This latter route of exposure is of minimal significance due to the dilution of contaminated runoff by receiving waters. Many of the detected contaminants are toxic to plant life, some of them at very low concentrations.

Plants can be exposed to the contaminants via sorption through leaves and roots, uptake of volatile contaminants through gas exchange with the atmosphere, and direct contact of roots with soil-borne contaminants. Those plants growing at the site are most susceptible to exposure.

Both terrestrial and aquatic animals are potential targets of contamination. Animals traversing the site can pick up contaminated soil on their feet and transport it to other locations. Ponded water on the site containing contaminants may be a source of drinking water for wildlife and birds and other animals can ingest contaminated soil while feeding on the ground. Burrowing animals are especially at risk at the site. In addition, Lake Haines is approximately 300 yards south of the site and is the receptor of

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stormwater runoff from the site. It is also the ultimate discharge point for shallow groundwater which migrates from under the site. As such aquatic wildlife, including benthic invertebrates, plankton, fish, and predatory birds may be exposed to mobile contaminants.

The toxic effects of the soil contaminants can be both acute and chronic. Some of the detected contaminants are very persistent in the environment and accumulate in the food chain. Of note is the contaminant DDT. The presence of trace quantities of DDT in the environment has been linked to declines in population of predatory birds (e,g, osprey, eagles) and other higher trophic level carnivores.

6.2 SURFACE WATER PATHWAY

Rain falling on the site may spread contamination emanating from the site through dissolution of soluble constituents and entrainment of soil-borne contaminants in the resulting stormwater runoff. This runoff enters the drainage ditch which runs along the east side of the property and makes its way southward to Lake Haines. Along its route, volatile organics in the runoff can desorb from the water and escape to the atmosphere. Water ponding on the site could likewise be contaminated by soluble chemicals residing in the upper layers of the soil.

Potentially exposed organisms include humans, plants, and other animals. Humans who contact contaminated runoff or water ponded at the site are at most risk. Plants sorbing contaminated water through roots can take up potentially toxic chemicals. Animals drinking ponded water or contaminated runoff are susceptible as are aquatic wildlife in Lake Haines. The lake and contiguous littoral areas are spawning grounds for a large number of important sport fishes and are used extensively for recreational purposes, including water contact sports.

The surface water pathway is, therefore, significant in terms of the geographic dispersion of contaminants from the site and the number of important receptors which could be exposed by this route. Nonetheless, on a quantitative level, the concentration of contaminants would be diluted by the receiving waters.

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6.3 GROUNDWATER PATHWAY

Based upon water level measurements during the field investigation the direction of flow in the surficial aquifer is southwestward towards the Lake Haines (however, heavy rains which occurred during the field work may have influenced the measured water levels). There was no data available on the transmissivity of the surficial aquifer at the site. The aquifer consists of relatively permeable fine sands intermixed with silt and clay and the hydraulic gradient is approximately 0.008 feet per foot.

The surficial aquifer and the intermediate aquifer are in direct contact at the site and the surficial aquifer recharges the intermediate aquifer. Similarly, the site is in an area of recharge to the Floridan aquifer. As such, there is a potential for downward migration of contaminants into the intermediate and Floridan aquifers.

Most public water supply wells in the vicinity of the site are terminated in the Floridan aquifer [5]. Both the surficial and intermediate aquifers may be used for potable and irrigation purposes. The City of Lake Alfred operates a well field approximately 3/4 mile east southwest and downgradient of the site which could be affected by site contamination.

Regarding contaminant migration, only soluble chemicals will be transported by the groundwater through the fine sand matrix of the surficial aquifer. Many of the contaminants detected in the samples are bound to the fine soil particles and are virtually insoluble. These constituents, such as chromium and pesticides are not mobile in the groundwater. There is, however, a significant potential for less dense contaminants to float on the surface of the aquifer and flow down gradient, as well as for soluble components to be transported with the groundwater mass. These pathways (or plumes) ultimately terminate at the point of groundwater discharge, Lake Haines. The plumes may be intercepted by surface drainage features, such as ditches, along the route or they may be extracted by irrigation wells.

Potential receptors for groundwater-borne contaminants are individuals drinking from a contaminated well, organisms coming in contact with contaminated well water or groundwater which has seeped into ditches, trees and other vegetation which extract groundwater from the soil through their roots, and organisms which reside in the soil.

The groundwater pathway is also significant in terms of contaminating off-site soils. As the plume migrates outward from the site, it will carry the contaminants into previously untainted soils which will in turn become contaminated.

6.4 AIR PATHWAY

The air can be a significant pathway for migration of volatile and semi-volatile organics and for dust-borne contaminants. Of particular concern at the site are the compounds vinyl chloride, 1,2-dichloroethane, trichloroethene, and tetrachloroethene which are known carcinogens, especially when inhaled into the lungs of a target organism. Visitors to the site as well as remediation workers who disturb contaminated soil are especially susceptible. These organic compounds can also volatilize at some distance from the site through aeration of groundwater plumes, contaminated runoff, and soil removed from the site.

Contaminants such as pesticides are relatively insoluble bound to fine soil particles which can be picked up by the wind and transported away from the site thereby exposing off-site organisms to contamination. These particles, like the volatiles, can be inhaled deep into the lungs of target organisms.

SECTION 7 CONCLUSIONS

Contamination at the Callaway site is widespread. Many types of contaminants have been detected in most soil and groundwater samples including organics, heavy metals, and pesticides. Of particular concern are the high levels of vinyl chloride, 1,2-dichloroethane, trichloroethene, and tetrachloroethene in groundwater samples and the presence of pesticides (especially 4,4'-DDT) in soils. The organics are mobile in the environment in many ways as they can move through the aquifer with the groundwater and they can volatilize into the air. The presence of pesticides is also significant as these compounds are highly toxic, they persist in the environment, and they bioaccumulate in the food chain often producing lethal effects.

These contaminants are present largely due to the operations of the drum cleaning facility and associated activities. Spillages and leaks of solvents have been documented in the literature and are associated with the type of activities used in with drum cleaning. Specifically, the site operator claimed that only used oil drums were

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cleaned at the site. The cleaning consisted of a succession of rinses with solvents followed by a rinse with water. All rinse water was discharged into the ponded area in the northeast portion of the site. There was a spill of unleaded fuel when a pipeline ruptured just north of the site. A considerable amount of product was discharged through the ditch running along the east side of the site. There is also no documented source for the pesticides detected, however some of the drums which were cleaned at the site may have been contaminated with these compounds.

The most significant contamination pathways at the site is through contact with contaminated soil and groundwater flow. For soils, this is because of the high levels of contaminants detected in soil samples, the potential for volatilization of organics from the soil, the mobilization of soil contaminants by entrainment in wind and runoff, and the dispersion of the soil contaminants during soil removal activities. Contaminants can also be transported off-site by stormwater runoff and by the air. These pathways are important, but pose a lesser threat than the soil mechanisms due to the effects of dilution in the respective medium. For groundwater, the reason for concern is the presence of toxic organics in high concentrations in the groundwater, the location of the site in an area of recharge to underlying aquifers, and the proximity of potable water supply wells.

At present, potential receptors of contaminants include visitors to the site, individuals directly adjacent to the site, organisms coming in contact with contaminated soil which is removed from the site, and individuals coming in contact with contaminated runoff and groundwater plumes. This group of exposed organisms includes humans, plants, and other animals.

Because of the nature and extent of contamination at the site, the presence of groundwater contamination in an aquifer recharge area, and the high potential for exposure of sensitive receptors to the contaminants, it is concluded that a Hazard Ranking System evaluation is warranted for the Callaway site on a high priority basis.

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Old Dixie Trail PD&E Study FPID No: 435391-1-22-01 Contamination Screening Evaluation Report



Map ID 17: Shufat Inc.



Florida Department of Environmental Protection

Bob Martinez Center, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400

Division of Waste Management Bureau of Petroleum Storage Systems

Storage Tank Facility Inspection Cover Page Report

District: SOUTHWEST

Type:

Retail Station

County: POLK

Status:

OPEN

ld: 8628467

Latitude:

28° 5' 54"

SHUFAT INC Name:

Longitude:

81° 42' 47"

1005 E LAKE ALFRED DR

LL Method:

DPHO

LAKE ALFRED, FL 33850-2406

LL Status:

REVIEWED

Contact: HUSSEIN SHEHADEH

(863) 956-0770 Phone:

Status Date: 06/06/2003

ACCOUNT OWNER INFORMATION

Name:

SHUFAT INC

Effective Date: 03/01/2004

1005 E LAKE ALFRED DR LAKE ALFRED.FL 33850

Placard #/ Date: 225566 - 11/15/2004

HUSSIEN SHEHADEH Contact:

Phone:

(863) 956-0770

TANK OWNER INFORMATION

Name:

MSR INVESTMENT INC

1005 E LAKE ALFRED RD

LAKE ALFRED,FL 33850

Contact:

MOHAMMED MIRZA

Phone:

Tank

(941) 956-2699

Effective Date: 08/10/1999

3000

Size Content **Placement**

Status

Leaded Gas (A)

07/01/1970

UNDERGROUND

Constructions

Pipings

Monitorings

(C) Steel

(B) Steel/galvanized metal

Installed

07/01/1970

(8) Manually sampled wells

3000

Leaded Gas (A)

UNDERGROUND

Removed from Site(B)

Removed from Site(B)

Constructions

Pipings

Monitorings

(C) Steel

(B) Steel/galvanized metal

(8) Manually sampled wells

Tank	Size	Content	Installed	Pla	cement	Status
3	3000	Unleaded Gas (B)	07/01/1970	UNE	DERGROUND	Removed from Site(B)
Constru	uctions		Pipings		Monitorin	ngs .
(C) Steel			(B) Steel/galvanized meta	al	(8) Manually	sampled wells
4	3000	Unleaded Gas (B)	07/01/1970	UN	DERGROUND	Removed from Site(B)
Constru	uctions		Pipings		Monitorin	ıgs
(C) Steel			(B) Steel/galvanized meta	al	(8) Manually	sampled wells
5	4000	Unleaded Gas (B)	07/01/1988	UN	DERGROUND	Out of Service(T)
Constru	uctions		Pipings		Monitorin	ıgs
(F) Fiberg	lass clad steel		(C) Fiberglass		(K) Monitor (dbl wall pipe space
(M) Spill c	containment bu	ıcket	(I) Suction piping system		(L) Automati	ic tank gauging - USTs
(N) Flow s			(,		(V) Suction	pump check valve
` ,			(F) Double wall		(2) Visual in	spect pipe sumps
(O) Tight f	1111		(K) Dispenser liners		(4) Visual ir	nspect dispenser liners
					(1) Continuo	ous electronic sensing
6	6000	Unleaded Gas (B)	07/01/1988	UNI	DERGROUND	Out of Service(T)
Constru	uctions		Pipings		Monitorin	ngs
(F) Fiberg	lass clad steel		(C) Fiberglass		(K) Monitor	dbl wall pipe space
(M) Spill c	containment bu	ıcket	(I) Suction piping system		(L) Automat	ic tank gauging - USTs
(N) Flow s			**		(V) Suction	pump check valve
(O) Tight t			(F) Double wall		(2) Visual in	spect pipe sumps
(O) Tigrici	1111		(K) Dispenser liners		(4) Visual ir	nspect dispenser liners
					(1) Continuo	ous electronic sensing
7	6000	Unleaded Gas (B)	07/01/1988	UNI	DERGROUND	Out of Service(T)
Constru	uctions		Pipings		Monitorin	ngs
(F) Fiberg	lass clad steel	l ,	(C) Fiberglass		(K) Monitor	dbl wall pipe space
(M) Spill c	containment bu	icket	(I) Suction piping system		(L) Automat	ic tank gauging - USTs
(N) Flow s					(V) Suction	pump check valve
(N) Flow s (O) Tight t			(F) Double wall		(2) Visual in	spect pipe sumps
(O) Fight	1111		(K) Dispenser liners		(4) Visual ir	nspect dispenser liners
					(1) Continuo	ous electronic sensing
Insura	nce Docu	ments			•	
FR Type			Effective Date	Expiration Date	Company Name	9
INSURAN	ICE		05/22/2002	05/22/2003	COMMERCE & INC	DUSTRY
NONE			05/22/2002	05/22/2003		

05/12/1993 FPLIPA

05/12/1989

INSURANCE

Legacy Compliance Activity Information

Activity Code	Date Initiated	Date Complete	Results	Inspector	AST/UST Count	Project Description
TXI	02/10/1999	' 03/03/1999	IN-COMPLIANCE	COOK_J	0/3	COMPLIANCE ASSURANCE
TIN	02/24/1999	03/05/1999	IN-COMPLIANCE	NEWBERG_D	0/3	COMPLIANCE ASSURANCE
TCI	05/09/2000	06/02/2000	SIGNIFICANT OUT-OF- COMPLIANCE	RANDOLPH_L	0/3	COMPLIANCE ASSURANCE
NCLI	05/24/2000	06/02/2000		RANDOLPH_L	0/0	COMPLIANCE ASSURANCE
TCI	08/23/2000	09/08/2000	SIGNIFICANT OUT-OF- COMPLIANCE	NEWBERG_D	0/3	COMPLIANCE ASSURANCE
NCLI	09/06/2000	09/11/2000		NEWBERG	0/0	COMPLIANCE ASSURANCE
RRBD	11/06/2000	11/07/2000		No name on record	1	COMPLIANCE ASSURANCE
RRBD	11/06/2000	11/07/2000		No name on record	1	COMPLIANCE ASSURANCE
RRBD	11/06/2000	11/07/2000		NEWBERG	0/3	DISCHARGE PROJEC
Completion	Notes: RESO	LVED-NO DISCHA	RGE LEAK TEST PASSED			
FR	11/08/2000	11/09/2000		No name on record	1	COMPLIANCE ASSURANCE
TCI	05/15/2002	05/29/2002	SIGNIFICANT OUT-OF- COMPLIANCE	NEWBERG_D	0/3	COMPLIANCE ASSURANCE
RRBD	06/18/2002	06/20/2002		NEWBERG_D	0/0	COMPLIANCE ASSURANCE
CWOE	06/18/2002	06/20/2002		NEWBERG_D	0/0	COMPLIANCE ASSURANCE

Legacy Compliance Activity Information

Activity Code	Da Initia		Date Complete	Results	Inspector	AST/UST Count	Project Description
NCLI	08/23	/2004	08/25/2004		GONZALEZ_J	0/0	COMPLIANCE
Completion	Notes:	REQUE MECH/		TED CFR & DOCUMENTATION	VERIFYING FINAN	ICIAL ASSURAN	ASSURANCE ICE
TCI	08/12	/2004	08/25/2004	SIGNIFICANT OUT-OF-	GONZALEZ_J	0/3	COMPLIANCE
Completion	Notes:	5 PHO ENVIR		COMPLIANCE ING-UNDERGROUND, PRESSU	RIZED DOUBLE-W	ALLED FLEX M	ASSURANCE FG. BY
LTR	09/11	/2004	09/14/2004		GONZALEZ_J	0/0	COMPLIANCE ASSURANCE
Completion	Notes:	30 DAY	LETTER.				710001411102
LTR	10/11	/2004	10/11/2004		GONZALEZ_J	0/0	COMPLIANCE ASSURANCE
Completion	Notes:	60 DAY	VIOLATION LET	TER.			ASSURANCE
CALL	11/02	/2004	11/10/2004		GONZALEZ_J	0/0	COMPLIANCE
Completion	Notes:			N CALL. MR HUSSEIN SHEHAI ECORDS (PLACARD & INSURAN		О СОМЕ ТОМО	ASSURANCE RROW AND
CRDE	11/18	/2004	11/18/2004		JENKINS_N	0/0	COMPLIANCE ASSURANCE

Compliance Activity Information

•	•				
Activity Code	Date Done	Results	Inspector	AST/UST Count	Project Name
Phone Conversation Activity	12/24/2008	Satisfied	CASSELS_CR	1	Annual Compliance Project
Site Inspection Activity	12/24/2008	Major Out of Compliance	CASSELS_CR	0/3	Annual Compliance Project
Issue Non- Compliance Letter Activity	12/24/2008	Satisfied	CASSELS_CR	1	Non-Compliance Project
Emergency Preparedness Information Activity	09/26/2006		SLAPPEY_WR	1	Annual Compliance Project
Document Receipt Activity	01/29/2007	Satisfied	NEWBERG_D	1	Non-Compliance Project
Emergency Preparedness Information Activity	02/02/2007		SLAPPEY_WR	1	Annual Compliance Project
Issue Document Activity	09/05/2008	Satisfied	NEWBERG_D	1.	Non-Compliance Project
Site Inspection Activity	07/12/2006	Major Out of Compliance	NEWBERG_D	0/3	Annual Compliance Project
Issue and Evaluate Non-Compliance Letter Activity	07/12/2006	Satisfied	NEWBERG_D		Non-Compliance Project
Issue Document Activity	02/04/2009	Satisfied	CASSELS_CR	· /	Non-Compliance Project

Compliance Activity Information

Activity Code	,	Date Done	Results	Inspector	AST/UST Count	Project Name
Phone Conversati Activity	on	07/11/2006	Satisfied	NEWBERG_D	1	Annual Compliance Project
Issue Docum Activity	nent	09/05/2008	Satisfied	NEWBERG_D	1	Non-Compliance Project
Enforceme Referral Acti		10/18/2007	Accepted	RANDOLPH_L	I	Enforcement Project
Open Vio	lations	6				
Insp Date	Viol#	Significance	Violation Text		Corrective Ac	tion
07/12/2006	1004	SNC-B	No financial responsibility.		Send docume Complete end	financial responsibility entation to our office closed Certification of eponsibility form and send
07/12/2006	1002	Minor	Registration fees not paid.		Contact Stora	age Tank Registration and
07/12/2006	1132	SNC-B	Unmaintained USTs not closed vidiscovery.	within 90 days of		lose the tanks.
12/24/2008	1128	Minor	System out-of-service longer tha	in required time limit.		ist be removed. Call this tification of the closure
12/24/2008	1125	Minor	Requirements not met for out of service systems.			ist be removed. Call this tification of the closure

Discharge Information

Discharge Date	Cleanup Status	Score	Eligiblity Info	Site Manager	Phone
03/26/1997	ACTIVE	66	PETROLEUM LIABILITY AND RESTORATION INSURANCE PROGRAM-ELIGIBLE	JESSICA,STULGINS KI	(863) 413 - 3325

End of Data for Facility # 8628467

2/12/09 9:38 AM Page 5 of 5



FACSIMILE COVER SHEET

I otal number	or pages	incinaing	transmission	sneet: _	<u> </u>

Date:

May 3, 2002

To:

Mr. Logan Randolph

Firm:

FDEP

Fax:

(813) 744-6125

From:

K.V. Duke Clem P.G., C.P.G.

Firm:

OES Environmental, Inc.

2830 Parkway Street Lakeland, FL 33811

www.oes-environmental.com e-mail: info@oesmail.com

Telephone:

(863) 683-4646, ext. 255

Fax No.:

(863) 682-7388

Subject:

CDF for MSR Investment, Inc

FACID # 538628467

Sincerely

K.V. Duke Clem P.G., C.P.G.

Regional Business Development Manager



Department of Environmental Protection

Jeb Bush Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

David B. Struhs Secretary

Petroleum Preapproval Program

CONTRACTOR DESIGNATION FORM

This Contractor Designation supersedes all previous designations for this site made by the Real Property Owner or Responsible Party whose signature appears below.

- * Please read this entire form carefully. It contains important information regarding the cleanup of your site. *
 This is a two-page form. Be sure to review and complete both pages.
- 1. The Florida Department of Environmental Protection (Department) is required by statute to preapprove the scope of work and cost for the cleanup of a petroleum contaminated site if state funds will be used to pay for that cleanup (Section 376.30711(1)(b), Florida Statutes (F.S.)).
- 2. The Real Property Owner or Responsible Party for the cleanup must use this form to designate a contractor that meets certain criteria (Sections 376.30711(2)(b)-(c), F.S.) for the Department to work with on their site. In addition, if the Department should coordinate its actions with your representative, you can use this form to designate such an alternative contact.
- 3. If the Real Property Owner is not the person responsible for completing the cleanup, then the Responsible Party should complete this form and submit it along with a copy of the legal agreement that details their cleanup responsibility.
- 4. Please fill out this form completely and carefully. The form will be returned if there is any omission, error or correction (including "white-out") in any of the required information, including the notary portion of the form. This will delay the cleanup of your site.
- 5. The Real Property Owner or Responsible Party may designate a new contractor at any time. However, this may also create a delay in the cleanup of your site. Also, the Real Property Owner or Responsible Party may be liable for payment for any work that the new contractor must perform in order to assume the site cleanup if the Department previously paid for such work. If a new contractor is designated, then any work in progress will be completed by the contractor to whom the work was awarded unless that contractor is being replaced for documented poor performance or it voluntarily agrees (in writing) to forgo the remaining work. A new designation does not take effect until this completed form is accepted and approved by the Department.
- Pursuant to Florida Law, "It is unlawful for a site owner or operator, or his or her designee, to receive any remuneration, in cash or in kind, directly or indirectly, from a rehabilitation contractor performing site cleanup activities..." under the preapproval program (Section 376.30711(6) F.S.) This prohibition includes payment of any program deductible by a contractor.
- 7. Please return the form with original signatures (copies cannot be accepted) to Mail Station 4540 in the Bureau of Petroleum Storage Systems at the letterhead address. If this form is not returned within 30 days or should you choose not to return it, then we will assume that you do not intend to designate a contractor or an alternative point of contact. If you choose not to designate a contractor, the Department will select one for you. If you have any questions, please call Leila Shuffler at (850) 487-3299. Thank you for your cooperation.

