

John E. Manning District One

Cecil L Pendergrass District Two

Larry Kiker District Three

Brian Hamman District Four October 27, 2016

Frank Mann District Five

Roger Desjarlais County Manager

Richard Wm. Wesch County Attorney

Donna Marie Collins Hearing Examiner Ms. Renée J. Kwiat, CHMM Environmental Consultant Florida Department of Environmental Protection, South District P.O. Box 2549 Fort Myers, FL 33902-2549

Re: Lee County Resource Recovery Facility, PA90-30H
Construction & Demolition Debris Recycling Facility
WACS ID No. 93715
Second Semi-Annual 2016 Water Quality Monitoring Report

Dear Ms. Kwiat:

Enclosed please find the Second Semi-Annual 2016 Water Quality Monitoring (WQM) Report for the Lee County Resource Recovery Facility (RRF) and the Construction & Demolition Debris Recycling Facility (CDDRF). Flowers Chemical Laboratories, Inc. (FCL) sampled the RRF's six (6) shallow monitoring wells, or WTE-1S, WTE-2S, WTE-3SR, WTE-4S, WTE-5S and WTE-6S, which include the CDDRF's three (3) monitoring wells or WTE-2S, WTE-3SR and WTE-4S, on August 8, 2016. Sampling was performed in accordance with the Facility's Ground Water Monitoring Plan (GWMP) dated August 2010 and approved by the Department on October 19, 2010. The laboratory analytical results from this WQM event were compared to the Department's water quality standards or maximum contaminant levels (MCL) established in Chapter 62-550, F.A.C., and are summarized below.

Ground Water Monitoring Data Discussion

Ground water from all (6) shallow monitoring wells sampled exceeded the secondary drinking water standard for Iron which is 0.3 milligrams per liter (mg/L) as established by Rule 62-550, F.A.C. Ground water from four (4) of the six (6) shallow wells sampled, i.e., WTE-2S, WTE-3SR, WTE-4S and WTE-5S, exceeded the secondary drinking water standard for Total Dissolved Solids (TDS) which is 500 mg/L as established by Rule 62-550, F.A.C. The concentrations of Iron and TDS in the wells that exceeded the standards as noted above are reported in Table 1. Note that the Iron and TDS concentrations reported are consistent with background and historical monitoring results and the ground water quality in this region.

In addition, ground water from WTE-4S exceeded the Ground Water Clean-Up Target Level (GCTL) for Ammonia which is 2.8 mg/L as established in Chapter 62-777, F.A.C. The Ammonia concentration of WTE-4S was reported to be 4.4 mg/L which is consistent with the March 2016 resample of 4.0 mg/L. Both of these results are significantly lower than the 19 mg/L reported in February 2016. With the Ammonia concentration steady and just over the GCTL and given Department Memorandum SWM-13.10, Monitoring and Evaluation Ammonia in Ground Water at Solid Waste Management Facilities, dated December 3, 2012, no further confirmation sampling will be performed. However, Ammonia will continue to be monitored in accordance with the approved ground water monitoring plan.

Table 1 – Results which Exceeded Standards in Chapter 62-550, F.A.C.

Parameter (units)	WTE-1S	WTE-2S	WTE- 3SR	WTE-4S	WTE-5S	WTE-6S
Iron (mg/L)	4.27	4.26	2.53	3.61	1.62	8.13
TDS (mg/L)	BS	778	612	550	502	BS

Water Quality Standards: Iron- 0.3 mg/L; TDS- 500 mg/L; BS-Below Standard

Electronic Data Files

As required, this WQM Report includes the field and laboratory ADaPT files which are provided as separate electronic files prepared in the Department specified format.

Ground Water Elevations

The ground water elevations at the six (6) shallow (water table aquifer) and six (6) deep (sandstone aquifer) monitoring wells are provided in Table 2 below. The elevations were determined in accordance with the DEP-SOP-001/01, and specifically, FS2200, Ground Water Sampling. The data used to determine the ground water elevations is provided in the Attachments to this WQM Report.