Part 1 – Real Property Owner/Responsible Party Identification (all information is required):

a.	FDEP Facility ID#:538628467		
b.	Name of Real Property Owner or Responsible	Party: MSR Investment Inc	
C.	Please Indicate (see paragraph 3 above):	Real Property Owner <u>x</u> Responsible Party	_
d.	Street Address of Real Property:	1005 Lake Alfred Rd (US HWY 92), Lake Alfred, F1 5	3 3 8
8.	Current Business Name (if any):	E-2 Foods No. 9	
	Mailing Address for Real Property Owner or R	esponsible Party Identified in Part 1.b.:	
1	MER FACUBLENT Love		
Ź	005- LAKE Altred Rd-	Lake Alfred RC Phone 863- 956-2699	
	ν	Page 1 of 2 33850	
	•		

Florida Department of Environmental Protection - Division of Weste Management - Bureau of Patrolaum Storage Systems

CONTRACTOR DESIGNATION FORM (continued)

This is page two of a two-page form. Be sure to review and complete both pages.

* Please read this entire form carefully. It contains important information regarding the cleanup of your site. *

	contractor Name: <u> </u>	OES Envir	ommental. I	RC.			
	contractor Address:				Florida 338	11	
c. C	contact Person at Cor	ntractor;	Char	les Markun			
d. P	hone Number for Co						
Use perso beha	Property Owner or this section to design on will serve as your aff. Do not list the o act, then leave this pr	nate an alterna r representative ontact person	itive point of co e regarding the	ntact to act on cleanup of yo	behalf of the paur site and rece	erson named in F aive all further no	tices on you
a. C	ontact Name:						
ь. С	Contact Address:						
a 0							
	lelationship of Contact	t to Real Pron	erty Owner or R	esponsible Par			
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This By s form must	part must be signe igning below you are and that all of the a t match that listed in	d In the prese certifying that bove informati Part 1.b.	nce of a notary you have read on is true and o	y public. and understoo correct to the b	od all of the info est of your know	ormation on both wledge. The nan	e in this par
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form - need to file w/m 30dap.

Well also need to provide a copy of

a segred contract, once know wire the

Polk County MSR Investment, Inc. ID#53/8628467 MEETING AGENDA April 3, 2002

I. INTRODUCTION

Dec. 4, 2001.

- a. The responsibilities of the FDEP.
- b. The responsibilities of the Polk County Health Department.

II. CHRONOLOGY OF ACTIVITIES

March 22, 1997. Discharge Reporting Form filed with the Polk County Department of Health.

March 22, 2001. Certified Letter from Jeffrey James of the Polk County Petroleum Cleanup office noting that the previously requested site assessment was not submitted and requesting written notification of corrective actions within 14 days.

Certified Letter from Jeffrey James of the Polk County Petroleum Cleanup office giving final notice that that the previously requested site assessment was not submitted and requesting written notification of corrective actions within 14 days.

Oct. 3, 2001. Case referred to the SW District for enforcement.

March 15, 2001. Warning Letter sent scheduling meeting for April 3, 2002.

III. DISCUSSION OF NONCOMPLIANCE ITEMS

- 1) Failure to initiate a site assessment Chapter 62-770.600(1), F.A.C. requires a site assessment to be initiated within 30 days of discharge discovery.
- 2) Failure to submit a Site Assessment report (SAR).

 Chapter 62-770.600(6, F.A.C. requires a Site Assessment Report to be submitted to the Department or to the local program.

IV. DISCUSSION OF PENALTIES AND CORRECTIVE ACTIONS TO BE COMPLETED

- 1) Initiate a Site Assessment.
- 2) Submit the Site Assessment Rreport to the Department or to the local program.

V. CONCLUSIONS

PENALTY COMPUTATION WORKSHEET

Violator's Name: Mohammed Mirza

Identify Violator's Facility: MSR Investment, Inc. ID#53/8628467

Name of Department Staff Responsible for the Penalty Computations: Logan Randolph

Date: 13 March, 2002

PART I - Penalty Determinations

Violation Number	Violation	ELRA Schedule	Potential for Harm	Matrix Amount	Total
	Туре				
Rule 62-770.600	Failure to	Section	Moderate	2000	2000
F.A.C	Initiate a Site	403.121(3)g,			
	Assessment	F.S.			

SW District Costs and Expenses: 100

Total Penalties for all Violations: 2100.00

	·
Deborah A. Getzoff	Date
Director of District Management	
Division Director	

JAN 29 2002 Southwest District Tampa

Memorandum

TO:

Logan Randolph, Environmental Specialist

Department of Environmental Protection, Southwest District

THROUGH: Hamp Pridgen, Environmental Manager

Polk County Health Department, Petroleum Cleanup Program

FROM:

Kimberly Murray, Environmental Specialist

Polk County Health Department, Petroleum Cleanup Program

DATE:

January 16, 2002

SUBJECT:

Additional Enforcement Referral Information

MSR Investment, Inc.

1005 East Lake Alfred Drive Lake Alfred, Polk County FDEP Facility ID# 538628467

Sorry for the delay. Attached is additional information regarding the above referenced facility:

- 1. Property Appraiser Information
- 2. Interested Party Information
- 3. Discharge Reporting Form
- 4. Discharge Inspection
- 5. PLIRP Application Packet

Please let me know if there is any additional information that is needed.

Memorandum

TO:

Logan Randolph, Environmental Specialist

Southwest District, Department of Environmental Protection

THROUGH

Hamp Pridgen, Environmental Manager

Polk County Health Department, Petroleum Cleanup Program

FROM: // Jeffrey W. James, Environmental Specialist II

Polk County Health Department, Petroleum Cleanup Program

DATE:

December31, 2001

SUBJECT:

Additional Enforcement Referral Information

MSR Investment, Inc.

1005 East Lake Alfred Drive Lake Alfred, Polk County FDEP Facility ID# 538628467

Attached is additional information regarding the above referenced facility.

PE_REV.DOC

Search

Manager Current Record 26273351750000001

Your Search List

New Search

Portfolio .

✓ Manager

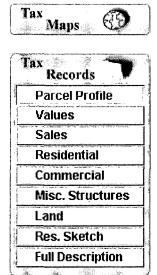
1 of 1

View Search ListRefine Search

Add to Portfol

Polk County Property Appraiser

Home Search Records Maps General Info Help



The information is current as of 07-NOV-2001

Owner	1 of 1
Owner Name	MSR INVESTMENT INC ET AL
Mailing Address	1005 LAKE ALFRED DR
City	LAKE ALFRED
State	FL
Country	US
Zip Code	33850

Parcel	
Location Address	1005 US HWY 92
City	LAKE ALFRED
Zip Code	33850
Section	33
Township	27
Range	26
Subdivision	OAK HILL ADD 2ND REPLAT PB 32 PG 24
Parcel	262733517500000011
County/City Tax district	82440
DOR Use Code	1174
DOR Description	Convenience Store w/gas

Short Description
SECOND REPLAT OF OAK HILL ADD PB 32 PG
. 24
. TRACT 1 BEG 300,7 FT E & 114 FT N OF SW COR

Site Design Copyright 1999-2001 Akanda Group LLC. All rights reserved.



Florida Profit

MSR INVESTMENT, INC.

PRINCIPAL ADDRESS 1005 LAKE ALFRED DRIVE LAKE ALFRED FL 33850

MAILING ADDRESS 1005 LAKE ALFRED DRIVE LAKE ALFRED FL 33850

Document Number P94000079507 FEI Number 593273261

Date Filed 10/26/1994

State FL Status ACTIVE Effective Date NONE

Last Event AMENDMENT Event Date Filed 07/19/2001

Event Effective Date NONE

Registered Agent

Name & Address

MIRZA, ZAKI M 1005 LAKE ALFRED DRIVE LAKE ALFRED FL 33850

Name Changed: 04/08/1999

Officer/Director Detail

Name & Address	Title
MIRZA, FAUZIA SABEH 1005 LAKE ALFRED DRIVE	PTD
LAKE ALFRED FL 33850	

Annual Reports

Annual Reports

Report Year	Filed Date	Intangible Tax
1999	.04/08/1999	N
2000	03/03/2000	
2001	05/18/2001	

Previous Filing

Return to List

Next Filing

<u>View Events</u> No Name History Information

View Document Image(s)

THIS IS NOT OFFICIAL RECORD; SEE DOCUMENTS IF QUESTION OR CONFLICT

Corporations Inquiry

Corporations Help



Department of Environmental Protection

Jeb Bush Governor Southwest District 3804 Coconut Palm Drive Tampa, Florida 33619

David B. Struhs Secretary

May 30, 2002

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Mohammed Mirza MSR Investment Inc. 1005 Lake Alfred Drive Lake Alfred, FL 33850

RE: MSR Investment, Inc. DEP #538628467

1005 Lake Alfred Drive, Lake Alfred, Polk County, Florida

Dear Mr. Mirza:

Petroleum contamination was discovered at the above referenced site on March 26, 1997. On December 4, 2000, the Polk County Health Department (County), under contract with the Department of Environmental Protection (Department), issued a letter outlining the assessment and cleanup requirements in Chapter 62-770, Florida Administrative Code (F.A.C.). A Site Assessment Report (SAR) should have been prepared and submitted to the Department in accordance with the timeframes in Chapter 62-770, F.A.C. (by January 7, 2001 The County sent a letter inquiring about the failure to submit the SAR on March 22, 2001.

Rule 62-770.600(6), F.A.C, requires that the responsible party submit a Site Assessment Report to the Department within 270 days of discovery of contamination. Further, it is a violation of Section 376.302(1)(b), F.S., for any person to fail to comply with any rule, regulation, order, permit, or certification adopted or issued by the Department pursuant to its lawful authority.

Based upon this failure to initiate and submit a SAR, the Department began enforcement proceedings. An Enforcement Meeting was held April 3, 2002 at 10:00 a.m., at the Southwest District Office of the Department of Environmental Protection located at 3804 Coconut Palm Drive, Tampa, Florida.

Subsequent to this meeting, this facility was found to be eligible for the Florida Petroleum Liability and Restoration Insurance Program (FPLRIP). Based upon this eligibility, the Department has decided to pursue no further enforcement activities and to seek no penalties for the failure to initiate a SAR.

PLEASE BE ADVISED that failure to follow the requirements governing FPLRIP-funded petroleum cleanup (Section 376.3072, Florida Statute) may result in additional enforcement proceedings. If you have any questions, please contact me at (813) 744-6100, ext. 458.

Sincerely

Logan Randolph, Environmental Specialist

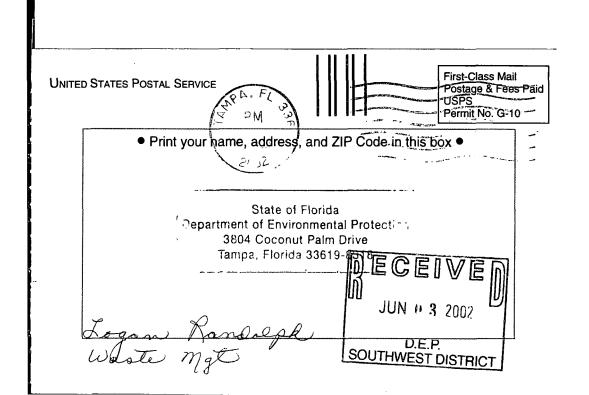
cc: Kimberly Murray, Polk County Health Department

"More Protection, Less Process"

Printed on recycled paper.

		IAIL RECEIPT	e Coverage Provided)	
7521				
0016 6336	Postage Certified Fee Return Receipt Fee (Endorsement Required) Restricted Delivery Fee (Endorsement Required) Total Postage & Fees	\$ \$	Postmark Here	·
200 0007	Recipient's Name Morrow Street, Apt. No.; or PO City, State, ZIP+ 4 PS Form 3800, February	Box No. Box No. Chee Alf	be completed by mailer) Fig. Discourse for Instructions	

SENDER: Complete items 1 and/or 2 for additional services. Complete items 3, 4a, and 4b. Print your name and address on the reverse of this form so that we card to you. Attach this form to the front of the mailpiece, or on the back if space permit. Write "Return Receipt Requested" on the mailpiece below the article the mailpiece was delivered and delivered.	e does not e number.	I also wish to rect following services extra fee): 1.	s (for an ee's Address d Delivery
ō	4a. Article N	<u> </u>	0500
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MSR Investment, Inc.	☐ Registere		☑ Certified
2 1	Express i		☐ Insured
1 0	7. Date of De	ceipt for Merchandise	
Lade Alfred, FL 33850	6/	1/02	
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So. Signature: (Addressee of Agent) PS Form 3811 , December 1994	2595-97-B-0179	Domestic Retu	urn Boogint





Florida Department of Environmental Protection

ENFORCEMENT/COMPLIANCE COVER MEMO

TO: X Deborah A. Getzoff, DDM

FROM/THROUGH: William Kutash, PROGRAM ADMINISTRATOR

Logan Randolph , ENVIRONMENTAL SPECIALIST I L

DATE: March 13, 2002

FILE NAME: MSR Investment, Inc. ID#53/8628467 OGC CASE No: None.

PROGRAM: Tanks; COUNTY: Polk; PROJECT NUMBER: None.

TYPE OF DOCUMENT: Warning Letter for Signature / Penalty Computation Approval.

DESCRIPTION OF VIOLATIONS:

1. Failure to complete a Site Assessment Report of petroleum contamination.

SUMMARY OF CORRECTIVE ACTIONS:

1. Complete a Site Assessment Report.

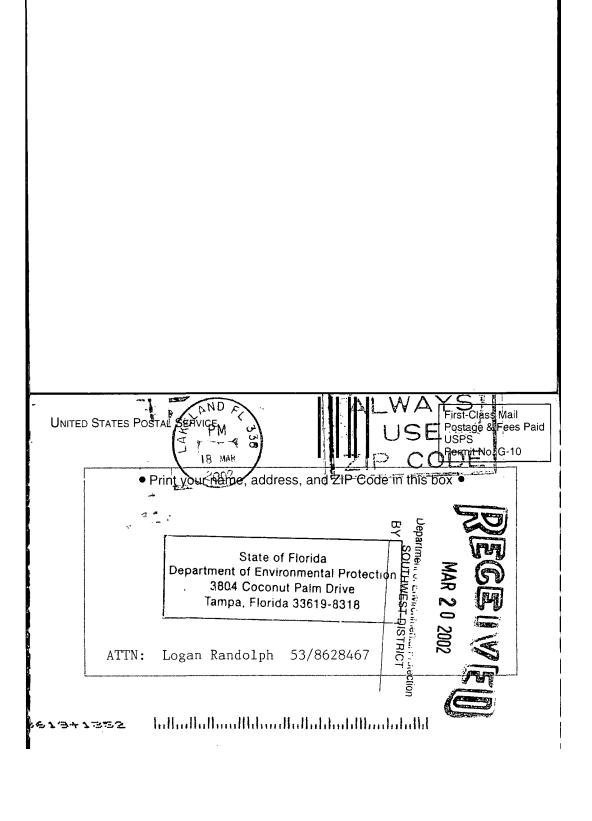
2. Pay all enforcement penalties and costs.

PENALTY SUMMARY: See attached computation sheets.

PENALTY AMOUNT: \$2,100

		AIL RECEIPT	e Coverage Provided)
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6661	MR. M	Mohamic	d Mirza
	Postage	\$	_
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	Total Postage & Fees	\$	
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700	City, State, ZIP+4	red F	1. 33850
-	PS Form 3800 Februa	ary 2000	See Reverse for Instructions

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the reverse side?	SENDER: Complete items 1 and/or 2 for additional services. Complete items 3, 4a, and 4b. Print your name and address on the reverse of this form so that we card to you. Attach this form to the front of the mailpiece, or on the back if space permit. Write "Return Receipt Requested" on the mailpiece below the articl The Return Receipt will show to whom the article was delivered and delivered.	e does not e number.	_	s (for an ee's Address d Delivery	pt Service.
ADDRESS completed on	3. Article Addressed to: Mr. Mohammed Mirza MSR Investment Inc. 1005 Lake Alfred Dr. Lake Alfred, FL 33850	4b. Service Register Express	20 0016 633 Type ed Mail ceipt for Merchandise	6 6661. Certified Insured COD	Thank you for using Return Receipt Service
Is your RETURN	5. Received By: (Print Name) Anton W. (Lams) 6. Signature:)(Addressee or Agent) X (Lature W. M. (Lams) PS Form 3811, December 1994	8. Addresse and fee is	e's Address (Only paid) Domestic Retu	· 	Thank y



Department of Environmental Protection

Jeb Bush Governor Southwest District 3804 Coconut Palm Drive Tampa, Florida 33619

David B. Struhs Secretary

March 15, 2002

CERTIFIED MAIL 7000 0520 0016 6336 6661 RETURN RECEIPT REQUESTED

Mr. Mohammed Mirza MSR Investment Inc. 1005 Lake Alfred Drive Lake Alfred, FL 33850

WARNING LETTER #02-021TK53SWD

RE:

MSR Investment, Inc. DEP #538628467

1005 Lake Alfred Drive, Lake Alfred, Polk County, Florida

Dear Mr. Mirza:

The purpose of this letter is to advise you of possible violations of law for which you may be responsible, and to seek your cooperation in resolving the matter. Petroleum contamination was discovered at the above referenced site on March 26, 1997. On December 4, 2000, the Polk County Health Department (County), under contract with the Department of Environmental Protection (Department), issued a letter outlining the assessment and cleanup requirements in Chapter 62-770, Florida Administrative Code (F.A.C.). A Site Assessment Report (SAR) should have been prepared and submitted to the Department in accordance with the timeframes in Chapter 62-770, F.A.C. (by January 7, 2001). The County sent a letter inquiring about the failure to submit the SAR on March 22, 2001. To date, the SAR has not been received by the Department. As such, violations of Florida Statutes and Rules may exist at this facility.

Rule 62-770.600(6), F.A.C, requires that the responsible party submit a Site Assessment Report to the Department within 270 days of discovery of contamination. Further, it is a violation of Section 376.302(1)(b), F.S., for any person to fail to comply with any rule, regulation, order, permit, or certification adopted or issued by the Department pursuant to its lawful authority.

Failing to initiate site assessment at your facility is contributing to violations of the above-described statutes or rules. The operation of a facility in violation of state statutes or rules may result in the judicial imposition of civil penalties of up to \$10,000 per violation per day pursuant to Section 403.141 and 403.161, F.S. It is typically Department policy to initiate enforcement action and seek civil penalties of \$2,100 for conditions such as those described above.

"More Protection, Less Process"

PLEASE BE ADVISED that a meeting has been scheduled for April 3, 2002 at 10:00 a.m., at the Southwest District Office of the Department of Environmental Protection located at 3804 Coconut Palm Drive, Tampa, Florida to discuss the issues raised in this Warning Letter. Please contact Logan Randolph with the Department at (813) 744-6100, ext. 458, within five days to confirm this meeting. The Department is interested in reviewing any facts you may have that will assist in determining whether any violations have occurred. You may bring anyone with you to the meeting that could help you to the meeting that you feel could help resolve this matter.

PLEASE BE ADVISED that this Warning Letter is part of an agency investigation, preliminary to agency action in accordance with Section 120.57(5), F.S. We look forward to your cooperation in completing the investigation and resolution of this matter.

Sincerely

Deborah A. Getzoff

Director of District Management

Southwest District

DAG/lrr

cc: Kimberly Murray, Polk County Health Department

PENALTY COMPUTATION WORKSHEET

Violator's Name: Mohammed Mirza

Identify Violator's Facility: MSR Investment, Inc. ID#53/8628467

Name of Department Staff Responsible for the Penalty Computations: Logan Randolph

Date: 13 March, 2002

PART I - Penalty Determinations

Violation Number	Violation	ELRA Schedule	Potential for Harm	Matrix Amount	Total
	Туре	·			
Rule 62-770.600	Failure to	Section	Moderate	2000	2000
F.A.C	Initiate a Site	403.121(3)g,			
	Assessment	F.S.	·		

SW District Costs and Expenses: 100

Total Penalties for all Violations: 2100.00

Deborah A. Getzoff

Director of District Management

Division Director

Date

Best Available Copy



Lawton Chiles Governor James T. Howell, M.D., M.P.H Secretary

May 6, 1997

TO:

Lewis Comman

Petroleum Cleanup Reimbursement Section

Department of Environmental Protection-Tallahassee

FROM:

Kelly Honey

Polk CHD Stationary Tank Program

SUBJECT:

EZ Foods #9, FDEP #538628467

999 E. Alfred Dr., Lake Alfred, Florida

MAY 0 9 1997

Departmental F
SOUTHWEST DISTRICT
BY

This facility filed a DRF after compliance monitoring indicated a discharge. This facility is not known to have been previously contaminated, yet the product discovered in the well appears extremely weathered and old. The inspector on site determined that there is no way that it was fresh. The tank and lines were all tested and all passed. It is apparent, then, that the product has migrated from somewhere, but we aren't sure from where it came. A possible candidate is FL Distillers (ID #538624523) which is located about ½ mile to the northwest and has existing contamination. That's the only one we could think of that might be the source, and chances are, it probably isn't. A Claim Form, etc., has been sent to the facility, but this office has not received anything back, yet. If I can provide further information, please contact me at SC 531-1140 (for voice mail, SC 531-1501, extension 144).

enclosures

xc:

Michael Davis*

Cooperative Enterprises, Inc.

*Note to the owner:

If a claim is to be filed under the FPLRIP, please sub William Truman at the Fl. Dept. of Environmental Protection, Twin Towers Office Bldg., 2600 Blair Stone Read and send a copy to this office for our file.

Here's an interesting one for you - New discoveryold product! Oh, what to do? Hove fun - V

ONGA ENVIRONMEN

Best Available Copy

Florida Department of Environmental Regulation vin Tower Office Bidg. ■ 2600 Blair Stone Road ● Tallanassee, Florida 32399-2400

CEA form - 17.7(1 (000)	923 0
Form Year Describing Reporting Form	
Chamber 10, 1990	
DEN AJO-Gahan No	
ده ده مد مدی	

Discharge Reporting Form

ENVIRONMENTAL ENGINEERING

MAR 2 7 1997:

Use this form to notify the Department of Environmental Regulation of:

1. Results of tank tightness testing that exceed allowable tolerances within ten days of receipt of test result.

STATIONARY TANKS PROGRAM

- 2. Petroleum discharges exceeding 25 gallons on pervious surfaces as described in Section 17-761.460 F.A.C. within one working day of discovery.
- 3. Hazardous substance (CERCLA regulated), discharges exceeding applicable reportable quantities established in 17-761.460(2) F.A.C., within one working day of the discovery.
- 4. Within one working day of discovery of suspected releases confirmed by: (a) released regulated substances or pollutants discovered in the surrounding area, (b) unusual and unexplained storage system operating conditions, (c) monitoring results from a leak detaction method or from a tank closure assessment that indicate a release may have occurred, or (d) manual lank gauging results for tanks of 550 gallons or less, exceeding ten gailons per weekly test or five gallons averaged over four consecutive weekly tests.

Mail to the DER District Office in your area listed on the reverse side of this form

PLEASE PRINT OR TYPE

	Complete all applicable blanks	
1.	DER Facility ID Number: 538628467 2. Tank Number: NA 3. Oats: 3-27-47	الموائية ا
	Facility Name: EZ Foods, #9	
	Facility Owner or Operator: EZ Foods, GEORGE DAVIS	
	Facility Address: Hwy 17 - 92 - LAKE ALFRED, FL	
	Telephone Number: () County: Polik	
	Mailing Address: 620 DUNDEE ROAD	
5.	Date of receipt of fest results or discovering 3/26/197 month/day/year	
6.	Method of initial discovery, (circle one only) A. Liquid detector (automatic or manual) B. Vapor detector (automatic or manual) C. Tightness test (underground tanks only). C. Tightness test (underground tanks only). C. Tightness test (underground tanks only). C. Tightness test (underground tanks only). C. Tightness test (underground tanks only).	
7.	Estimated number of gallons discharged: UNKnown	
8.	What part of storage system has leaked? (circle all that apply) A. Dispenser B. Pipe C. Fitting D. Tank (E. Unknown)	
	Typs of regulated substance discharged. (circle one) A. !eaded gasoline	
0.	Cause of leak. (circle all that apply)	7
1	A. Unknown C. Loose connection E. Puncture G. Spill I. Other (specify) B. Spilt O. Corrosion F. Installation failure H. Overfill	ż
١.	Type of financial responsibility (circle one) A. Third party insurance provided by the state insurance contractor B. Self-insurance pursuant to Chapter 17-7E9-500 F.A.C. D. None	idu
	To the best of my knowledge and better all information submitted on this form is true accounte, and complete.	
	Frinted Name of Owner, Operator of Authorized Representative Signature of Owner, Operator or Authorized Representative	, <u>`</u>



April 10, 1997

Mr. Michael Davis Cooperative Enterprises Inc. 620 SR 542 Dundee, FL 33838-0905

RE:

DEP FAC #538628467 EZ Food Store #9 999 Alfred Dr. Lake Alfred, FL

Dear Mr. Davis:

The Stationary Pollutant Storage Tank Inspection Program of the Polk County Health Department (County) has been authorized, by contract with the Florida Department of Environmental Protection (Department), to perform compliance, closure and installation inspections at facilities regulated under Chapters 62-761 and 62-762 of the Florida Administrative Code (FAC).

Attached are the 62-761 and/or 62-762, FAC, compliance inspection results for the above named facility. The inspection was conducted under the authority of Chapter 376, Section 303, Florida Statutes, and is designed to determine the compliance status of the facility with regard to 62-761 and/or 52-762, FAC. Also enclosed is a checklist that was used for the Florida Petroleum Liability and Restoration Insurance Program (FPLRIP). No response is necessary on the FPLRIP checklist. Eligibility will be determined by Mr. Bill Truman, Petroleum Insurance Administrator, Tallahassee. If you have any questions regarding eligibility, please contact Mr. Truman at (904) 488-0876. A letter will be mailed to you from his office.

If you have any questions concerning this letter please call the Stationary Pollutant Storage Tank Inspection Program at (941) 533-3398, extension 139.

Sincerely How for BRAD WEINISCHKE

Environmental Specialist II

enclosure(s)

BCW

STATE OF FLORIDA

DEPAPTMENT OF ENVIRONMENTAL PRO CTION LUTANT STORAGE TANK SYST.

INSPECTION REPORT FORM - COVER PAGE

PAGE: 1 OF

PRINTED: 04/07/97

FACILITY ID #: 538628467

FACILITY NAME: E-Z FOODS #9

FACILITY LOCATION: 999 E ALFRED DR, LAKE ALFRED

LATITUDE: 28-51-5100 LONGITUDE: 81-43-320

FACILITY CONTACT: COOPERATIVE ENTERPRISES INC

OWNER: COOPERATIVE ENTERPRISES INC

PHONE: (813) 956-3093

PHONE: (813) 439-1505

OWNER ADDRESS: 620 SR 542, DUNDEE, FL, 33838-0905

OWNER CONTACT: MICHAEL DAVIS

OWNER CHANGE DATE: 11/14/86

FAC TYPE: RETAIL STATION *

COUNTY: POLK

LAST UST COMPLIANCE DATE: 12/30/94

LAST AST COMPLIANCE DATE:00/00/00

CONTAMINATION DATA AVAILABLE: OTHER

TANK #	SIZE	CONTENT	INSTALL DATE	UNDER OR ABOVE	TANK TYPE	INTEGRAL PIPING	MONITORING SYSTEM	TANK STAT
1111111 π				NDO 4 D			GIGIEN	_
1	3000	Α	XX/70	Ŭ	- C	В	В	В
2	3000	Α	XX/70	U	С	В	В	В
3	3000	В	XX/70	ŭ	C	В	В	В
4	3000	В	XX/70	Ŭ .	С	В	В	В
5	4000	В	XX/88	u	FMO -	CI	BN	U
6	6000	В	88\XX	ប	fm D	CI	BN	ប
7	6000	В	XX/88	U	FMO	CI	BN	U

Note: Cill visible piping is bone steel. all piping in contact with the soil must be circulan risistant of be replaced with double walled piping by 18/8/188. Dispenser lines and ill protection de also required by 12/81/18.

the state of the s	
INSPECTION TYPE (ALL THAT APPLY) X ROUTINE X DISCHARGE INSTALL CLOSURE ABANDONED REINSPECT	SITE INFORMATION (ALL THAT APPLY) NEAR PUB WELL CONTAMINATED COMPLAINT ACID TANKS MAZARD MAT
DEP DISTRICT OR LOCAL PROGRAM: 53	ank Polk
INSPECTOR NAME (PRINT) B. Weinischk	/
Brady Junischke 4/9/47	
INSPECTOR'S SIGNATURE & DATE	CONTACT'S SIGNATURE & DATE

1Ct 1 57

DEPARTMENT OF ENVIRONMENTAL PROTECTION

LUTANT STORAGE TANK SYST

INSPECTION REPORT FORM - COVER PAGE

PAGE: 2 OF 2 PRINTED: 04/07/97

COUNTY: POLK

FACILITY NAME: E-Z FOODS #9 FACILITY LOCATION: 999 E ALFRED DR, LAKE ALFRED FACILITY CONTACT: COOPERATIVE ENTERPRISES INC PHONE: (813) 956-3093 - placed in current COMMENTS: all regards are current ment Lines passed. When some wells med to choose an alternates encliped.

FACILITY ID #: 538628467



Name: EZ Fook #9
Facility I.D.#: 5386 284167
Date: 4 9 9 7

UNDERGROUND STORAGE TANK COMPLIANCE INSPECTION FORM

		res	NO	Unk	N/A
<u>I.</u>	REGISTRATION/NOTIFICATION: Comments:				
nama A ntigra niani			owiterbeet to	30.3834.00	
المحاصفات المدا	 Facility has registered all applicable tanks on site; 62-761.400 Current registration placard is properly displayed; 62-761.410 (6) 2. 		N. (2)		
		mm	mm	mm	mm
	Proper notification has been made for the following; 62-761.450: 3. Proper closure (30 days prior); (1) (a)				
A Comment	4. Change of ownership (30 days after); (1) (b) 4.			200482000	\mathcal{A}
	5. Upgrading, replacement or installation (10 days prior); (1) (c)	76837	0.00		
	6. Change of tank status (in service/out of service), (within 30 days); (1) (d) 6.				+
San San San	7. Change of facility status (e.g. substances stored), (within 30 days); (1) (e)	X3- 91	~ SUP	30000	
y i jegovali di (8. Change of method of financial responsibility (within 30 days); (3) 8.				
2.40	9. Start of closure, upgrades or installation (24 hr. verbal or written); (4)	1 1 1 1	20 N 10 St	/ 1948 SEE	
. A B. Sadd-Alles (* 1519 - 27)					
II.	RECORDS KEEPING: Comments:				
11.	KECOKBO KEEL IIVO. COMMOND.				
	10. All records were maintained for two (2) years and were available for inspection within			0.000	ASSES TO
	five (5) working days; 62-761.710 (1)				
	11. Some, but not all records were maintained for two (2) years and were available for				
	inspection within five (5) working days: 62-761.710 (1)				
				,	
III.	REPORTING/DISCHARGE RESPONSE/ REPAIRS: Comments:				
		**********		,,,,,,,,	
	Proper reporting requirements have been met for the following; 62-761.460:				
	12. Results of tightness test; (1)		2000	7. E.	
	13. Any spill, overfill, or other discharge within one working day of discovery; (2)				
	14. Suspected releases within one working day of discovery; (3) (a), (b)			1.4	
	15. Confirmed releases (positive responses of a release detection device) within one 15.	mm	mm	mm	mm
	working day of discovery; (3) (c)				
TO SUBSTITUTE OF STREET	The owner or the operator of the system which has discharged has:				
	16. Taken it out-of-service; 62-761.700 (1), had it repaired or replaced; .700, or properly	mm	mm	<i>,,,,,,,</i>	mm
Specific /+	closed it: .820 (1)				
	17. Removed any regulated substances from the system: 62-761.820 (1) 17. 18. Tightness tested all repaired components before placing them back in service; 62-761.700 (6) 18.		er zeli Mese i	. a-1000000000	
	 Had repairs or replacements performed by a certified contractor; 489.105 (3) Had tightness test performed by registered tank tester; 62-761.200 20. 	3	4.40.200	1.000	
	21. Begun initial corrective actions for a release; 62-761.820 (2) 21. 21. 22. 21. 22. 21. 22. 21. 22. 21. 22. 21. 22. 21. 22. 21. 22. 22				
-	21. Begun minar corrective actions for a release, 02-701.020 (2)				
IV.	INIVENTORY REQUIREMENTS: Commonto				
<u>IV.</u>	INVENTORY REQUIREMENTS: Comments:				
	22. All inventory requirements maintained in accordance with 62-761.720 (1)	اسرا			
,	23. Some, but not all inventory requirements maintained in accordance with 62-761.720 (1) 23.				\nearrow
<u>V.</u>	PERFORMANCE STANDARDS/CATHODIC PROTECTION: Comments:				
<u></u>	LEM SAME COLOR DE LA COMPANION COMMENS.		<u> </u>		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Storage tank criteria; 62-761.500, .520 and .550:				
	24. Facility meets applicable storage tank standards; (1) 24.				
	25. Systems meet siting requirements; (4) 25.				
	26. Tank(s) equipped with spill containment; (5) (b) 26.				
	27. Tank(s) equipped with overfill protection; (5) (b) 27.		Contra montro		
	28. Facility meets construction upgrading schedule; 62-761.510 28.	أسسيا			



Name: EZ Foods #9
Facility I.D.# 53 867 8467
Date: 4 9 97

UNDERGROUND STORAGE TANK COMPLIANCE INSPECTION FORM

		Yes	No	Unk	N/A
<u>V.</u>	PERFORMANCE STANDARDS/CATHODIC PROTECTION: Continued:				
_					
	Piping criteria; 62-761.500:				
A TRANSPORT	29. New piping has secondary containment; (2) 29.				مبر
altiense Lain de 1	30. Dispensers are upgraded with properly installed and maintained liners; (6) 30.				
	31. Facility meets construction upgrading schedule; 62-761-510 (6)		35.52.72.73		2000/00 Sec.
	Cathodic Protection/Certified Contractors/Tightness Testing	5mm	,,,,,,,	الالالالا	,,,,,,,
2000	32. Cathodic protection system proyides continuous protection; 62-761.730 (1)-(4)	4111111			
الحاصلات أستديان				7 7 7 7 7 7	
garage cut biggs	33. PSSSC conducted all storage tank repairs, installations or removals; 62-761.740 (1)-(9) 33. 34. Test performed by a D.P.Rregistered tester; 62-761.740	44	Marketon	20-00-00-00-00-00-00-00-00-00-00-00-00-0	
1 - 2 - M	34. Test performed by a D.P.Rregistered tester, 62-761.740	- Instit	1000	100000	PE
VI.	RELEASE DETECTION/MONITORING WELLS: Comments:				
<u> </u>	RECEASE DETECTION MONTONING WEELD. Comments.				
The Selection of	35. New petroleum or hazardous substance storage tanks provided with an approved release 35.	Service Commence	200	***	Tigo on the
از قاماسیسی مهم در ۱۳۵۶	35. New petroleum or hazardous substance storage tanks provided with an approved release. 35. detection system upon installation; 62-761.600 (3)	0111111	///////	777777	dinn.
المنطقين سنا	detection system upon histanzaon, 02-701.000 (5)				
n can compared	36. All release detection systems meet general release standards; 62-761.600 36.	 i 	المنافعة الم	0.00.00000000	distances.
Acres Comme	37. Release detection systems are monitored for a discharge at least every 30 days; 62-761.600 (5)		277.50	5,750 S	8985 C
Compression of	38. Groundwater monitoring wells are properly sampled and meet requirements of 62-761.640 (1) 38.		1000 x 1 100	2000001 20 / 20 · · ·	<u> </u>
The state of the	39. Vapor monitoring wells are properly sampled and meet the requirements of 62-761.640 (2)				1
	An approved release detection system is provided for:				
استخدد انداک	40. Existing hazardous substance storage tanks; 62-761-560 40.	STATE OF THE STATE	3506		
	41. Existing vehicular fuel storage tanks; 62-761.610				
Marie and an	42. Other existing regulated substance storage tanks; 62-761.620	and visit	JACK.	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	
	43. Integral piping provided with secondary containment; 62-761.630 43.				
	44. Integral piping without secondary containment; 62-761.640 (8)		EARLS:	dezent.	
- Andrews - Andrews - Comments					
<u>VII.</u>	OUT-OF-SERVICE STATUS: Comments:				
integrals, displayed the control of the control	SAN THE STATE OF T	Fac. 11		tioners are	
. ser	45. Storage systems have been emptied of regulated substances; 62-761.200 (26) 45.	45.00	- 2000		
	Out-of-Service storage tank systems have; 62-761.800:				
	46. Corrosion protection properly maintained; (1) (a) (1) 46.	(*************************************	C-12.	and the	1888 22
	47. Release detection system, monitored for evidence of a discharge at least every six months: (1) 47.				1
	(a) (2)				
A STATE AND ADDRESS.	48. Vent lines open, ancillary equipment secured; (1) (b) 48.	2.3			
miletin di Mile	49. Been upgraded or replaced before returning to service; (1) (c) 49.				
	50. Been tested tight before returning to service; (1) (c) 50.	* *	110		
	51. Been out-of-service for no more than two years; (1) (d) 51.				
		-			
		-	70,000		
7277	53. Proper closure for an un-maintained tank; (2) 53.				
	54. Has a closure assessment performed; (3) 54.				
<u></u>					
VIII.	VARIANCE: Comments:				
	THUTH YELL COMMOND.				
	55. Facility Applied For Alternate Procedure (Explain in comments) 62-761.850 55.			1	
,	J. Carrier Asserting Asserting Asserting Company Comments (Comments of the Com				
IX.	OTHER: Comments:				
1					
	56. Any other violations noted during inspection (Explain in comments) 56.				

INDEE BUSINESS CENTER Best Available Copy AAA TANK TESTER

5600 Oakbrook Parkway Suite 120 Norceous, GA 30093 770 41-L160

Test Date: 03/29/97 Line Name 37275

Test Site: E-2 Foods #9

999 East Alfred Drive

Lake Alfred, FL

Bill To: E-2 F000S

George Davis

620 State Road 542 Dundee, FL 338384100

CENTIFICATE OF TEST RESULTS

Certified test results for the test size are summarized below. Testing bas been conducted in accordance with all federal and local regulations.