Ms. Renée Kwiat October 27, 2016 Page 3 of 3

Table 2 – Ground Water Elevations (ft., NGVD) Measured August 8, 2016

WELL ID	Elevation (ft., NGVD)	WELL ID	Elevation (ft., NGVD)
WTE-1S	21.68	WTE-1D	14.35
WTE-2S	21.14	WTE-2D	19.87
WTE-3SR	20.17	WTE-3DR	18.99
WTE-4S	18.47	WTE-4D	17.54
WTE-5S	20.73	WTE-5D	19.43
WTE-6S	17.87	WTE-6D	16.32

Note: WTE-2S, WTE-3SR and WTE-4S comprise the monitoring well network for the CDDRF

Field Documentation and Report Certification

The attachments to this WQM Report include DEP Form #62-701.900(31), F.A.C., Water Quality Monitoring Certification, DEP Form FD 9000-24, Ground Water Sampling Log for each well sampled, field data sheets and sample chain of custody.

Recommendations/Conclusions

The monitoring results reported herein are consistent with prior monitoring results and background data for the RRF and the CDDRF and are typical for ground water in this geographical region with the exception of the ammonia concentration reported in WTE-4S. Given the substantial decrease in ammonia indicated by the resample results along with the Department Memorandum SWM-13.10, no additional ammonia monitoring is recommended at this time. The RRF and CDDRF will continue to implement the approved ground water monitoring plan and will report the results to the Department as required.

Please call me at (239) 533-8930 if White May questions pertaining to this Water Quality Monitoring Report. CENSE

No. 50138

Laura A. Gray, P.E. Engineering Manager

Solid Waste Division

Attachments

Cc:

Bureau of Solid and Hazardous Waste, FDEP

Siting Coordination Office, FDEP

Keith Howard, SWD Mike Duff, Covanta Tyler Huffman, Covanta

File II E107

LIST OF ATTACHMENTS

- Attachment A Ground Water Monitoring Report Certification, DEP Form # 62-701.900(31)
- Attachment B Ground Water Contour Maps (Shallow and Sandstone Wells) and Supporting Data
- Attachment C Ground Water Monitoring Well Inspection and Water Level Measurement Form (Shallow and Sandstone Wells)
- Attachment D Sampling Documentation (Shallow Wells)

Ground Water Sampling Logs, FD 9000-24 Field Data and Calibration Sheets Chain of Custody

Attachment A-Ground Water Monitoring Report Certification, DEP Form # 62-701.900(31)



PART I GENERAL INFORMATION

Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 DEP Form #. 62-701.900(31), F.A.C