TANK TEST RESULTS

TANK	TYPE OF TEST	PRODUCT	TANK CAPACITY	TANK DIAMETER	TANK TEST RESULTS	CHANGE	RESULTS
1 2 3	USTest USTest USTest	PLUS PREMIUM UNICADED	4.000 5.000 6.000	64 96 96	PASS PASS PASS	-0.041 0.044 -0.020	PASS PASS PASS
		÷ :		:			
				·			
	_			:			

TAHK	TYPE OF LINE	PRODUCT	VOLUME	LINE TEST RESULTS	DETELTOR	LEAK DETECTOR RESULTS SERIAL MUNDER				
23	Suction Suction Suction	PREMIUM UNLEADED	-0.009 -0.000	PASS PASS PASS	N/A H/A H/A					
		•								
		·								

The AAA Jank Testers team appreciates your business, and we bope that you will call on m again in the f

Test Conducted by: Jeff Evans

Technician Certification Number: FL0014 Florida Certification Number : 200060839 Edd Price. President

Florida Department of Environmental Protection Pollutant Storage Tank Application Facility Inspection Cover Page

Facility Information

Id #: 8624523

Name: FL DISTILLERS CO

530 N DEKOTA AVE

LAKE ALFRED, FL 33850-2130

Contact: PATRICK J EVERSDEN

Latitude: 28:5:50

Longitude: 81:42:50

Account Owner Information

Name: FL DISTILLERS CO % PAT EVERSDEN

PO BOX 1447

LAKE ALFRED, FL 33850-2130

Phone: 813-956-1116

Tank Owner Information

Name: FL DISTILLERS CO % PAT EVERSDEN

PO BOX 1447

LAKE ALFRED, FL 33850-2130

Phone: 813-956-1116

Phone: 941-967-4481

Type: Fuel user/non-reta

District: SWD

County: POLK

Status: OPEN

Tank #	Size	Content	Installed	Placement	Status	Const	Pipe	Monitor
2	3000	D		UNDERGR	Α	D	В	Υ
3	900	В		UNDERGR	A .	D	В	Y
1	10000	D		ABOVEGR	U	С К О	A	М
4	550	В	01-JUL-90	ABOVEGR	U	A C K	A B I	I
5	2000	U	01-FEB-90	ABOVEGR	U	E K	Α	M
5	1500	T	01-FEB-90	ABOVEGR	U	K Y	Α	M
7	8000	Т	01-JUL-90	ABOVEGR	U	C N	В	C D M

Department of Environment | Protection

FLORIDA PETR	OLEUM LIA TITY RESTORATION AND INSURANCE PHOGRAM COMPLIANCE CHECKLIST
FPLRIP .	ATRP \Box PCPP \Box OTHER DATE OF DISCHARGE: $3-26-97$
Date:	5-5-97 DEP Facility Number: 538628467
Facility Name:	EZ Foods #9
Facility Address:	999 E. Calse alfred Dr.
	Lake alfred, FC
Contact Person:	Michael Davis Telephone: (941) 439-1505
	Latitude: 28 °05 ' 20" Longitude: 81 ° 42' '20"
	v that may indicate non-compliance or gross negligence or unknown, please explain in detail ges if necessary; also, provide supporting documentation and a vicinity sketch:
YES NO	COMPLIANCE WITH CHAPTER 376.3072 F.S., AS REVISED.
□ □ ¹a.	Was any contamination reported (discovered) prior to the current discharge?
1b.	If yes, was an approved method of release detection installed by January 1, 1997?
	What method?
☐ ☐ ^{2.}	Has proper demonstration of financial responsibility been made in accordance with Rule 62-761.480 or 62-762.480, F.A.C.?
	FPLIPA (exp 5/97) you may want to double check
☐ 3.	Has a Storage Tank Program inspection ever been performed for this facility in accordance with Chapter 62-761, or 62-762, F.A.C.? If yes, give the date of the most recent inspection and supply a copy.
	Compliance: 4-9-97 Have all previously identified violations (Mod/Mod) been corrected?
	NIA- only item noted prening was wotten, on dispenses for
_	Closure: Installation:
□ □ 4.	Has the owner or operator intentionally caused or concealed a discharge or disabled leak detection equipment?
□ □ 5.	Has the owner or operator <u>failed</u> to report a suspected release within 1 working day after discovery?
☐ ☐ ⁶ .	Has the owner or operator, within 3 days of discovery of an actual new discharge, <u>failed</u> to take steps to test or empty the storage tank system and complete such activity within 7 days. Tanks and lines fightness tested 3/29/97 - all
	sintems passed.
7.	Has the owner or operator, after testing or emptying the storage tank system, failed to proceed within 24 hours thereafter to abate the known source of the discharge or to begin free product removal relating to an actual new discharge and failed to complete abatement within 72 hours, although free product recovery may be ongoing.

• , •				DEP Facility Number.	538628467
				Facility Name:	EZ Food #9
				Date:	3-3-47
<u>YES</u>	NO		INFORMATIO	ON MUST BE COMPLETED BY INSPECTOR (S	SITE SCORING AND RANKING).
		8.		ence of a contamination problem in accordant .3071, F.S.? If yes, explain in comment sect	
<u>If yes</u>	to 8,	check th	ose that appl	<u>y:</u>	
			Α.	monitoring well(s)/borehole(s) show	•
			В.	monitoring well(s)/borehole(s) show or petroleum sheen.	(s) <2" free product 1.75"
			C.	monitoring well(s)/borehole(s) are of	ontaminated but contain no
			D.	free product (vapors only). Soil contamination and/or recent product los	3.
Chec	k thos	e that a	poly:		
		9	. Contan	nination product type (Chapter 62-771, F.A.C	n :
	<u>:</u>		A.	Light petroleum: (kerosene, gasoline, aviation	on fuel, etc.)
			В.	Heavy petroleum: (fuel oil, diesel, etc.)	
			C.	Other:	
			D.	Unknown: The groduct had a	"Coal black" appearance -, though
·· ••		٦.	0. Potable	definately fetro leum water (Chapter 62-771, F.A.C):	-, though
		<u> </u>	A.	Within ½ mile: Large wells >100,000 gpd.	
				1. Indicate direction: #1: East 2. Estimate distance: #1: 1320 pt	1#2: ≈37°59E 220011-02 EZ =>#1 well
			B.	Within 1/4 mile: small wells <100,000 gpd.	327
·				Indicate direction: Estimate distance:	
			C.	Surface water body used as a public water	system.
		1		e below, proximity to population centers: (reace, etc.):	staurants, shopping centers.
			A.	<500 feet:	
				 Indicate direction: Estimate distance: 	
			В.	>500 feet:	•
				Indicate direction: Estimate distance:	
Com	ments:			Z. Estimate distance.	· ·
Thi	رند ر	1 ; A	ed a DRI	and the inspector noted 1	75" of Hick, black
bre	e p10	duct.	He mid	icates that this could me	of be new product
thi	<u> </u>	ite h	as never	been known to be conta	minated in the
ga	<u>st.</u>	Appr	rently, I		from somewhere else.
The ≈	1/2 1 all	t like mule tank	away to	they NW (catty-corner), but it	38624523) which is is unknown for sure.
		npliance	Inspector	KE, EST	nspection Date 4-G-61
DED	District		vo o iii · sek	(or) Local Program:	53 Tank Horde
		`		torr Local Frograms	7 1000

PENALTY COMPUTATION WORKSHEET

Violator's Name: Mohammed Mirza

Identify Violator's Facility: MSR Investment, Inc. ID#53/8628467

Name of Department Staff Responsible for the Penalty Computations: <u>Logan Randolph</u>

Date: 18 January, 2002

PART I - Penalty Determinations

Violation Number	Violation Type	ELRA Schedule	Potential for Harm	Matrix Amount	Total
Rule 62-770.600	Failure to	Section	Moderate	2000	2000
F.A.C	Initiate a Site	403.121(3)g,			
	Assessment	F.S.			

SW District Costs and Expenses: 100

Total Penalties for all Violations: 2100.00

Director of District Management	Date
Division Director	



October 3, 2001

Florida Department of Environmental Protection Attention: Ms. Laurel Culbreth 3804 Coconut Palm Drive Tampa, FL 33619

D.E.P. OCT 0 9 2001 Southwest District Tampa

Subject:

Enforcement Referral

Dear Ms. Culbreth:

This letter is the Polk County Health Department, Petroleum Cleanup Program's formal referral of the following facility to the Department of Environmental Protection for enforcement.

Facility Name

Discharge Date

Facility ID Number

MSR Investment, Inc.

March 26, 1997

538628467

Enclosed please find copies of the relevant information from our file. If you have any questions, please contact me by e-mail at jeffrey james@doh.state.fl.us, or by telephone at (863) 701-1303, ext. 109.

Sincerely

Jeffrey W. James

Environmental Specialist II

Enclosures

cc:

Director

Mr. Mohammed Mirza, MSR Investments, Inc., 1005 Lake Alfred Road, Lake Alfred, FL 33850

Ms. Grace Rivera, FDEP - Tallahassee

Mr. Kenny Heyman, Office of General Counsel, 3900 Commonwealth Boulevard, MS 35, Tallahassee,

Florida 32399-3000

File

POLK COUNTY HEALTH DEPARTMENT



December 4, 2000

CERTIFIED MAIL 7000 0520 0018 2935 0947 RETURN RECEIPT REQUESTED

Mr. Mohammed Mirza MSR Investment Inc. 1005 Lake Alfred Road Lake Alfred, FL 33850

Subject:

MSR Investment Inc.

1005 East Lake Alfred Drive Lake Alfred, Polk County FDEP Facility ID# 538628467

Dear Mr. Mirza:

The Polk County Health Department, Petroleum Cleanup Program, has received a Discharge Report Form that was filed with the Polk County Health Department, Stationary Tanks Program, and indicates that petroleum contamination was discovered at the above-referenced site on March 26, 1997.

Rule 62-770.600, Florida Administrative Code (F.A.C.), requires that a Site Assessment be initiated within 30 days of discovery of contamination and a Site Assessment Report (SAR) be prepared and submitted within 270 days (approximately nine months) of discovery of contamination (no later than December 26, 1997). Two copies of the report must be sent to the Polk County Health Department, Petroleum Cleanup Program, 5015 South Florida Avenue, Suite 302, Lakeland, FL 33813.

If free product is present, the owner, operator or responsible party must also remove free product attributable to the new discharge in accordance with Rule 62-770.300, F.A.C.

If this site has previously existing petroleum contamination which is eligible for cleanup funding from the Inland Protection Trust Fund under the Early Detection Incentive Program, Abandoned Tank Restoration Program, Petroleum Liability and Restoration Insurance Program or Petroleum

POLK COUNTY HEALTH DEPARTMENT

Daniel O. Haight, MD Director

ENVIRONMENTAL ENGINEERING DIVISION

Petroleum Cleanup Program

5015 South Florida Avenue, Suite 302, Lakeland, Fl. 33813 Phone 863-701-1303, Fax 863-701-1307, Suncom Phone 515-7007, Suncom Fax 515-7011 Gabriele Bloodworth, MPH Assistant Director Mr. Mohammed Mirza December 4, 2000 Page two

Cleanup Participation Program, Section 376.30714, Florida Statutes, provides interested persons an option to apply to the Florida Department of Environmental Protection (FDEP) to enter into a Site Rehabilitation Funding Allocation agreement with the FDEP. The agreement will establish the respective funding allocations of the FDEP and the applicant for cleanup of the combined discharges, and will establish the priority in which such cleanup will occur. In such an agreement, the FDEP will be responsible for cleanup of no more than the existing eligible contamination and the applicant will be responsible for cleanup of no more than the new discharge. Applicants wishing to take advantage of this option must submit a Limited Contamination Assessment Report (LCAR) and Application for Site Rehabilitation Funding Allocation Agreement to the FDEP within 120 days of the date of discovery of the new discharge. Until such time as the application for a funding allocation agreement is submitted to the FDEP with a complete LCAR, you remain obligated to perform the site assessment activities set forth in Chapter 62-770, F.A.C. A copy of program information and requirements, minimum content of the LCAR, and application form, may be obtained by contacting the Bureau of Petroleum Storage Systems at (850) 488-3935, or at the Bureau's internet web site address at www.dep.state.fl.us/dwm/programs/pcp/funding.htm.

Within 30 days after receipt of this letter you must provide The Polk County Health Department, Petroleum Cleanup Program with written notification detailing the actions taken to initiate the assessment pursuant to Rule 62-770.600, F.A.C. or, alternately, to initiate an LCAR to support a funding allocation agreement. The FDEP Facility Number for this site is 538628467. Please use this identification on all future correspondence with the FDEP or The Polk County Health Department, Petroleum Cleanup Program. If you have any questions or require additional information, please contact me at (863) 701-1303, ext. 109, or at the letterhead address. Thank you for your prompt attention to this matter.

Sincerely.

Environmental Specialist II

/iwi cc:

Grace Rivera, FDEP - BPSS

Omega Environmental Services, 20 Lake Wire Drive, Lakeland, FL 33815

File

Best Available Copy

	-			COMPLETE THIS S	ECTION ON DELI	VERY
	SENDER: COMPLETE	THIS SECTION		A. Received by (Plea		B. Date of Delivery
	 Complete items 1, 2, item 4 if Restricted D Print your name and so that we can return Attach this card to to or on the front if span Article Addressed to: 	and 3. Also comple belivery is desired. address on the reven the card to you. the back of the mailp	erse	C. Signature X	·	Agent Addressee
	MSR Investme Attn: Mr. Mc 1005 Lake Al Lake Alfred,	hammed Mirza fred Road	· [3. Service Type	uil □ Express N	lail
				Certified Ma	☐ Return Re	ceipt for Merchandise
				Insured Mai 4. Restricted Deli		☐ Yes
	FDEP #53862			4. 11000110		
	2. Article Number (Cop) 7000 0520 0 PS Form 3811, July	018 2333 034	7 Domestic R	eturn Receipt		102595-00-M-0952
	PS TOTH GET 1, 1947	وها رايد مدرا عراضته استستند عداريا				
	E co		C	S. Postal Service ERTIFIED MAI omestic Mail On		ce Coverage Provided)
	IVELOP IVELOP		1947 1947 18	. Mohammed 1	Mirza FD	EP #538628467
*	TURN AD		1. E. 1. E. 2. C.	Postage \$	1.40	
·	E STICKER AT TO THE RIGHT OF RE FOLD AT DOT		T C (Ende	Return Receipt Fee preement Required) cricted Delivery Fee preement Required) at Postage & Fees	1.25	Postmark Here
	PLACE TO THI		. ப Reci	pient's Name (Piez Toleum Clea	ase Print Clearly) (1 2 Nuo Progra	o be completed by mailer) am JWJ
	<u>a.</u> ,		Stree	t, Apt. No.; or PO Box 5 South Flo	No.	*************
				State, ZIP. 4 eland. Flor	ida 33813	le, burce 302
UIO NDER: COMPLETE THIS	SECTION	COMPLETE THIS SI				See Reverse for Instructions
omplete items 1, 2, and 3. dod tem 4 if Restricted Delivery e int your name and addres de io that we can return the ca	Also complete is desired. so on the reverse ard to you. so f the mailpiece,	A. Received by (Please) C. Signature	ase Print Clear	B. Date of Deliver	, <u> </u>	
example on the front if space permisor. Junior ticle Addressed to:	nits.	O. Is delivery address		item 17 Pes		
dnp		If YES, enter deliv	ery address t	elow. Lino		
Jacobist Investment Ir Jacobist In: Mr. Mohamme Jacobist In: Mr. Mohamme Jacobist Index Alfred	ed Mirza Road				_	
Il Oake Alfred, Flor	riaa 33850 -	3. Service Type Certified Mail Registered Insured Mail	☐ Express ☐ Return I	: Mail Receipt for Merchand	ise	
eußi®DEP #538628467		4. Restricted Deliver		☐ Yes		·
ticle Number (Copy from serv pal) 000 0520 0018 29	935 0947				<u> </u>	
orm 3811, July 1999	Domestic Ret	urn Receipt		102595-00-M-09	52	



March 22, 2001

CERTIFIED MAIL 7000 0520 0018 2935 1753 RETURN RECEIPT REQUESTED

Mr. Mohammed Mirza MSR Investment Inc. 1005 Lake Alfred Road Lake Alfred, FL 33850

Subject:

MSR Investment Inc.

1005 East Lake Alfred Drive Lake Alfred, Polk County FDEP Facility ID# 538628467

Dear Mr. Mirza:

Petroleum contamination was discovered at the above-referenced site on March 26, 1997 and a Discharge Report Form (DRF) was filed with the Polk County Health Department, Stationary Tanks Program. On December 4, 2000, the Polk County Health Department, Petroleum Cleanup Program, under contract with the Florida Department of Environmental Protection (FDEP), issued a letter outlining the requirement to conduct a site assessment in accordance with Chapter 62-770, Florida Administrative Code (F.A.C.). As specified in the previous letter, a Site Assessment (SA) should have been initiated within 30 days of discovery of contamination and written notification of SA initiation should have been provided to the Polk County Health Department, Petroleum Cleanup Program by January 7, 2001. As of the date of this letter, the notification has not been received by the Polk County Health Department, Petroleum Cleanup Program.

In accordance with Rule 62-770.800(6), F.A.C., failure to meet any time frame in Chapter 62-770, F.A.C. is a violation of Chapters 376 and 403, Florida Statutes (F.S.). Specifically, it is a violation of Section 376.302(1)(b), F.S., to fail to comply with any rule adopted or issued by the FDEP. <u>Please be advised</u> that failure to conduct a site assessment may result in formal enforcement action.

POLK COUNTY HEALTH DEPARTMENT

Daniel O. Haight, MD Director ENVIRONMENTAL ENGINEERING DIVISION

Petroleum Cleanup Program
5015 South Florida Avenue, Suite 302, Lakeland, Fl. 33813
Phone 863-701-1303, Fax 863-701-1307, Suncom Phone 515-7007, Suncom Fax 515-7011

Gabriele Bloodworth, MPH Assistant Director Mr. Mohammed Mirza March 21, 2001 Page two

Please be reminded that if free product is present, the owner, operator or responsible party must also remove free product attributable to the new discharge in accordance with Rule 62-770.300, F.A.C.

Within fourteen days after receipt of this letter, you must provide the Polk County Health Department, Petroleum Cleanup Program with written notification detailing the actions taken to comply with Chapter 62-770, F.A.C., if any. Correspondence should be submitted to my attention, Polk County Health Department, Petroleum Cleanup Program, 5015 South Florida Avenue, Suite 302, Lakeland, FL 33813. The FDEP Facility Number for this site is 538628467. Please use this identification on all future correspondence with the FDEP or the Polk County Health Department, Petroleum Cleanup Program.

If you have any questions, please contact me at (863) 701-1303, ext. 109. We look forward to your cooperation in resolving this matter.

Sincerely

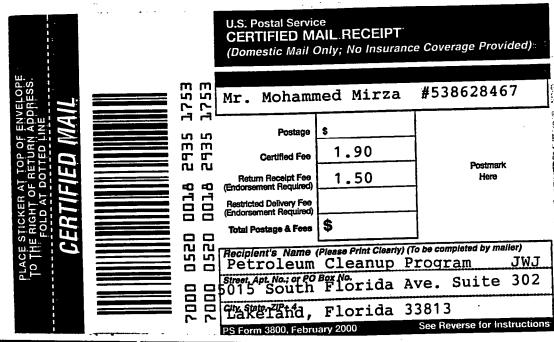
Jeffrey W. James

Environmental Specialist II

/jwj

cc: OES Environmental Services, 20 Lake Wire Drive, Lakeland, FL 33815 Grace Rivera, FDEP – BPSS File

SENDER: COMPLETHIS SECTION	COMPLETE THIS SF ON ON DELIVERY
 Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	A. Received by (Please Print Clearly) B. Date of Delivery C. Signature X Agent Addressee
Article Addressed to:	D. Is delivery address different from item 1? Yes If YES, enter delivery address below: No
Mr. Mohammed Mirza MSR Investment Inc. 1005 Lake Alfred Road Lake Alfred, Florida 33850	
Dake Allied, Florida 33850	3. Service Type
FDEP #538628467	4. Restricted Delivery? (Extra Fee)
2. Article Number (Copy from service label) 7000 0520 0018 2935 1753	
PS Form 3811, July 1999 Domestic Ret	urn Receipt 102595-00-M-0952



SENDER: COMPLETE THIS SECTION	CO	MPLETE THIS SE	CTION ON DEL	VERY
 Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse 	· II	Received by (Plea	se Print Clearly)	B. Date of Delivery アンチ・ク)
 so that we can return the card to you. Attach this card to the back of the mailpiec or on the front if space permits. 	e, X	Signature	Zauz	gent dddressee
1. Article Addressed to:		ls delivery address If XES, enter delive		
Mr. Mohammed Mirza				,
MSR Investment Inc.	\parallel	•	į	ļ
1005 Lake Alfred Road	_		,	·
Lake Alfred, Florida 3	$3850\frac{1}{3}$	Service Type		
		Certified Mail	☐ Express Mai	·
	1	Registered Insured Mail	☐ Return Rece ☐ C.O.D.	ipt for Merchandise
FDEP #538628467	4. 1	Restricted Delivery	? (Extra Fee)	☐ Yes
2. Article Number (Copy from service label) 7000 0520 0018 2935 175	53			
PS Form 3811, July 1999 Dome	estic Return Re	eceipt		102595-00-M-0952



July 29, 2022 TERRA-COM #2021-0116

Ms. Jilian Drenning Florida Department of Health in Polk County 2090 E Clower Street Bartow, FL 33830

RE: Task 4 Deliverable – Proposed Natural Attenuation Monitoring Plan

Shufat, Inc.

1005 E Alfred Street

Lake Alfred, Polk County, FL

FAC ID: 53/8628467

PO#: B9D9EE

Dear Ms. Drenning:

TERRA-COM Environmental Consulting, Inc. (TERRA-COM) is pleased to submit this updated Task 4, Proposed Natural Attenuation Monitoring (NAM) Plan for the Shufat, Inc. site. This letter is in response to a teleconference held on May 9, 2022 between the Florida Department of Health in Polk County and TERRA-COM to discuss the future of the site with the limited remaining available funding and a response to the July 14, 2022 FDOH Review Letter requesting additional sampling and the re-submittal of a revised plan (**Appendix A**). A copy of the FDEP Purchase Order #B9D9EE and the Schedule of Pay Items – Invoice Rate Sheet are provided in **Appendix B**.

1.0 BACKGROUND

The Site location, vicinity land use and regulatory background are summarized below.

1.1 Site Location, Description and Area Land Use

Shufat, Inc. (Site) is currently non-operational and is surrounded by a combination of residential and commercial properties. The Site is located at 1005 E Alfred Street, Lake Alfred, Polk County, FL. An updated site map is presented on **Figure 1.**

1.2 Regulatory Background

According to historical information, four 3,000-gallon underground storage tanks (USTs) containing unleaded and leaded gasoline were removed from the site in 1988. No closure assessment is on record for the removal of the tanks. Two 6,000-gallon USTs and one 4,000-gallon UST which previously contained unleaded gasoline were removed from site in July 2019 during source removal activities.

A Discharge Report Form was filed on March 26, 1997 after approximately 1.75 inches of thick black product was discovered in one of the compliance wells during an inspection. The cause of

Ms. Jilian Drenning Florida Department of Health Page 2 of 5 July 29, 2022

the discharge is unknown since the tanks and lines passed tightness tests. In November 1997, the site was deemed eligible for the Petroleum Liability Restoration Insurance Program (PLRIP). Site assessment began in 2006 and a Template Site Assessment Report (TSAR) was submitted on June 18, 2006. The property owners were informed that the tanks needed to be upgraded and that PLRIP funds would not cover the removal, however, they failed to comply, and a consent order was issued in November 2007. A Remedial Action Plan (RAP) was submitted in December of 2007 and proposed a source removal which included disposing of the USTs. Further site assessment was needed prior to approval of the RAP and site assessments continued through the end of 2012. In 2009, the site received imminent threat status. At the time, 22 small public and private wells were within a ¼ mile radius of the site. Since the tanks were still in place, a Final Judgement was filed in October of 2011. Given the imminent threat status at the site and the impact of the contaminant plume on the surrounding private wells, FDEP decided in 2017 to proceed with the removal of the USTs using available PLRIP funds.

A second discharge occurred on August 18, 2011. This discharge was an emergency response discharge that took place when rainwater entered into the westernmost UST and caused residual petroleum products to overflow out of the tank through a broken fill cap. No assessment work has been performed on this discharge.

TERRA-COM Environmental consulting submitted a underground storage tank removal/source removal RAP to the Florida Department of Health in Polk County on December 1, 2017. The RAP was approved in a letter dated April 12, 2018. The approved RAP commenced in March 2019 with baseline groundwater sampling, preburn sampling, and backfill sampling.

On March 5-7, 2019, TERRA-COM personnel conducted baseline sampling of the onsite monitoring wells. Depth to water measurements and groundwater samples were collected from monitoring wells DMW-1, DMW-2, DMW-4, DMW-6, DMW-7, DMW-8, DMW-10, VMW-1, MW-1, MW-3, MW-4, MW-5, MW-6, MW-9 and MW-10 for laboratory analysis by EPA Methods 8260B, 8270C and FL-PRO. Laboratory analytical results reported benzene present at a concentration above its Natural Attenuation Default Concentration (NADC) per Chapter 62-777, F.A.C. in monitoring wells DMW-2 and DMW-8. Total xylenes were reported in exceedance of NADCs in monitoring wells DMW-2 and DMW-4. Benzene was reported at a concentration above its Groundwater Cleanup Target Level (GCTL) per chapter 62-777, F.A.C. in monitoring wells DMW-4, DMW-6, DMW-7, DMW-10 and VMW-1. Toluene was reported present above it's GCTL in DMW-2. Ethylbenzene was reported present above its GCTL in monitoring wells DMW-2, DMW-4, DMW-6 and DMW-10. Total xylenes were reported present above GCTLs in monitoring well DMW-10. MTBE was reported present above GCTLs in DMW-2, DMW-7, DMW-8, DMW-10 and VMW-1. Naphthalene was reported present above GCTLs in monitoring wells DMW-2, DMW-4, DMW-7 and DMW-10. 2-methylnaphthalene was reported present above GCLTs in DMW-2 and DMW-10. TRPHs were reported present above GCTLs in DMW-2. All other analytes were reported either present at a concentration below their GCTL or not present at their respective method detection limit.



Ms. Jilian Drenning Florida Department of Health Page 3 of 5 July 29, 2022

Between July 8 and July 18, 2019, storage tank and source removal activities took place at the site. A total of 88.35 tons of soil was removed for transport to the Cedar Trail Landfill in Bartow, FL. Laboratory results from all confirmation sidewall samples reported all assayed compounds were reported below soil cleanup target levels. The three underground storage tanks remaining at the site were properly cleaned and removed from the site. A source removal report was submitted by TERRA-COM on August 30, 2019 and approved by the Florida Department of Health in Polk County in a letter dated September 27, 2019.

On May 27, 2021 TERRA-COM submitted a NAM Report. Groundwater samples were collected from monitoring wells MW-3, MW-4, MW-5, MW-6, MW-7, MW-10, VMW-1, DMW-2, DMW-4, DMW-7, and DMW-10. Analytical groundwater results reported GCTL analyte exceedances in monitoring wells VMW-1, DMW-2, DMW-4, DMW-7, and DMW-10. The analytical groundwater results reported NADC exceedances in VMW-1 and DMW-2.

On February 10, 2022 TERRA-COM submitted a NAM Report. Groundwater samples were collected from monitoring wells MW-3, VMW-1, DMW-1, DMW-2, DMW-4, DMW-6, DMW-7, and DMW-10. Analytical groundwater results reported GCTL analyte exceedances in monitoring wells DMW-2, DMW-4, DMW-6, DMW-7, and DMW-10. The analytical groundwater results reported DMW-1 with a concentration at its NADC for naphthalene. The analytical groundwater results reported NADC exceedances in DMW-2. TERRA-COM recommended a teleconference with FDOH and FDEP to discuss a plan on how to best utilize the remainder of the CAP (approximately \$53,000) for the Shufat site.

On May 9, 2022 TERRA-COM and FDOH held a teleconference to discuss the future of the site. It was determined that currently the best course of action is to pursue No Further Action with Conditions at the site. In order to accomplish this a NAM plan would be recommended and following a review of historical analytical data TERRA-COM would recommend a sampling plan, and if necessary, the installation of monitoring wells to complete groundwater contamination delineation. Approximately \$53,000 in funds remain for this site.

2.0 NATURAL ATTENTUATION MONITORING PLAN

Historical groundwater analytical results indicate that there are two on-site groundwater plumes that have been identified as stable and not migrating off-site. The first plume, located just north of the former UST where a 2019 soil excavation took place, is comprised of GCTL exceedances for benzene toluene, ethylbenzene, total xylenes, MTBE, naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene in monitoring wells DMW-2 and DMW-4; and NADC exceedances for benzene, toluene, ethylbenzene, total xylenes, and naphthalene in monitoring well DMW-2. The second groundwater plume, located south of the former UST is comprised of benzene, MTBE, and naphthalene in monitoring wells DMW-1, DMW-6, and DMW-7.

A third off-site groundwater plume, located to the east across Lee Jackson Road, is centered around monitoring well DMW-10 and consisted of GCTL exceedances for benzene, ethylbenzene, and naphthalene. **Table 1** and **Table 2** present historical groundwater analytical data.



Ms. Jilian Drenning Florida Department of Health Page 4 of 5 July 29, 2022

TERRA-COM recommends the best use of the remaining cap funds is to sample existing key monitoring wells on site and bordering the property, on a quarterly basis, to demonstrate if the groundwater plume is stable and/or shrinking and remains on property in order to meet No Further Action with Conditions (NFA-C) requirements.

Prior to initiated any sampling TERRA-COM recommends the installation of a new vertical extent monitoring well (VMW-3) adjacent to deep monitoring well DMW-2, installed to a depth of 30 ftbls, to determine if the groundwater is descending at this location. This monitoring well is proposed to be a 2-inch double cased monitoring well with a total depth to 50 ft-bls with 5-feet of 0.010" slotted screen and an outer casing to 42 ft-bls. An alternative drilling method would be using a SONIC drill rig and use an over-ride casing to 42 ft-bls and install the monitoring well to 50 ft-bls with 5-feet of 0.010" slotted screen.

Following the installation of this monitoring well, TERRA-COM recommends the following Monitoring Plan to be completed and reports submitted on a quarterly basis summarizing the groundwater concentrations over the course of the sampling events to demonstrate if NFA-C conditions are met. Groundwater samples will be collected from the deep zone aquifer as the shallow aquifer wells (MW-1 through MW-14) will not be sampled because each of these wells demonstrate clean groundwater analytical results.

The following key wells will be defined: DMW-3 (side gradient), DMW-1 (source), DMW-8 (down gradient), and DMW-5 (upgradient) along with off-site wells DMW-8 (down gradient), DMW-9 (down gradient), DMW-10 (source), DMW-11 (down gradient). These wells will provide information on groundwater plume shrinkage or migration.

The following key onsite wells will be used to monitor if the plume concentration changes on property and through the vertical deep zones: VMW-1 (45 ft), VMW-3 (proposed deep well north boundary 45 ft), DMW-1 through DMW-6 (30 ft depth), and DMW-7 (45 ft).

Proposed Sampling Schedule

Well ID	<u>Parameters</u>	EPA Method	<u>Notes</u>
DMW-1	BTEX/MTBE & PAHs	8260B & 8270C	East perimeter. Contamination
			present (source)
DMW-2	BTEX/MTBE & PAHs	8260B & 8270C	Contamination present (source)
DMW-3	BTEX/MTBE & PAHs	8260B & 8270C	North perimeter. Once clean
			quarter. (side gradient)
DMW-4	BTEX/MTBE & PAHs	8260B & 8270C	Contamination present. (down
			gradient)
DMW-5	BTEX/MTBE & PAHs	8260B & 8270C	West Perimeter. Only 1 clean
			sampling event. (up gradient)
DMW-6	BTEX/MTBE & PAHs	8260B & 8270C	Contamination present (source)
DMW-7	BTEX/MTBE & PAHs	8260B & 8270C	Contamination present (source)
DMW-8	BTEX/MTBE & PAHs	8260B & 8270C	South perimeter. Contamination
			present. (down gradient)



DMW-9	BTEX/MTBE & PAHs	8260B & 8270C	Offsite. Only 1 clean sampling
			event. (down gradient)
DMW-10	BTEX/MTBE & PAHs	8260B & 8270C	Offsite, east perimeter.
			Contamination present (source)
DMW-11	BTEX/MTBE & PAHs	8260B & 8270C	Only 1 clean sampling event
			(down gradient)
VMW-1	BTEX/MTBE & PAHs	8260B & 8270C	Only 1 clean quarter
VMW-3	BTEX/MTBE & PAHs	8260B & 8270C	New proposed vertical well

A draft Schedule of Pay Items estimates a total cost of \$47,288.06 to conduct monitoring well installation and 4 groundwater sampling events. A copy of the SPI is included in **Appendix B**.

A review of the historical soil analytical results indicates that there are no historical soil exceedances that need further investigation. Table 3 presents historical soil analytical data.

If you have any questions or concerns regarding this report, please contact Philip Hoffken Jr. at 772-217-8502 ext. 101.

Sincerely,

TERRA-COM Environmental Consulting, Inc.

Digitally signed

by: Philip J.

Hoffken, Jr., P.G.

Date: 2022.07.29

14:29:55 -04'00' Philip J. Hoffken Jr., P.G.

Staff Geologist

Appendix: **Tables**

Figures

Appendix A through C

Project File – Vero Beach cc.

Digitally signed by: Brendon R. Blum DN: CN = Brendon R. Blum email = bblum@terra-comenv.com C = Engineering Date: 2022.07.29 14:53:32 -04'00'

Brendon Blum, P.E. Vice President of Engineering



Tables

TABLE 1: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY

Facility Name: Shufat, Inc.

Fac ID:

53/8628467

B= Base		NADC	100	400	300	200	200	140	280	280	50000	100	100	150	2
K= Key W	/ell	CTL'S	1	40	30	20	20	14	28	28	5000	10	10	15	0.02
ocation.	Date	DTW	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	Naphtha- iene	1-methyl naphthalene	2-methyl naphthalene	TRPH	1,2,4- Trimethylbenzene	1,3,4- Trimethylbenzene	Leed	EDB
IW-1	10/17/2006	D.11	6,200	6,800	970	5,800	250	160	47	72	11,000	900	400	7	< 0.0053
	7/1/2009		0.88 U	0.44 U	2.6	1.91	0.271	0.43 U	0.75 U	0.45 U	100 U	4.6	0.36 U	NS	NS
	10/20/2011		18	1.6	17	6.1	0.661	NS	NS	NS	NS	NS	NS	NS	NS
	3/6/2019		0.5 U	0.5 U	0.5 U	2 U	5 U	3.09 I	0.47 I	0.45 I	250 U	NS	NS	NS	NS
WW-2	10/17/2006		0.51	0.871	0.63 I	1.9 I	< 0.32	<0.015	< 0.016	<0.030	5,700	NS	NS	NS	NS
	7/1/2009		U 88.0	0.44 U	0.85 I	1.3 U	0.20 U	0.43 U	0.75 U	0.45 U	1,900	NS	NS	NS	NS
MW-3	10/17/2006		17,000	42,000	2,700	15,000	680	300	48	84	15,000	NS	NS	NS	NS
	7/1/2009		0.88 U	0.44 U	0.43 U	1.3 U	0.20 U	0.43 U	0.75 U	0.45 U	100 U	NS	NS	NS	NS
	10/20/2011		0.34 U	0.35 U	0.34 U	1.1 U	0.27 U	NS	NS	NS	NS	NS	NS	NS	NS
	3/16/2019		0.5 U	0.5 U	0.5 U	2 U	5 U	2 U	0.2 U	0.2 U	250 U	NS	NS	NS	NS
	5/12/2021		0.28 U	0.66 U	0.56 U	1.3 U	0.71 U	0.056 U	0.044 U	0.033 U	2600	NS	NS	NS	NS
	1/5/2022		0.25 U	0.25 U	0.25 U	0.75 U	0.76 I	0.19 U	0.20 U	0.20 U	600 U	NS	NS	NS	NS
MW-4	10/17/2006		0.52 I	3.80	0.90 I	5.80	< 0.32	<0.018	<0.018	< 0.034	<75	NS	NS	NS	NS
	3/5/2019		0.5 U	0.5 U	0.5 U	2 U	5 U	2 U	0.2 U	0.2 U	250 U	NS	NS	NS	NS
	5/12/2021		0.28 U	0.66 U	0.56 U	1.3 U	0.71 U	0.055 U	0.043 U	0.032 U	790	NS	NS	NS	NS
MW-5	40/47/2000		4 500	20.000	0.400	00.000	1 40	400		140	7.000	1 10	No.	NO	Luc
MW-5	10/17/2006 7/1/2009		4,500 0.88 U	32,000 0.44 U	3,400 0,43 U	22,000 1.3 U	16 0.20 U	430 0.43 U	75 0.75 U	0.45 U	7,300 100 U	NS NS	NS NS	NS NS	NS NS
	10/20/2011		0.34 U	0.35 U	0.411	1.1 U	0.27 U	NS	NS	NS	NS	NS	NS	NS	NS
	3/5/2019		0.5 U	0.5 U	0.5 U	2 U	5 U	2 U	0.2 U	0.2 U	250 U	NS	NS	NS	NS
	5/12/2021		0.28 U	0.66 U	0.56 U	1.3 U	0.71 U	0.056 U	0.044 U	0.033 U	580 U	NS	NS	NS	NS
MW-6	4400007		58	49	290	490	87	34	741	201	4 400	110	110	110	110
MW-6	1/12/2007 7/1/2009		0.88 U	0.44 U	1.1	1.3 U	0.651	0.43 U	7.1 I 0.75 U	8.8 I 0.45 U	1,400 100 U	NS NS	NS NS	NS NS	NS NS
	10/20/2011		0.86 U	0.44 U	0.34 U	1.1 U	0.851 0.27 U	NS	0.75 U	0.45 U NS	NS	NS NS	NS NS	NS	NS NS
	3/5/2019		0.5 U	0.5 U	0.5 U	2 U	5 U	2 U	0.2 U	0.2 U	250 U	NS	NS NS	NS	NS
	5/12/2021		0.33 I	0.66 U	0.56 U	1.3 U	6.0	0.40	0.16 I	0.0381	580 1	NS	NS	NS	NS
MW-7	1/12/2007		<0.36 0.34 U	<0.31 0.35 U	<0.33 0.34 U	<0.83 1.1 U	<0.32 0.27 U	<0.012 NS	<0.012 NS	<0.022 NS	<150 NS	NS NS	NS NS	NS NS	NS NS
	5/12/2021		0.34 U 0.28 U	0.35 U 0.66 U	0.34 U 0.56 U	1.1 U 1.3 U	0.27 U	0.056 U	NS 0.044 U	0.033 U	630 I	NS NS	NS NS	NS NS	NS NS
MW-8	1/12/2007		1.1	<0.31	< 0.33	<0.83	<0.32	<0.012	<0.012	<0.022	<150	NS	NS	NS	NS
MW-9	1/12/2007		2,100	28,000	3,000	18,000	32	420	53	92	20,000	NS	NS	NS	NS
	7/1/2009		0.88 U	0.44 U	0.43 U	1.3 U	0.20 U	0.43 U	0.75 U	0.45 U	100 U	NS	NS	NS	NS
	10/20/2011 3/5/2019		0.34 U 0.5 U	0.35 U 0.5 U	0.34 U 0.5 U	1.1 U 2 U	0.27 U 5 U	NS 2 U	NS 0.2 U	NS 0.2 U	NS 250 U	NS NS	NS NS	NS NS	NS NS
	3/3/2019		0.50	0.5 0	0.50	20	30	20	0.2 0	0.2 0	250 0	143	143	No	145
MW-10	1/12/2007		9,700	25,000	1,200	13,000	19,000	320	34	53	37,000	NS	NS	NS	NS
	7/1/2009		0.88 U	0.44 U	0.43 U	1.3 U	0.20 U	0.43 U	0.75 U	0.45 U	100 U	NS	NS	NS	NS
	10/21/2011		0.34 U	0.35 U	0.34 U	1.1 U	0.27 U	NS	NS	NS	NS	NS	NS	NS	NS
	3/5/2019 5/12/2021		0.5 U 0.28 U	0.5 U 0.66 U	0.5 U 0.56 U	2 U 1.3 U	5 U 0.71 U	2 U 0.055 U	0.2 U 0.043 U	0.2 U 0.032 U	250 U 750	NS NS	NS NS	NS NS	NS NS
	3/12/2021		0.200	0.000	0.50 0	1.50	0.710	0.033 0	0.043 0	0.032 0	730	140	140	140	140
MW-11	3/2/2007		< 0.36	<0.31	< 0.33	<0.83	<0.32	<0.073	<0.035	<0.056	<75	NS	NS	NS	NS
MW-12	3/2/2007		< 0.36	<0.31.	< 0.33	<0.83	< 0.32	<0.066	<0.032	<0.051	<76	NS	NS	NS	NS
MW-13	3/2/2007		<0.36	<0.31	< 0.33	<0.83	<0.32	<0.075	<0.036	<0.058	<75	NS	NS	NS	NS
MW-14	3/2/2007		<0.36	<0.31	< 0.33	<0.83	<0.32	< 0.067	<0.032	< 0.052	<75	NS	NS	NS	NS
	414010005		0.000	050	4 000	4 505	4 500				0.400	110	110		
DMW-1	1/12/2007 3/2/2007		3,900 4,700	250 110	1,200 1,300	1,500 2,100	1,500 1,300	60 61	6.6 I 5.9 I	9.2 I 7.6 I	3,100 3,500	NS NS	NS NS	NS NS	NS NS
	7/1/2009		13	1.1 U	470	3.2 U	510	13	2.4	0.45 U	1,300	NS	NS	NS	NS
	10/20/2011		320	3.2	250	140	26	NS	NS	NS	NS	NS	NS	NS	NS
	3/6/2019		0.63 I	0.5 U	0.63 I	2 U	5 U	2 U	1.2	0.2 U	600 I	NS	NS	NS	NS
	1/5/2022		0.25 U	0.25 U	0.25 U	0.75 U	200	0.19 U	0.20 U	0.20 U	NS	NS	NS	NS	NS
DMW-2	5/18/2007		460	21	6.50	120	91	30	4.81	8.21	470	NS	NS	NS	NS
	7/1/2009		830	6.0 I	56	52	580	7.4	0.87 I	1.11	390 I	NS	NS	NS	NS
	10/21/2011		6,300	200	510	2,300	1,100	NS	NS	NS	NS	NS	NS	NS	NS
	3/5/2019		380 L	380 L	210 L	970 L	150 L	102 L	23	38	13,100	NS	NS	NS	NS
	5/12/2021 1/5/2022		4500 3200	570	1500	3500	85	200	30	52	8500	NS	NS	NS	NS
				690	930	2800	110	190	30	48	2300	NS	NS	NS	NS

TABLE 1: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY

Facility Name: Shufat, Inc.