Form Title: Water Quality Monitoring Certification

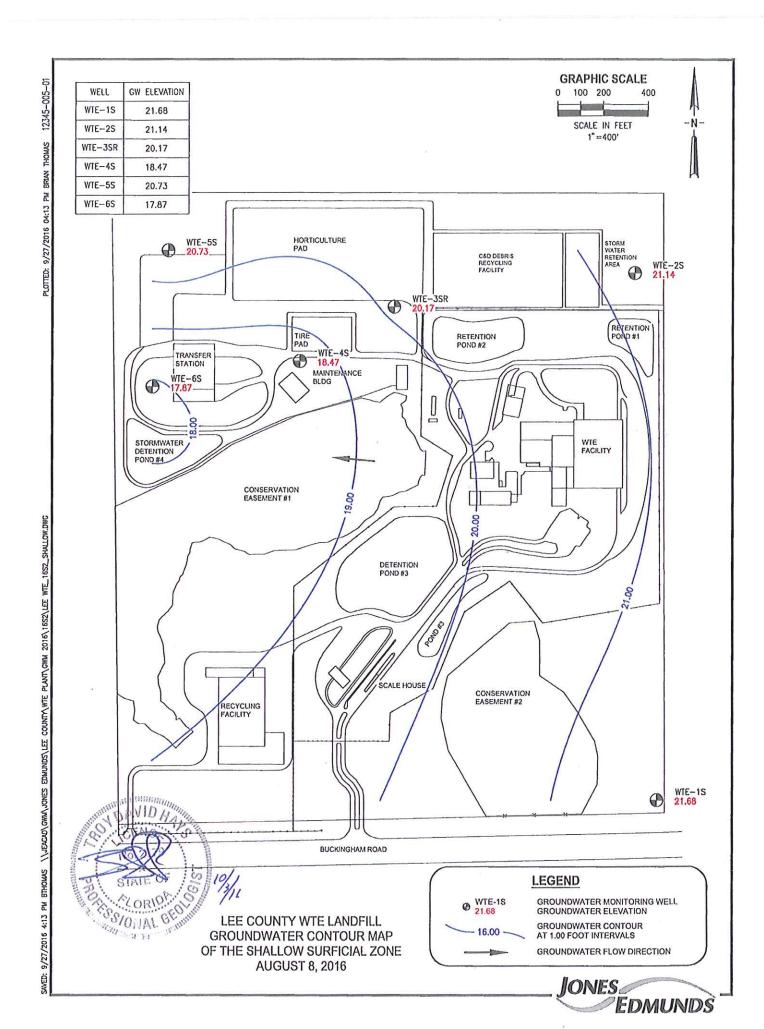
Effective Date: January 6, 2010

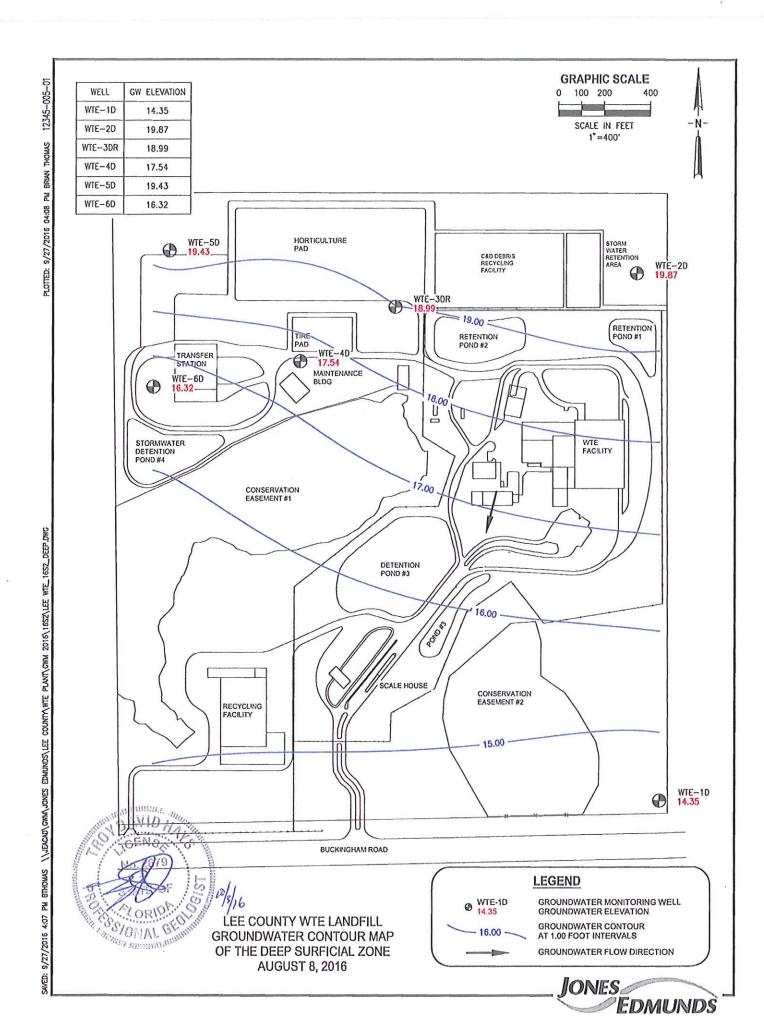
Incorporated in Rule 62-701.510(9), F.A.C.