Fac ID:

53/8628467

3= Base Line		NADC	100	400	300	200	200	140	280	280	50000	100	100	150	2
<= Key We	ell	CTL'S	1	40	30	20	20	14	28	28	5000	10	10	15	0.02
ocation.					Ethyl	Total		Naphtha-	1-methyl	2-methyl		1,2,4-	1,3,4-		
	Date	DTW	Benzene	Toluene	Benzene	Xylenes	MTBE	lene	naphthalene	naphthalene	TRPH	Trimethylbenzene	Trimethylbenzene	Lead	EDB
DMW-3	10/21/2011		0.34 U	0.35 U	0.34 U	1.1 U	0.27 U	NS	NS	NS	NS	NS	NS	NS	NS
DMW-4	3/21/2012		2,040	2,640	145	4,350	124	140	24.3	36.1	2,080	NS	NS	NS	NS
	3/5/2019		86	2.5	190 L	205	5 U	55	18.0	27	3,300	NS	NS	NS	NS
	5/12/2021		12	0.66 U	87	14	0.71 U	26	14	15	1600	NS	NS	NS	NS
	1/5/2022		7.9	0.39 1	200	4.8	0.25 U	47	25	26	600 U	NS	NS	NS	NS
DMW-5	3/21/2012		0.40 U	0.40 U	0.40 U	0.80 U	0.960 I	0.522	0.05 U	0.05 U	92 U	NS	NS	NS	NS
DMW-6	3/31/2012		1,520	36	1,140	831	1660	131	25.5	29.8	2,580	NS	NS	NS	NS
	3/6/2019		17	0.5 U	81	2.0 U	5.0 U	13.3	2.4	2.1	250 U	NS	NS	NS	NS
	1/5/2022		7.4	0.25 U	3.4	0.75 U	1.2	2.0	0.31	0.30	780	NS	NS	NS	NS
DMW-7	3/21/2012		1.01	0.40 U	0.40 U	0.80 U	12.1	0.756	0.05 U	0.05 U	165 U	NS	NS	NS	NS
	3/6/2019		48	0.5 U	0.66 I	8	130 L	52	4.6	6.9	1,000	NS	NS	NS	NS
	5/12/2021		0.48 I	0.66 U	0.56 U	1.3 U	170	0.61	0.044 U	0.033 U	820	NS	NS	NS	NS
	1/5/2022		49	0.25 U	0.29 1	3.0 1	170	24	83.0	0.95	NS	NS	NS	NS	NS
VMW-1	5/18/2007		140	<0.31	<0.33	<0.83	2,000	<0.065	<0.031	<0.051	120 I	NS	NS	NS	NS
	7/1/2009		0.88 U	0.44 U	0.43 U	1.3 U	150	0.43 U	0.75 U	0.45 U	100 U	NS	NS	NS	NS
	10/20/2011		0.99 T	1.8 U	1.7 U	5.5 U	440	NS	NS	NS	NS	NS	NS	NS	NS
	3/6/2019		2.1	0.5 U	0.5 U	2 U	80	2 U	0.2 U	0.2 U	250 U	NS	NS	NS	NS
	5/12/2021		0.28 U	0.66	0.56	1.3 U	220	0.057 U	0.045 U	0.034 U	890	NS	NS	NS	NS
	1/5/2022		0.25 U	0.25 U	0.25 U	0.75 U	0.25 U	NS	NS	NS	NS	NS	NS	NS	NS
VMW-2	3/21/2012		0.610 I	0.40 U	0.40 U	0.80 U	2.93	0.896	0.05 U	0.05 U	118 I	NS	NS	NS	NS
DMW-8	5/16/2012		2.64	0.411	0.57 I	1.33 I	45.60	0.65	0.05 U	0.05 U	37 U	NS	NS	NS	NS
	3/6/2019		140 L	0.5 U	10	2.11	180 L	14	1.92	0.46 I	700 I	NS	NS	NS	NS
DMW-9	5/16/2012		0.97 I	0.40 U	0.40 U	0.80 U	2.71	0.05 U	0.05 U	0.05 U	37 U	NS	NS	NS	NS
DMW-10	5/16/2012		4.30	0.40 U	33	1.88 I	194	5.8	1.01	1.52	46 U	NS	NS	NS	NS
	3/6/2019		8.1	0.5 U	180 L	28	35	94 L	22	30	4,500	NS	NS	NS	NS
	5/12/2021		1.6	0.66 U	11	1.3 U	7.5	16	9.0	2.3	910	NS	NS	NS	NS
	1/5/2022		5.6	1.2	54	4.3	3.4	28	12	2.1	600 U	NS	NS	NS	NS
DMW-11	12/3/2012		0.10 U	0.50 U	0.50 U	0.50 U	0.50 U	0.027 I	0.025 U	0.025 U	59 U	NS	NS	NS	NS

TABLE 2: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY

Facility Name: Shufat, Inc.

53/8628467

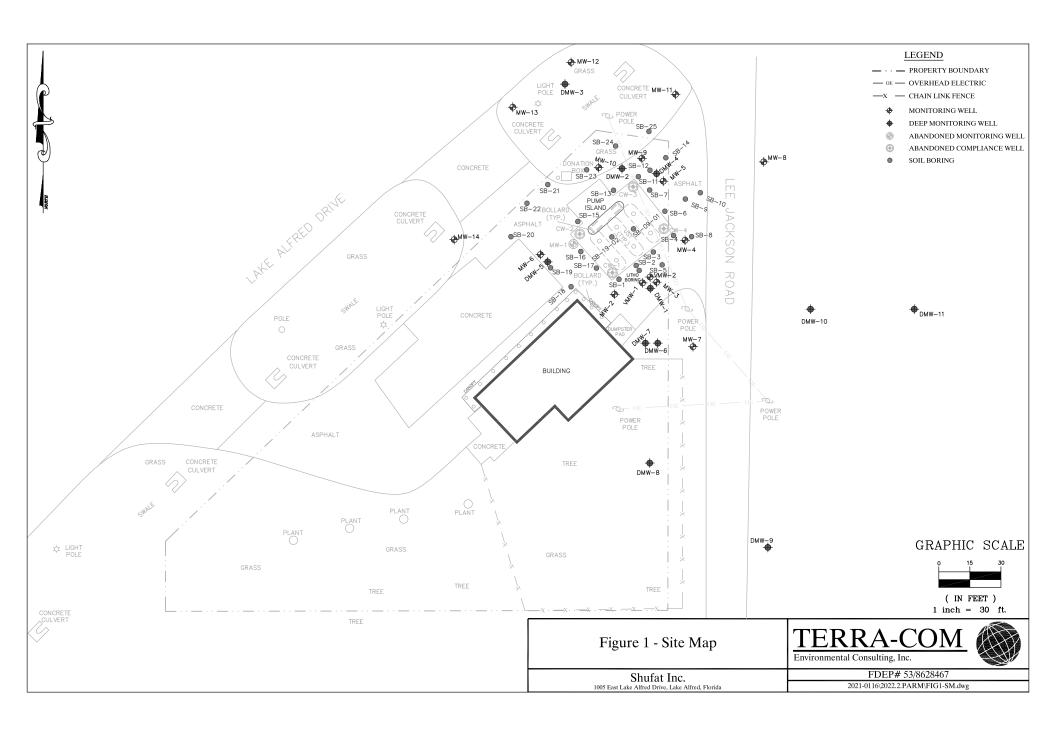
B= Base K= Key V		NADC CTL'S	200 20	2100 210	21000 2100	0.5 0.05	20 0.2	2100 210	5 0.5	0.5 0.05	48 4.8	0.05 0.005	2800 280	2800 280	0.5 0.05	2100 210	2100 210
Location			Acenaph	Acenaph		Benzo(a)	Benzo(a)	Benzo(g.h,i)	Benzo(k)	Benzo(b)		Dibenzo(a,h)			Indeno(1,2,3-c,d)		
MW-1	Date 10/17/2006	DTW	thene <0.018	thylene <0.027	Anthracene <0.017	Anthracene <0.034	< 0.023	perylene <0.014	fluoranthene <0.013	Fluoranthene <0.011	Chrysene <0.016	anthracene <0.013	Fluoranthene <0.012	Fluorene <0.015	pyrene <0.020	Phenanthrene <0.024	Pyrene <0.014
	10/1//2000		10.010	10.027	-0.017	-0.004	10.020	-0.014	-0.010	-0.011	10.010	10.010	10.012	-0.010	-0.020	10.024	-0.014
MW-2	10/17/2006		<0.017	<0.025	<0.016	<0.032	<0.021	<0.013	<0.012	<0.011	<0.015	<0.012	<0.011	<0.014	<0.019	<0.023	<0.014
MW-3	10/17/2006	-	<0.017	<0.025	0.24 I	<0.032	<0.021	<0.013	<0.012	<0.011	<0.015	<0.012	0.77	< 0.014	<0.019	0.29	1.3
IVIVV-3	5/12/2021		0.029 U	0.033 U	0.054 U	0.043 U	0.037 U	0.046 U	0.033 I	0.044 U	0.031 U	0.054 U	0.038 U	0.039 U	0.043 U	0.037 U	0.038 U
MW-4	10/17/2006		<0.019	<0.029	<0.019	< 0.036	<0.025	<0.015	<0.014	<0.012	<0.017	<0.014	<0.013	<0.016	<0.022	<0.026	<0.015
	5/12/2021		0.028 U	0.032 U	0.053 U	0.042 U	0.036 U	0.045 U	0.027 U	0.043 U	0.031 U	0.053 U	0.038 U	0.038 U	0.042 U	0.036 U	0.037 U
MW-5	10/17/2006		< 0.016	<0.025	<0.016	< 0.031	<0.021	<0.013	<0.012	<0.010	< 0.014	<0.012	<0.011	< 0.014	<0.018	<0.022	< 0.013
WITT 0	5/12/2021		0.029 U	0.033 U	0.054 U	0.043 U	0.037 U	0.046 U	0.028 U	0.044 U	0.031 U	0.054 U	0.038 U	0.039 U	0.043 U	0.037 U	0.038 U
MW-6	1/12/2007		<0.013	<0.019	<0.012	<0.024	<0.016	<0.0096	<0.0092	<0.0078	<0.011	<0.0092	<0.0081	<0.010	<0.014	<0.017	<0.010
	5/12/2021		0.028 U	0.032 U	0.053 U	0.042 U	0.036 U	0.045 U	0.027 U	0.043 U	0.031 U	0.053 U	0.038 U	0.038 U	0.042 U	0.036 U	0.037 U
MW-7	1/12/2007		< 0.013	<0.019	<0.012	<0.024	<0.016	<0.0097	<0.0093	<0.0079	<0.011	<0.0093	<0.0082	<0.011	<0.014	<0.017	<0.010
	5/12/2021		0.029 U	0.033 U	0.054 U	0.043 U	0.037 U	0.046 U	0.028 U	0.044 U	0.031 U	0.054 U	0.038 U	0.039 U	0.043 U	0.037 U	0.038 U
MW-8	1/12/2007		<0.013	<0.019	<0.012	<0.024	<0.016	<0.0097	<0.0092	<0.0079	<0.011	<0.0092	<0.0082	<0.011	<0.014	<0.017	<0.010
MW-9	1/12/2007		< 0.013	<0.019	<0.012	<0.024	<0.016	<0.0097	<0.0092	<0.0079	<0.011	<0.0092	<0.0082	<0.011	<0.014	<0.017	<0.010
	171212007		10.010	10.010	-0.012	-0.02-4	10.010	-0.0007	-0.000E	-0.0070	10.011	10.0002	10.0002	-0.011	-0.014	10.017	-0.010
MW-10	1/12/2007		<0.013	< 0.019	< 0.012	<0.024	<0.016	<0.0097	< 0.0093	< 0.0079	<0.011	< 0.0093	<0.0082	< 0.011	< 0.014	<0.017	<0.010
	5/12/2021		0.028 U	0.032 U	0.053 U	0.042 U	0.036 U	0.045 U	0.027 U	0.043 U	0.031 U	0.053 U	0.038 U	0.038 U	0.042 U	0.036 U	0.037 U
MW-11	3/2/2007		<0.014	<0.021	<0.047	<0.0081	<0.059	<0.049	<0.052	<0.048	<0.055	<0.0081	<0.042	<0.078	<0.016	<0.067	<0.032
10100-11	3/2/2007		<0.014	<0.021	<0.047	<0.0081	<0.059	<0.049	<0.05Z	V0.046	<0.055	<0.0081	<0.042	<0.076	V0.016	<0.067	<0.032
MW-12	3/2/2007		<0.013	< 0.019	<0.042	<0.0073	<0.053	<0.044	<0.047	<0.044	< 0.049	<0.0073	<0.038	< 0.070	<0.015	<0.061	<0.029
MW-13	3/2/2007		<0.015	<0.022	<0.048	<0.0083	<0.060	<0.050	<0.054	<0.050	<0.056	<0.0083	<0.044	<0.080	<0.017	<0.070	<0.033
MW-14	3/2/2007		< 0.013	<0.020	<0.043	<0.0074	<0.054	<0.045	<0.048	<0.045	<0.050	<0.0074	<0.039	<0.072	<0.015	<0.062	< 0.030
			1														
DMW-1	1/12/2007		<0.013	<0.019	<0.012	<0.024	<0.016	<0.0097	<0.0092	<0.0079	<0.011	<0.0092	<0.0082	<0.011	<0.014	<0.017	<0.010
	3/2/2007		<0.015	<0.023	<0.050	<0.0086	< 0.063	<0.052	<0.056	<0.052	<0.058	<0.0086	<0.045	< 0.083	<0.017	< 0.072	<0.034
DMW-2	5/18/2007		8.9	< 0.019	<0.042	<0.0074	< 0.054	<0.045	<0.048	0.19	<0.050	< 0.0074	0.35	4.71	<0.015	5.4	< 0.029
	5/12/2021		5.3	0.14 I	0.15 I	0.044 U	0.038 U	0.047 U	0.032 I	0.045 U	0.032 U	0.055 U	0.48	3.8	0.044 U	6.1	0.22
DMW-4	3/21/2012		14.5	0.532	0.025 U	0.025 U	0.015 U	0.015 U	0.015 U	0.015 U	0.025 U	0.0051 U	0.425	6.16	0.015 U	6.56	0.177
	5/12/2021		0.43	0.033 U	0.054 U	0.043 U	0.037 U	0.046 U	0.028 U	0.044 U	0.031 U	0.054 U	0.33	0.38	0.043 U	0.79	0.22
DMW-5	3/21/2012		0.025 U	0.025 U	0.025 U	0.025 U	0.015 U	0.015 U	0.015 U	0.015 U	0.025 U	0.0051 U	0.025 U	0.025 U	0.015 U	0.025 U	0.025 U
DMW-6	3/21/2012		0.105	0.025 U	0.110	0.025 U	0.015 U	0.015 U	0.015 U	0.015 U	0.025 U	0.0051 U	0	0	0.015 U	0.248	0.116
DINIVI	3/2/1/2012		0.100	0.020 0	0.110	0.020 0	0.010 0	0.010 0	0.010-0	0.010 0	0.020 0	0.0001 0	Ů	·	0.010	0.240	0.110
DMW-7	3/21/2012		0.025 U	0.025 U	0.025 U	0.025 U	0.015 U	0.015 U	0.015 U	0.015 U	0.025 U	0.0051 U	0.025 U	0.025 U	0.015 U	0.025 U	0.025 U
	5/12/2021		0.029 U	0.033 U	0.054 U	0.043 U	0.037 U	0.046 U	0.028 U	0.044 U	0.031 U	0.054 U	0.038 U	0.039 U	0.043 U	0.037 U	0.038 U
VMW-1	5/18/2007		< 0.013	< 0.019	<0.042	<0.0072	<0.015	<0.044	<0.047	< 0.043	< 0.049	<0.0072	<0.038	< 0.070	<0.014	<0.060	< 0.029
	5/12/2021		0.029 U	0.033 U	0.055 U	0.044 U	0.038 U	0.047 U	0.028 U	0.045 U	0.032 U	0.055 U	0.039 U	0.040 U	0.044 U	0.038 U	0.039 U
VMW-2	3/21/2012		0.025 U	0.025 U	0.025 U	0.025 U	0.015 U	0.015 U	0.015 U	0.015 U	0.025 U	0.0051 U	0.025 U	0.025 U	0.015 U	0.025 U	0.025 U
DMW-8	5/16/2012		0.025 U	0.025 U	0.025 U	0.025 U	0.015 U	0.015 U	0.015 U	0.015 U	0.025 U	0.0051 U	0.025 U	0.025 U	0.015 U	0.025 U	0.025 U
			<u> </u>														
DMW-9	5/16/2012		0.025 U	0.025 U	0.025 U	0.025 U	0.015 U	0.015 U	0.015 U	0.015 U	0.025 U	0.0051 U	0.025 U	0.025 U	0.015 U	0.025 U	0.025 U
DMW 10	E/16/0010	1	0.00511	0.025 U	0.025 U	0.025 U	0.04511	0.015 U	0.015 U	0.04511	0.025 U	0.0051 U	0.025 U	0.025 U	0.04511	0.00511	0.025 U
DMW-10	5/16/2012 5/12/2021		0.025 U 0.98	0.025 U	0.025 U	0.025 U	0.015 U 0.036 U	0.015 U	0.015 U	0.015 U 0.043 U	0.025 U 0.031 U	0.0051 U	0.025 U 0.11 I	0.025 U	0.015 U 0.042 U	0.025 U 1.7	0.025 U
DMW-11	12/3/2012		0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
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Facility ID# 53/8628467

Sample	TVA	Ι						Analytical Result	ts																			$\overline{}$
Sample	Net TVA			Ethyl-				2-Methyl-	1- Methyl-	Acena-		Benzo(a)- pyrene	Fluorene	Anthracene	Benzo(g,h,i) Pervlene	Fluoranthene	Eluorene	Pyrene	Benzo(a)	Benzo(b) Fluoranthene	Chrysene	Dibenzo(a,h) Anthracene	Indeno(1,2,3,-c,d) Pyrene	Benzo(a) anthracene	Benzo(k) Fluoranthene	Phenanthrene	B(a)P Equivalent	TRPH
Depth (ft-	Reading	Benzene	Toluene	benzen	Total xylenes	MTBE	Naphthalene	naphthalene	naphthalene	phthylene	Acenaph-	(mg/kg)	(mg/kg)	(ma/ka)		(mg/kg)			(mg/kg)				(mg/kg)		(mg/kg)			(mg/kg)
Boring ID # Date Collected bis)	(ppm) SCTLs:	(mg/kg) 1.2	(mg/kg) 7500		(mg/kg) 130	(mg/kg) 4400	(mg/kg) 55	(mg/kg) 210	(mg/kg) 200	(mg/kg) 1800	thene (mg/kg) 2400	0.1	2600	21000	(mg/kg) 32000	3200	(mg/kg) 2600 160	(mg/kg) 2400 880	(mg/kg) 0.1 8	(mg/kg)	(mg/kg) #	(mg/kg)		(mg/kg)	#	(mg/kg) 2200	(mg/kg) 0.7	480
MW-14D 4/8/2002 25-26	LSCTLs:	0.007 14	0.5 430	0.6 31	0.2 138	0.09 BDL	1.2 BDL	8.5 BDL	3.1 BDL	NA BDL	2.1 0.4	8 BDL	160 0.58	2500	2500	1200	160	880	8	2.4	77	0.7	6.6	0.8	24	250	0.1	340
MW-15 4/10/2002 9	NM	8.2	79	12	60	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL															
SB-01-07 4/10/2007 5	0	<0.001	<0.0011	<0.0005	<0.0012	<0.0007	<0.004	<0.002	<0.004	<0.004	<0.003	<0.003	<0.003															
SB-01-07 4/10/2007 15	39	0.0015i	<0.0011	<0.0005	0.0029i	<0.0006	<0.004	<0.002	<0.004	<0.004	<0.003	<0.003	<0.003															
SB-01-07 4/10/2007 31	263	0.042	0.022	0.043	0.17	<0.0007	<0.004	<0.002	<0.004	<0.004	<0.003	0.01	<0.003															
SB-01-07 4/10/2007 41	750	0.086	0.0018i	0.019	0.057	<0.0007	<0.004	<0.002	<0.004	<0.004	<0.003	<0.003	<0.003															
SB-02-07 4/10/2007 20	0	<0.0012	<0.0014	<0.0007	0.0027i	<0.0008	<0.005	<0.003	<0.005	<0.005	<0.004	<0.004	<0.004															
SB-02-07 4/10/2007 39	274	<0.051	< 0.057	<0.029	<0.063	< 0.034	0.79	9.0	15	0.48	5.0	<0.03	<0.03	-														
SB-02-07 4/10/2007 43	1,800	<0.0012	<0.0013	<0.0006	0.0036i	<0.0008	<0.005	<0.003	<0.005	<0.005	<0.004	<0.004	<0.004															
	8.650		0.7	0.23i	1.3	<0.035	0.10	0.73	1.3	0.17	<0.003	<0.003	0.01i															
		<0.052																										
SB-03-07 4/11/2007 27	2,620	0.21i	2.9	1.7	9.7	<0.036	0.04	0.18	0.27	0.01i	<0.004	<0.004	<0.004															
SB-03-07 4/11/2007 33	FO	2.1	48	17	96	<0.14	<0.005	<0.002	<0.005	<0.005	< 0.003	<0.003	<0.003	-														
SB-03-07 4/11/2007 49	1,100	0.13	0.049	0.071	0.090	<0.0008	0.05	<0.003	0.01i	0.19	<0.004	<0.004	<0.004															
SB-04-07 4/11/2007 17	274	<0.0012	< 0.0013	<0.0007	<0.0015	<0.0008	<0.005	<0.003	<0.005	<0.005	<0.004	<0.004	<0.004															
SB-04-07 4/11/2007 25	200	<0.001	<0.0011	<0.0006	<0.0013	<0.0007	<0.005	<0.002	<0.005	<0.005	<0.003	<0.003	<0.003															
SB-04-07 4/11/2007 39	302	<0.001	<0.0011	<0.0006	<0.0012	<0.0007	<0.004	<0.002	<0.004	<0.004	<0.003	<0.003	<0.003															
SB-04-07 4/11/2007 45	221	0.036	0.063	0.0076	0.045	<0.0007	<0.005	<0.002	<0.005	<0.005	<0.004	<0.004	<0.004															
SB-01-12 4/2/2012 9	NM	0.0006 U	0.0007 U	0.0007 U	0.00081	0.0006 U	0.003 U	0.004 U	0.08	0.006 U	0.01 U	0.003 U	0.006 U															
SB-02-12 4/2/2012 26	NM	0.028 U	0.260 I	0.033 U	17	0.028 U	59 L	9.6 L	18 L	2.4 L	0.01 U	0.003 U	0.64															
SB-03-12 4/2/2012 31	NM	0.0005 U	0.0006 U		0.0004 U	0.0005 U	0.003 U	0.004 U	0.003 U	0.005 U	0.01 U	0.003 U	0.005 U															
SB-03-12 4/2/2012 41	NM	0.0006 U		0.0007 U	0.0005 U	0.0006 U	0.004 U	0.005 U	0.004 U	0.006 U	0.01 U	0.004 U	0.006 U	1														
SB-04-12 4/2/2012 39	NM	0.0007 U	0.0008 U	0.0008 U	0.0005 U	0.0007 U	0.004 U	0.005 U	0.004 U	0.007 U	0.01 U	0.004 U	0.007 U															
SB-05-12 4/2/2012 27	NM	0.0008 U	0.0024 I	0.00421	0.030	0.0008 U	0.005 U	0.006 U	0.005 U	0.008 U	0.02 U	0.005 U	0.008 U	1														
SB-05-12 4/2/2012 33	NM	0.030 U	0.036 U	0.180 I	1.5	0.030 U	0.004 U	0.005 U	0.13 U	0.006 U	0.01 U	0.004 U	0.006 U															
SB-02A-12 7/2/2012 26	NM	0.0004 U	0.0053 I	0.001 I	0.019	0.0005 U	0.003 U	0.12	0.65	0.005 U	0.01 U	0.003 U	0.005 U															
SB-05A-12 8/6/2012 33	NM	0.0074	0.130	0.074	0.230	0.0006 U	NS	NS	NS	NS	NS	NS	NS															
MW-25 10/1/2012 37	16800	0.130 U	38	50	330 L	0.160 U	NS	NS	NS	NS	NS	NS	NS															
SB-05B-12 4/16/2014 33	0	0.0011 U	0.0001 U	0.0009 U	0.0008 U	0.0009 U	NS	NS	NS	NS	NS	NS	NS	-														
SB-16-01 10/27/2016 43	1541	2.000			34.000 L	0.610 U	0.429	0.272	0.122	0.00195 U	0.00261 I	0.00234 U	0.00549															
SB-16-02 10/27/2016 33	299	0.015	0.630 L		2.300 L	0.00955 U		2.060 L	0.925	0.004121	0.01443	0.00364 U	0.0598															
	144																											
SB-16-03 10/27/2016 41		0.134 U		13.000	71.000 L	0.670 U	3.011 L	2.726 L	1.237	0.00572	0.02316	0.00291 I	0.131															
SB-16-04 10/27/2016 13	76	0.0019 U	0.0019 U	0.0019 U	0.035	0.00595 U	0.473	0.891	0.450	0.003631	0.0117	0.0038 I	0.07962	-														
SB-16-05 10/28/2016 13	1750	0.00141 U	0.097	0.580 L	3.300 L	0.00705 U	0.606	0.669	0.319	0.0244 I	0.00572	0.00267 U	0.0189															
S-1 (SB-1) 8/2/2006 4	0	<0.00021	0.00026 I	<0.00021	<0.00087	<0.00017	<0.0081	<0.0071	<0.011	<0.027	<0.030	<0.0097	<0.050	<0.047	<0.024	<0.037	<0.050	< 0.031	<0.097	<0.027	<0.027	<0.0090	<0.027	<0.041	<0.027	<0.031	Pass	<0.68
S-2 (SB-16) 8/2/2006 4	360	<0.00020	<0.00014	<0.00020	<0.00084	<0.00017	<0.0085	<0.0074	<0.012	<0.026	<0.031	<0.010	<0.052	<0.049	<0.025	<0.038	<0.052	< 0.033	<0.010	<0.029	<0.028	<0.0094	<0.028	<0.043	<0.038	<0.032	Pass	21
S-3 (SB-3) 8/2/2006 4	1470	<0.11	2.7	6.7	55	<0.088	20	24	13	<0.051	<0.057	<0.019	<0.095	<0.091	<0.045	<0.071	<0.095	<0.060	<0.019	<0.052	<0.051	<0.017	<0.052	<0.079	<0.070	<0.059	Pass	710
S-4 (SB-13) 8/2/2006 6	>9,910	<0.0096	0.17	0.41	1.7	<0.0080	<0.0088	<0.0078	<0.012	<0.029	< 0.033	<0.011	<0.054	<0.052	<0.026	<0.040	< 0.054	<0.034	<0.011	<0.030	<0.029	<0.0098	<0.029	<0.045	<0.040	<0.034	Pass	10
ESW@2.5' 7/12/2019 2.5	0		0.00106 U		0.00212 U	0.0053 U		0.00175 U	0.00140 U	0.00175 U	0.00175 U	0.0021 U	0.00175 U	0.0014 U	0.0028 U		0.00175 U				0.00175 U	0.0028 U	0.0028 U	0.00175 U	0.0021 U	0.00245 U	NC	3.71 U
NSW@2.5' 7/12/2019 2.5	-		0.00100 U			0.0057 U	0.00856		0.0942	0.00177 U	0.00177 U		1								0.00177 U							3.74 U
	0				0.00228 U			0.0135				0.00212 U 0.00214 U	0.0177 U	0.00141 U	0.00282 U	0.00212 U		0.00212 U		0.00212 U		0.00282 U	0.00282 U	0.00177 U	0.00212 U	0.00247 U	NC NC	
WSW@2.5' 7/12/2019 2.5	0		0.0011 U		0.0022 U	0.0055 U	0.00178 U	0.00178 U	0.00143 U	0.00178 U	0.00178 U		0.00178 U	0.00143 U	0.00285 U	0.00214 U				0.00214 U	0.00178 U	0.00285 U	0.00285 U	0.00178 U	0.00214 U	0.00249 U	NC	3.78 U
SSW@2.5' 7/12/2019 2.5	0	0.001 U	0.001 U	0.001 U	0.002 U	0.005 U	0.00175 U	0.00175 U	0.0014 U	0.00175 U	0.00175 U	0.0021 U	0.00175 U	0.0014 U	0.0028 U	0.0021 U	0.00175 U	0.0021 U	0.0021 U	0.0021 U	0.00175 U	0.0028 U	0.0028 U	0.00175	0.0021 U	0.00245 U	NC	3.71 U
fi bla - foot below load and																												

ft-ble = feet below land surface mg/kg = militgames per klogare mg/kg = militgames per klogare mg/kg = militgames per klogare MS-NHO Sampled SCTL = Direct Eposure Residential Soil Concentration Target Level, F.A.C. 62-777, Table II SCTL = Leachfully Soil Concentration Target Level based on Groundwater Criteria, F.A.C. 62-777, Table II SCTL = Leachfully Soil Concentration Target Level based on Groundwater Criteria, F.A.C. 62-777, Table II SCTL = Leachfully Soil Concentration Target Level based on Groundwater Criteria, F.A.C. 62-777, Table II SCTL = Leachfully Soil Concentration Target Level based on Groundwater Criteria, F.A.C. 62-777, Table II SCTL = Leachfully Soil Concentration Target Level based on Groundwater Criteria, F.A.C. 62-777, Table II SCTL = Leachfully Soil Concentration Target Level based on Groundwater Criteria, F.A.C. 62-777, Table II SCTL = Leachfully Soil Concentration Target Level based on Groundwater Criteria, F.A.C. 62-777, Table II SCTL = Leachfully Soil Concentration Target Level based on Groundwater Criteria, F.A.C. 62-777, Table II SCTL = Leachfully Soil Concentration Target Level based on Groundwater Criteria, F.A.C. 62-777, Table II SCTL = Leachfully Soil Concentration Target Level based on Groundwater Criteria, F.A.C. 62-777, Table II SCTL = Leachfully Soil Concentration Target Level based on Groundwater Criteria, F.A.C. 62-777, Table II SCTL = Leachfully Soil Concentration Target Level based on Groundwater Criteria, F.A.C. 62-777, Table II SCTL = Leachfully Soil Concentration Target Level based on Groundwater Criteria, F.A.C. 62-777, Table II SCTL = Leachfully Soil Concentration Target Level based on Groundwater Criteria, F.A.C. 62-777, Table II SCTL = Leachfully Soil Concentration Target Level based on Groundwater Criteria, F.A.C. 62-777, Table II SCTL = Leachfully Soil Concentration Target Level based on Groundwater Criteria, F.A.C. 62-777, Table II SCTL = Leachfully Soil Concentration Target Level Based on Groundwater Criteria, F.A.C. 62-777, Table II SCTL = Leachfully Soil Concen

Figure



Appendix A FDOH Review Letter

Mission:

To protect, promote & improve the health of all people in Florida through integrated state, county & community efforts.



Ron DeSantis Governor

Joseph A. Ladapo, MD, PhD State Surgeon General

Vision: To be the **Healthiest State** in the Nation

July 14, 2022

(Sent via e-mail only to addressee at phoffken@terra-comenv.com)

Mr. Philip J. Hoffken Jr., P.G. TERRA-COM Environmental Consulting, Inc. 1801 Art Museum Drive, Suite 108,

Subject: <u>Task 4 Review Letter</u>

Shufat Inc

1005 E Lake Alfred Dr. Lake Alfred, Polk County FDEP Facility ID# 538628467 Purchase Order # B9D9EE

Discharge Date: March 26, 1997 (PLIRP)

Mr. Hoffken:

The Florida Department of Health in Polk County (FDOH-Polk) on behalf of the Florida Department of Environmental Protection (FDEP) has reviewed the Task 4 – Natural Attenuation Monitoring Plan dated June 24, 2022 (received June 24, 2022) prepared and submitted by TERRA-COM Environmental Consulting, Inc. for the subject facility. The Task 4 deliverable was intended to be a Natural Attenuation Monitoring Plan (NAM Plan) with the goal of collecting sufficient data over a 1-year period to support conditional closure. The plan provided is not sufficient and does not include all monitoring wells. Please review the deliverable and provide a 4-quarter sampling plan that will define the extent on contamination and determine if the plume is shrinking or stable.

Please note: the revised report must be received by 7/29/2022. If you should have any questions concerning the review, please contact me at (863)578-2053 or at the letterhead address.

Sincerely,

Jilian M. Drenning

Environmental Specialist II

Gerald Robinson
Gerald Robinson, P.E.
Professional Engineer III

ec: Mohammed Mirza – mmirza@mccallgroup.com

FDEP File, Facility File



Appendix B

Purchase Order and Schedule of Pay Items

Order B9D9EE 2/10/22, 7:35 AM



Order No. B9D9EE

Version Number: 1 Internal Version: false Issued on Tue, 21 Sep, 2021

Created on Tue, 21 Sep, 2021 by Ariba System

Supplier:

TERRA-COM Environmental Consulting, Inc. 1120 NW 23rd Avenue Gainesville, FL 32609 **United States** Phone: 1904-396-3070

Fax: 1352-332-3838 Contact: Stuart Castle

Ship To:

DEP-PETROLEUM RESTORATION PROGRAM BMC RM 420 MS 4575 2600 BLAIR STONE RD TALLAHASSEE, FL 32399 **United States**

Deliver To:

Jilian Drenning (Contracts)

Bill To:

DEP-PETROLEUM RESTORATION PROGRAM BMC RM 420 MS 4575 2600 BLAIR STONE RD TALLAHASSEE, FL 32399 **United States**

Entity Description: Department of Environmental Protection

Organization Code: 37450404555 Object Code: 000000-131545 Expansion Option: JG Exemption Status: No Exemption Reason?:

Item	Description	Part Number	Unit	Qty	Need By	Unit Price	Extended Amount
1	Contractor has been selected to perform a		Dollar	6,385.84	None	\$1.00000 USD	\$6,385.84000 USD

Contractor has been selected to perform a Natural Attenuation Monitoring (NAM) at the Shufat Inc, 1005 E Lake Alfred Dr, Lake Alfred, Polk County, Florida, FAC ID 538628467. Attachment A, Scope of Work, attached to the purchase order (PO) describes the work to be completed by the Contractor. All work shall be performed in accordance with the terms of the Agency Term Contract (ATC). The PRP reference number for this project is 777-026E.

Attache

d hereto and made a part of this PO is Attachment B - Schedule of Pay Items and Other Related Documents. Pay Items are at or below the negotiated maximum rates included in the ATC. Contractor must submit the appropriate completed documents from Attachment B to the Site Manager with each deliverable, as instructed. Upon completion and approval of all work under this PO, Contractor shall submit a signed Release of Claims document, along with the final invoice. Contractor must include Subcontractor Utilization Report form, included as a tab on Attachment B, with each invoice.

The Department will retain 5% of the total amount of each payment made. Contractor may submit a request for release of retainage upon completion, and DEP approval of, all work performed under this PO.

The Department will evaluate the Contractor as specified in the Agency Term Contract.

The Contractor agrees to perform the services described in the PO in accordance with the terms of its ATC (as those terms may have been amended) which are in effect on date of issuance of the PO. The applicable ATC terms are available at the following URL: https://facts.fldfs. com/Search/ContractD etail.aspx?AgencyId= 370000&ContractId=GC

Distributors?: N

Requester: Jilian Drenning (Contracts)

Ship To Code: DEP305S State Contract ID: Contract ID: Requester Phone: PR No.: PR11886886 MyGreenFlorida Content: N

Method of Procurement:: J - Agency ITN [s 287.057(1) (c), F.S.]

Shipping Method: Best Way FOB Code: INC-Dest

FOB Code Description: Destination freight paid by vendor and included in price. Title passes upon receipt. Vendor files any claims.

Encumber Funds: Yes

PO Start Date: Tue, 21 Sep, 2021 PO End Date: Mon, 11 Apr, 2022 Fiscal Year Indicator: 2022

PUI#: 3701

Site Code: 370000-12

Terms and Conditions: http://dms.myflorida.com/mfmp PO TC

P Card Order?: No

Order B9D9EE 2/10/22, 7:35 AM

Total \$6,385.84000 USD

Comments

• Jordan Riedel (Contracts), 09/14/2021:

The following attachments are attached hereto and made a part of this Purchase Order.

Attachment A – Scope of Work
Attachment B – Schedule of Pay Items and Other Related Documents (Jordan Riedel (Contracts), Tue, 14 Sep, 2021)
Magen Greene (Contracts), 09/21/2021:
Note: Attachment B language appearing in upper right-hand corner titled "Without Handling Fee" is used by the program to identify the total cost less the 6% handling and MFMP fee on reimbursable items. This information is only used as a check point for PRP staff. The total PO amount for the project is the amount appearing in the "Total Extended Cost" section in the upper right-hand side of the spreadsheet. (Magen Greene (Contracts), Tue, 21 Sep,

Attachments

- ATTACHMENT by Jordan Riedel (Contracts) on Tuesday, September 14, 2021 at 10:26 AM AttachmentA-SOW-538628467-NAM.pdf (191785 bytes)
- ATTACHMENT by Jordan Riedel (Contracts) on Tuesday, September 14, 2021 at 10:26 AM AttachmentB-SPI-538628467-NAM.xlsm (1386898 bytes)

Petroleum Contamination Site Response Action Services SCHEDULE OF PAY ITEMS INVOICE RATE SHEET

Facility Name: SHUFAT INC 7-Digit Facility ID #: 8628467 County: 53 Region: Central Site Manager Name: JILIAN DRENNING **Site Manager Phone:** (863)578-2053 Site Manager Email: jilian.drenning@flhealth.gov

Contractor: TERRA-COM Environmental Consulting, Inc.

CID#: 00559 Contract #: GC777 SPI ID #: 23076

5% Retainage %: Purchase Order: FDEP Cost Share %: 100.00% Total Extended Cost: \$ 7,608.88 Without Handling Fee: \$ 7,608.88

B9D9EE Download Date: 9/8/21 12:18 Assignment Type: SCOPE

Transition Agreement: O Yes No

		-			PO Rate S	heet		viously voiced	Thi	is Invoi	ice	Ва	lance
PAY ITEM	DESCRIPTION	UNIT OF MEASURE	UNITS		GOTIATED M PRICE	TOTAL EXTENDED PRICE	u	INITS	UNITS	E	EXTENDED PRICE	UI	NITS
Task	1												
1-2.a.	Site Health & Safety Plan for Continued Work (no cost to FDEP)	Per Site	1	\$	-	\$ -		1	0	\$	-		0
		RETAINAGE				\$ -	\$	-		\$	-	\$	-
		SUBTOTAL				\$ -	\$	-		\$	-	\$	-
Task	2												
3-1.	Mobilization, Light Duty Vehicle (car or 1/2 ton truck) - ≤ 100 miles each way	Per Round Trip	1	\$	549.45	\$ 549.45		1	0	\$	-		0
8-1.	Monitoring Well Sampling with Water Level, ≤ 100 foot depth	Per Well	10	\$	225.00	\$ 2,250.00		8	0	\$	-		2
	Electronic Data Deliverables (EDD)	Per Sampling Event	1	\$	157.50	\$ 157.50		1	0	\$	-		0
9-27.	Water, BTEX + MTBE (EPA 602, EPA 624, EPA 8021 or EPA 8260)	Per Sample	10	\$	46.30	\$ 463.00		8	0	\$	-		2
9-30.	Water, Polycyclic Aromatic Hydrocarbons, including 1-methylnaphthalene + 2-methylnaphthalene (EPA 610 [HPLC], EPA 625, EPA 8270 or EPA 8310)	Per Sample	8	\$	94.50	\$ 756.00		7	0	\$	-		1
9-36.	Water, Total Recoverable Petroleum Hydrocarbons (FL-PRO)	Per Sample	5	\$	72.76	\$ 363.80		4	0	\$	-		1
19-7.	Natural Attenuation or Post RA Monitoring Report, Quarterly or Non-Annual	Per Report	1	\$	675.94	\$ 675.94		1	0	\$	-		0
21-19.	P.E. Review, Evaluation and Certification of a Non-Annual Natural Attenuation or Post RA Monitoring Report That Includes a Recommendation for NFA or a Recommendation to Modify the Approved Monitoring Plan	Per Report	1	\$	170.15	\$ 170.15		1	0	\$	-		0
		RETAINAGE				\$ 269.29	\$	233.80		\$	-	\$	35.49
		SUBTOTAL				\$ 5,385.84	\$	4,675.98		\$	-	\$	709.86
Task	3			•						•			
20-6.	Scientist/Technical Specialist (Key)	Per Hour	1	\$	93.77	\$ 93.77		1	0	\$	-		0
21-1.	Professional Engineer (Key)	Per Hour	1	\$	154.35	\$ 154.35		1	0	\$	-		0
		RETAINAGE				\$ 12.41	\$	12.41		\$	-	\$	-
		SUBTOTAL				\$ 248.12	\$	248.12		\$	-	\$	-
Task	4												
20-3.	Engineer (Key)	Per Hour	2	\$	112.38	\$ 224.76		0	2	\$	224.76		0
20-6.	Scientist/Technical Specialist (Key)	Per Hour	8	\$	93.77			0	8	\$	750.16		0
23-1.	Contingent Funding - Allowance only to be used as offset for field change orders	NOT BILLABLE	1000	\$	1.00	\$ 1,000.00		n/a	n/a		n/a	1	000
		RETAINAGE				\$ 98.75	\$	-		\$	48.75	\$	50.00
		SUBTOTAL				\$ 1,974.92	\$	-		\$	974.92	\$	1,000.00
		TOTAL COST				\$ 7,608.88	\$	4,924.10		\$	974.92	\$	1,709.86
Version	: 11.0	·			ost Share:	*	\$	-		\$	-	\$	-
			F		ost Share:			4,924.10		\$	974.92		1,709.86
					Retainage:			246.21		\$	48.75		85.49
			FDEP	Less	Retainage:	\$ 7,228.44	\$	4,677.90		\$	926.17	\$	1,624.37

Site Manager Approval:

Schedule of Pay Items 08-13-21 6/27/2022

Petroleum Contamination Site Response Action Services SCHEDULE OF PAY ITEMS INVOICE RATE SHEET

				PO Rate S	heet	Previously Invoiced	This	Invoice	Balance
PAY	DESCRIPTION	UNIT OF MEASURE	UNITS	NEGOTIATED ITEM PRICE	TOTAL EXTENDED PRICE	UNITS	UNITS	EXTENDED PRICE	UNITS
-	Print Name				_				

Print Name

Signature

Date of Review Letter

Schedule of Pay Items 08-13-21 6/27/2022

Appendix C

Draft Schedule of Pays Items and Attachment A Tables

Petroleum Contamination Site Response Action Services SCHEDULE OF PAY ITEMS INVOICE RATE SHEET

Facility Name: SHUFAT INC 7-Digit Facility ID #: 8628467 County: 53 Region: Central Site Manager Name: JILIAN DRENNING Site Manager Phone: (863)578-2053 Site Manager Email: jilian.drenning@flhealth.gov

Contractor: TERRA-COM Environmental Consulting, Inc.