WATER QUALITY MONITORING CERTIFICATION

(1)	Facility Name Lee County Solid Waste Energy Recovery Faci	lity	
	Address 10500 Buckingham Road		
	City Fort Myers	Zip 33905	County Lee
	Telephone Number (239) 533-8000		
(2)	WACS Facility ID 93715		
(3)	DEP Permit NumberPA90-30H		
(4)	Authorized Representative's Name Keith Howard	Title	Director
	Address 10500 Buckingham Road		
	City Fort Myers	Zip <u>33907</u>	County Lee
	Telephone Number (239) 533-8000		
	Email address (if available) khoward@leegov.com		
doc the per	certify under penalty of law that I have personally examined cument and all attachments and that, based on my inquiry of information, I believe that the information is true, accurate, nalties for submission of false information including the poseibile of 25/16	and am familiar with those individuals immediand complete. I amity of fine and imprisonn	ediately responsible for obtaining aware that there are significant nent.
	(Date) (Øwner or Auth	norized Representative's	s Signature)
PA	RT II QUALITY ASSURANCE REQUIREMENTS		
Sar	mpling Organization Flowers Chemical Laboratories, Inc.		
Ana	alytical Lab NELAC / HRS Certification # E83018		
Lab	Name Flowers Chemical Laboratories, Inc		
Add	dress P.O. Box 150597, Altamonte Springs, FL 32715-0597		
Pho	one Number (407) 339-5984		
Em	ail address (if available)		

Attachment B – Ground Water Contour Maps (Shallow and Sandstone Wells) and Supporting Data





Attachment C – Ground Water Monitoring Well Inspection and Water Level Measurement Form (Shallow and Sandstone Wells)

Ground Water Monitoring Well Inspections & Water Level Measurements

8-8-16 Inspector Name: Dushin Rayburn Date: Site and/or Well Network Name: WTE Plant Well TOC, ft., Distance to | Elevation, ft., Well in Good Well ID Time* NGVD Water, ft. NGVD Condition (Y/N)? ** WTE-1S 12:04 21.91 0.23 12:03 8.61 WTE-1D 22.96 8:69 3.04 WTE-2S 24.18 80.8 WTE-2D 3.65 23.52 8 49 WTE-3SR 23.98 3 81 4.92 WTE-3DR 8:48 23.91 WTE-4S 9.29 10.4 22.48 WTE-4D 9 28 23.81 627 WTE-5S 3 08 23.81 1009 10 08 WTE-5D 24.5 5.07 11:04 WTE-6S 23.66 5 79 11:03 WTE-6D 6.59 22.91 *Enter date too if different than noted above "If 'N' entered, explain below. Attach additional sheets if needed. Enter Comments Below As Needed. Ensure well ID is clearly noted for each comment. Additional Pages Attached (Y/N)? Land Fly (8.8.16 Inspector Signature

Forward 272/15

Lee County Resource Recovery Facility Ground Water Elevations for Aug. 8, 2016

	GW Elevation		GW Elevation (ft,
Well ID	(ft, NGVD)	Well ID	NGVD)
WTE-1S	21.68	WTE-1D	14.35
WTE-2S	21.14	WTE-2D	19.87
WTE-3SR	20.17	WTE-3DR	18.99
WTE-4S	18.47	WTE-4D	17.54
WTE-5S	20.73	WTE-5D	19.43
WTE-6S	17.87	WTE-6D	16.32

All deep wells are 4 inch diameter and all shallow well are 2 inches diameter

Well No.	Elev. TOC, NGVD	Depth to Water, ft.	Water Elevation, Ft., NGVD
			00.50
WTE-1S	21.91	0.23	21.68
WTE-1D	22.96	8.61	14.35
WTE-2S	24.18	3.04	21.14
WTE-2D	23.52	3.65	19.87
WTE-3SR	23.98	3.81	20.17
WTE-3DR	23.91	4.92	18.99
WTE-4S	22.48	4.01	18.47
WTE-4D	23.81	6.27	17.54
WTE-5S	23.81	3.08	20.73
WTE-5D	24.5	5.07	19.43
WTE-6S	23.66	5.79	17.87
WTE-6D	22.91	6:28	16.32

Attachment D – Sampling Documentation (Shallow Wells)