CID #: 00559 Contract #: GC777 SPI ID #: 25409

Retainage %: 5% FDEP Cost Share %: 100.00% Total Extended Cost: \$ 49,776.90 Without Handling Fee: \$ 49,776.90

Purchase Order: Download Date: 5/26/22 9:41 Assignment Type: SCOPE

Transition Agreement:

Yes No

				F	PO Rate S	heet	Previously Invoiced	Thi	is Invoice		Balance
PAY ITEM	DESCRIPTION	UNIT OF MEASURE	UNITS		OTIATED I PRICE	TOTAL EXTENDED PRICE	UNITS	UNITS	EXTENDED PRICE		UNITS
Task	1								•		
1-2.a.	Site Health & Safety Plan for Continued Work (no cost to FDEP)	Per Site	1	\$	-	\$ -	0	0	\$ -	Т	1
		RETAINAGE				\$ -	\$ -		\$ -	\$	-
		SUBTOTAL				\$ -	\$ -		\$ -	\$	ò -
Task	2			'							
3-2.	Mobilization, Light Duty Vehicle (car or 1/2 ton truck) - > 100 miles each way	Per Round Trip	4	\$	1,035.00	\$ 4,140.00	0	0	-	Т	4
3-10.a.	Drill Rig and Support Vehicles Mobilization (hollow stem auger, mud rotary or sonic) - > 100 miles each way	Per Round Trip	1	\$	2,096.73	\$ 2,096.73	0	0	\$ -	1	1
4-1.a.	Per Diem - For travel > 1 consecutive day (prorated in quarter day incrementsin accordance with 112.061,	Per Person, Per									
4-1.a.	F.S.) - Travel Voucher required and quoted rate should be per person per day	Day	16	\$	80.00	\$ 1,280.00	0	0	\$ -		16
5-6.	HSA or MR Boring, ≤ 6 inch diameter, < 50 foot total depth	Per Foot	50	\$	39.84	\$ 1,992.00	0	0	\$ -		50
5-12.	HSA or MR Boring, > 10 to 14 inch diameter, < 50 foot total depth	Per Foot	42	\$	54.33	\$ 2,281.86	0	0	\$ -		42
6-2.a.	Well Installation - 2 inch diameter (vertical)	Per Foot	50	\$	47.52	\$ 2,376.00	0	0	\$ -		50
6-5.	Surface Casing - 6 inch diameter	Per Foot	42	\$	57.05	\$ 2,396.10	0	0	\$ -		42
8-1.	Monitoring Well Sampling with Water Level, ≤ 100 foot depth	Per Well	13	\$	241.42	\$ 3,138.46	0	0	\$ -		13
8-6.	Soil/Sediment Sample Collection	Per Sample	1	\$	84.76	\$ 84.76	0	0	\$ -		1
8-11.	Electronic Data Deliverables (EDD)	Per Sampling Event	1	\$	169.00	\$ 169.00	0	0	\$ -		1
9-3.	Soil, Volatile Organic Halocarbons (EPA 8021 or EPA 8260)	Per Sample	1	\$	69.49	\$ 69.49	0	0	\$ -		1
9-11.	Soil, Arsenic (EPA 6010 or EPA 6020)	Per Sample	1	\$	13.42	\$ 13.42	0	0	\$ -		1
9-12.	Soil, Cadmium (EPA 6010 or EPA 6020)	Per Sample	1	\$	13.42	\$ 13.42	0	0	\$ -		1
9-13.	Soil, Chromium (EPA 6010 or EPA 6020)	Per Sample	1	\$	13.42	\$ 13.42	0	0	\$ -	T	1
9-14.	Soil, Lead (EPA 6010 or EPA 6020)	Per Sample	1	\$	13.42	\$ 13.42	0	0	\$ -		1
9-15.	Soil, Toxicity Characteristic Leaching Procedure-Extraction Only (EPA 1311)	Per Sample	1	\$	61.16	\$ 61.16	0	0	\$ -	T	1
9-27.	Water, BTEX + MTBE (EPA 602, EPA 624, EPA 8021 or EPA 8260)	Per Sample	13	\$	49.03	\$ 637.39	0	0	\$ -	T	13
9-30.	Water, Polycyclic Aromatic Hydrocarbons, including 1-methylnaphthalene + 2-methylnaphthalene (EPA 610 [HPLC], EPA 625, EPA 8270 or EPA 8310)	Per Sample	13	\$	100.08	\$ 1,301.04	0	0	\$ -		13
12-6.	Transport and Disposal of Petroleum Impacted Soil (includes drum)	Per Drum	20	\$	232.67	\$ 4,653.40	0	0	\$ -		20
19-7.	Natural Attenuation or Post RA Monitoring Report, Quarterly or Non-Annual	Per Report	1	\$	725.28	\$ 725.28	0	0	\$ -		1
20-6.	Scientist/Technical Specialist (Key)	Per Hour	2	\$	100.62	\$ 201.24	0	0	-		2
		RETAINAGE				\$ 1,382.88	\$ -		- \$	\$	1,382.88
		SUBTOTAL				\$ 27,657.59	\$ -		\$ -	\$	\$ 27,657.59
Task	3										
3-2.	Mobilization, Light Duty Vehicle (car or 1/2 ton truck) - > 100 miles each way	Per Round Trip	1	\$	1,035.00	\$ 1,035.00	0	0	\$ -		1
8-1.	Monitoring Well Sampling with Water Level, ≤ 100 foot depth	Per Well	13	\$	241.42	\$ 3,138.46	0	0	\$ -		13
8-11.	Electronic Data Deliverables (EDD)	Per Sampling Event	1	\$	169.00	\$ 169.00	0	0	\$ -		1
9-27.	Water, BTEX + MTBE (EPA 602, EPA 624, EPA 8021 or EPA 8260)	Per Sample	13	\$	49.03	\$ 637.39	0	0	\$ -		13

7/29/2022 Schedule of Pay Items 03-14-22

Petroleum Contamination Site Response Action Services SCHEDULE OF PAY ITEMS INVOICE RATE SHEET

					PO Rate S	Sheet		Previously Invoiced	This	s Inv	oice		Balance
PAY ITEM	DESCRIPTION	UNIT OF MEASURE	UNITS		GOTIATED EM PRICE	тот	AL EXTENDED PRICE	UNITS	UNITS		EXTENDED PRICE		UNITS
9-30.	Water, Polycyclic Aromatic Hydrocarbons, including 1-methylnaphthalene + 2-methylnaphthalene (EPA 610 [HPLC], EPA 625, EPA 8270 or EPA 8310)	Per Sample	13	\$	100.08	s	1,301.04	0	0	\$			13
19-7.	Natural Attenuation or Post RA Monitoring Report, Quarterly or Non-Annual	Per Report	1	\$	725.28		725.28	0	0	\$	-		1
10 11	production of contact the management of contact the co	RETAINAGE				\$	350.31	\$ -		\$	_	\$	350.31
		SUBTOTAL				\$	7.006.17	\$ -		\$	_	\$	7.006.17
Task	4			<u> </u>			,,,,,,,	·		<u> </u>		Ė	,
3-2.	Mobilization, Light Duty Vehicle (car or 1/2 ton truck) - > 100 miles each way	Per Round Trip	1	\$	1,035.00	\$	1,035.00	0	0	\$	-		1
8-1.	Monitoring Well Sampling with Water Level, ≤ 100 foot depth	Per Well	13	\$	241.42	\$	3,138.46	0	0	\$	-		13
8-11.	Electronic Data Deliverables (EDD)	Per Sampling Event	1	\$	169.00	\$	169.00	0	0	\$	-		1
9-27.	Water, BTEX + MTBE (EPA 602, EPA 624, EPA 8021 or EPA 8260)	Per Sample	13	\$	49.03	\$	637.39	0	0	\$	-		13
9-30.	Water, Polycyclic Aromatic Hydrocarbons, including 1-methylnaphthalene + 2-methylnaphthalene (EPA 610 [HPLC], EPA 625, EPA 8270 or EPA 8310)	Per Sample	13	\$	100.08	\$	1,301.04	0	0	\$	-		13
19-7.	Natural Attenuation or Post RA Monitoring Report, Quarterly or Non-Annual	Per Report	1	\$	725.28	\$	725.28	0	0	\$	-		1
	•	RETAINAGE				\$	350.31	\$ -		\$	-	\$	350.31
		SUBTOTAL				\$	7,006.17	\$ -		\$	-	\$	7,006.17
Task	5			•		•							
3-2.	Mobilization, Light Duty Vehicle (car or 1/2 ton truck) - > 100 miles each way	Per Round Trip	1	\$	1,035.00	\$	1,035.00	0	0	\$	-		1
8-1.	Monitoring Well Sampling with Water Level, ≤ 100 foot depth	Per Well	13	\$	241.42	\$	3,138.46	0	0	\$	-		13
8-11.	Electronic Data Deliverables (EDD)	Per Sampling Event	1	\$	169.00	\$	169.00	0	0	\$	=		1
9-27.	Water, BTEX + MTBE (EPA 602, EPA 624, EPA 8021 or EPA 8260)	Per Sample	13	\$	49.03	\$	637.39	0	0	\$	-		13
9-30.	Water, Polycyclic Aromatic Hydrocarbons, including 1-methylnaphthalene + 2-methylnaphthalene (EPA 610 [HPLC], EPA 625, EPA 8270 or EPA 8310)	Per Sample	13	\$	100.08	\$	1,301.04	0	0	\$	-		13
19-8.	Natural Attenuation or Post RA Monitoring Report, Annual	Per Report	1	\$	1,643.51	\$	1,643.51	0	0	\$	-		1
21-20.	P.G or P.E. Review, Evaluation and Certification of an Annual Natural Attenuation Monitoring Report	Per Report	1	\$	182.57	\$	182.57	0	0	\$	-		1
		RETAINAGE				\$	405.35	\$ -		\$	-	\$	405.35
		SUBTOTAL				\$	8,106.97	\$ -		\$	-	\$	8,106.97
		TOTAL COST				\$	49,776.90	\$ -		\$	-	\$	49,776.90
Version:	12.0		Ov	vner (Cost Share:	\$	-	\$ -		\$	-	\$	-
			F	DEP (Cost Share:	\$	49,776.90	\$ -	ĺ	\$	-	\$	49,776.90
					Retainage:		2,488.85	\$ -	ĺ	\$	-	\$	2,488.85
			FDEP	Less Retainage: \$ 47,288.06		\$ -		\$	-	\$	47,288.06		

Site Manager Approva	<u> </u> :
	Print Name
	Signature
	Date of Review Letter

Schedule of Pay Items 03-14-22 7/29/2022

Attachment A Petroleum Restoration Program Scope of Work

9-Digit C	acility ID Number	E20620467
_	Facility ID Number: ICM Facility Name:	
٥.	Civi Facility Isaline.	SHUFAT INC
SubPhase(s):	: NAM	
Specifications		
All work must be per		ce with this Scope of Work (SOW) and any attachments, Chapters 62-160, 62-532, 62-777 and 62-780,
		nagement District guidance memoranda, standard industry procedures and as described in the Agency
Term Contract (ATC)		
	ced guidelines are ava gov/waste/petroleu	
		propriate FDEP forms found at: um-restoration/content/procedures-guidance-documents
		ce with PRP Standard Specification Details found at: um-restoration/content/templates-forms-tools-and-guidance
Http://Horidadop.g	JOV/Wasie/politolog	IIII-16St01dti011/c011te111/te111pidte5-1011115-t0015-and-guidanoc
The following tabl	les are included as	attachments to this SOW and further represent the details of the scope of work.
	-	
<u></u>	Water Sampling T	
L	Soil and Air Sampl	ling Table
<u> </u>	Soil Boring (SB) ar	nd Well Installation Table
L	Well Abandonmei	nt Table
	O&M (System) Pa	rameters Table
] Remedial Action (Construction Table
	Source Removal T	fable
	Teel: 1 Description:	HASP (at no cost to FDEP)
	Task 1 Description: Task 1 Deliverable:	
	iverable Due Date:	
		Pre-Drill Meeting, Install vertical extent monitoring well, conduct NAM Sampling (Semi-
	•	Annual)
1	Task 2 Deliverable:	NAM Non-Annual
	iverable Due Date:	
		NAM Sampling (Semi-Annual)
	Task 3 Deliverable:	
	iverable Due Date:	
	· · · · · · · · · · · · · · · · · · ·	NAM Nam Annual
	Task 4 Deliverable:	
	iverable Due Date:	
	Task 5 Description: Task 5 Deliverable:	NAM Appual
<i>1</i>	ask o Deliverable.	NAM Annual

Attachment A Petroleum Restoration Program Scope of Work

9-Digit Facility ID Number:	538628467
STCM Facility Name:	SHUFAT INC
Task 5 Deliverable Due Date:	
Task 6 Description:	
Task 6 Deliverable:	
Task 6 Deliverable Due Date:	
Task 7 Description:	
Task 7 Deliverable:	
Task 7 Deliverable Due Date:	
Task 8 Description:	
Task 8 Deliverable:	
Task 8 Deliverable Due Date:	
Task 9 Description:	
Task 9 Deliverable:	
Task 9 Deliverable Due Date:	
Task 10 Description:	
Task 10 Deliverable:	

Schedule of Pay Items (SPI)

Task 10 Deliverable Due Date:

PO End Date:

All unit rates and extended prices for all line item costs associated with this project are provided in the SPI [Attachment B to this Purchase Order (PO)] and shall not exceed the rates established in the ATC.

Requests for Change (RFC)

All requests for changes to the SOW must be submitted in writing and be approved in writing by the FDEP/LP using the RFC form in accordance with paragraphs 2.A and 26 of the ATC and can be found at:

http://floridadep.gov/waste/petroleum-restoration/content/templates-forms-tools-and-guidance

Any change which results in an extension of the due dates, PO end date, or a change in quantities or costs, requires that a PO Change Order be formally issued prior to performance of the revised SOW.

Performance Measures

The FDEP/LP Site Manager will review the submitted documentation to confirm that all work was performed in accordance with the Specifications referenced above. The FDEP/LP Site Manager will notify the Contractor of acceptance or any deficiencies in the work and/or deliverables. The Contractor will be given an opportunity to remedy deficiencies at no additional cost to the FDEP.

The FDEP/LP Site Manager will review the work and/or deliverables within the timeframes established in FDEP guidance documents. The Contractor will respond to any comments to complete the work and/or deliverables within the timeframe established in the comment letter or email correspondence.

Invoicing, Payments and Financial Consequences

The Contractor may submit an invoice for a Task upon written notification of acceptance of the work/deliverables by the FDEP/LP Site Manager. Upon receipt of FDEP/LP written approval of the required documentation for completed portions of each task, the Contractor must submit an invoice within thirty (30) days. Invoices for completed work may be submitted at any time for fully completed and approved tasks, but no more frequently than every thirty (30) days, for approved partial tasks. Each invoice request must contain all documentation of performance as specified in the ATC, this Purchase Order (PO), and its attachments.

Attachment A Petroleum Restoration Program Scope of Work

9-Digit Facility ID Number: 538628467
STCM Facility Name: SHUFAT INC

Failure to provide all deliverables which are satisfactory or failure to meet the specified deliverable timetables, shall result in non-payment, loss of retainage, or other financial consequences, and/or termination of the PO, as specified in the ATC. If the deliverable due day occurs on a weekend, state holiday, or federal holiday the deliverable will be due the following business day.

Retainage shall be withheld in the amount of 5%, unless otherwise noted in the SPI, from each payment by the FDEP/LP until completion and approval of all Tasks. The Contractor shall submit a Release of Claims and request for retainage payment with the final invoice. Payment of retainage will be reduced by the amount of any assessed financial consequences.

Notice of Field Activities

The Contractor must provide written notification (emails are acceptable) of field activities at least seven (7) calendar days prior to the commencement of work to all applicable parties including the PRP site manager, PRP Inspector (PRP_Inspector@dep.state.fl.us), site operator, site owner, RP and affected off-site property owners.

Deliverables

All deliverables under this Purchase Order must be electronic. Paper copies should not be submitted unless the deliverable requires a Professional Engineer (PE) or Professional Geologist (PG) signature and seal, and the electronic signature and seal does not meet the requirements in Chapters 61G15 or 61G16, Florida Administrative Code, as applicable.

Florida Department of Environmental Protection - Petroleum Restoration Program

FDEP Facility ID#: 538628467 STCM Facility Name: SHUFAT INC

Any blank fields are not applicable to the scope of work.

	SAMPLING TABLE	<u>, </u>																		
Task#	Well #(s) or Water Sample Location		Expedited Turnaround (TA)	Water Level/FP Gauging Only (8-7.)	# MWs Sampled (8-1./8-2.)	(9-27.) BTEX + MTBE	(9-30.) PAHs													
2	DMW-1,2,3,6,7,10, VMW-1, 3				8	8	8													
3	DMW-1,2,3,6,7,10, VMW-1, 3				8	8	8													
4	DMW-1,2,3,6,7,10, VMW-1, 3				8	8	8													
5	DMW-1,2,3,6,7,10, VMW-1, 3				8	8	8													
			Γask 2 Subtotal	0	8	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0
	GRAND	TOTALS		0	32	32	32	0	0	0	0	0	0	0	0	0	0	0	0	0

Attachment A (Water Sampling)

Version 11-30-18

Florida Department of Environmental Protection - Petroleum Restoration Program

FDEP Facility ID#: 538628467 STCM Facility Name: SHUFAT INC

Any blank fields are not applicable to the scope of work.

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SOIL BO	RING (SB) an	d WELL INST	ALLATION	TABLE													
	SOIL	BORING DE	TAILS		Screening	g/Split Spoor	n Intervals				V	VELL INSTALL	ATION DET	ΓAILS			
TASK#	Installation Method	Quantity	Depth (ft bls)	Total Boring Footage (ft)	Screening Depth Interval 1 & Spacing	Screening Depth Interval 2 & Spacing	Screening Depth Interval 3 & Spacing	Quantity	Well Type	Well Diameter (in)	Depth (ft bls)	Screen Interval (ft bls)	Total Well Footage (ft)	Surface Casing Diameter (in)	Surface Casing Depth (ft)	Total Casing Footage (ft)	Well Completion Type
2	HSA/MR	1	50	50				1	MW	2	40	45-50	50	6	42	42	8" MH
	то	TALS		0									50			42	