- Ground Water (GW) Sampling Logs, FD 9000-24
- Field Data and Calibration Sheets
- Chain of Custody

Ground Water (GW) Sampling Logs, FD 9000-24

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									8* = 0.006, 1/2			= 0.016					
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									Electric Submersiti		0	400-11					
		R	FPP Reverse	e Flow Peristalti	c Pump:	SM = Straw M	Aethod (Tubina)	Gravity Drain	n). O = Other (S	Specify)							

NOTES 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. Stabilization Criteria for range of variation of last three consecutive readings (see FS 2212, section 3)
pH: ± 0.2 units Temperature; ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater) 2, 2009

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NOTES 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. <u>Stabilization Criteria for range of variation of last three consecutive readings (see FS 2212, section 3)</u>
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2);
optionally, + 0.2 mg/L or + 10% (whichever is greater)

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WELL CA	APACITY (C	iallons Per Foot)	0,75" = 0.0	02, 1" = (0.04. 1.:	25" = 0.06.	2" = 0.16	3" = 0.37, 4" = 0.	65: 5" = 1.02	6" = 1.47	12" = 5.88					
								5/16" = 0.004, 3			5/8" = 0.016					
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Mark Committee of the		LL (feet): 8.0				TUBING	LOODE	. p.c			FIELD-FIL		No	FILTER	SIZE:	mm
		TAMINATIO		PUMP	No	MATERIA			placed		Filtration E			NI.		
TILLO		LE CONTAINER			110		- 1	SAMPLE PRE				DUPLICA	TE:	No	SAMPLE	DUBLO
	Citio	LL COMPANIEN	JI LOW TON	11011			7.00	SAMPLE PRE	SERVATION			INTENDED			SAMPLE	PUMP
SAMPLE			VATERIAL			PRES	SERVATIVE		TOTAL VOL		FINAL	ANALYSIS AND/OR		EQUIPMENT	FLOWR	ATE (Gal/Mn)
ID CODE	# CC	INTAINERS .	CODE	VOLU	ME		USED	JA.	DED IN FIELD ((mL)	pН	METHOD		DDE		
											7.09	SEE		:PP	31	0.15
REMA	RKS: H	EAVY TRA	FFIC A	REA												
	L CODES:	AG = Amber	Glass; Co	G = Clear G	Slass; P	E = Polyethyle		Polypropylene; S =			Other (Specify)					
SAMPLIN	G EQUIPM			r Peristaltic I				dder Pump; ESP =								
			REPP Rever	rse Flow Pe	eristaltic Pu	mp, SM =	Straw Metho	od (Tubing Gravity Drai	n). O = Other	(Specify)						

2, 2009

NOTES 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. Stabibization Criteria for range of variation of last three consecutive readings (see FS 2212, section 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings < 20% saturation (see Table FS 2200-2); optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

SITE						lou	C					
	E COUNTY SOLID	MASTE	NATE SIA	MELLS		SIT		re				
WELL NO		VVAGIL	-VVIL SIA	VVELLO	SAMPI	LE ID: 3064770	CATION: WI	IE	DATE:	8/8/201	^	
	7712 10				TO/MAIL I	PURGING I			IDATE:	8/8/201	0	
WELL		ITU	JBING		V	VELL SCREEN IN		STATIC	4.01	PURGE PUMP	TYPE	DEDD
					1 853	EPTH: fee		eet DEPTH(fe		OROL I OM	1111	MIT
DIAMETE	R (inches): 2.0	DI	AMETER (nches): 0	.25			TOC (feet	22.48	OR BAILER:		
WELL VO	DLUME PURGE: 1	WELL	VOLUME	= (TOTA	L WELL DEPT	H - STATICE	EPTH TO V	VATER) X W	ELL CAPACIT	Y		
(only fill o	ut if applicable)											
		= (feet -	4.01	feet) X C	0.16 gallo	ons/foot =	1.50 gal	lons		
	ENT VOLUME PUR	GE: 1 I	EQUIPME	IT VOL.	= PUMP VOLU	JME + (TUBING	CAPACITY	X TUBII	NG LENGTH) +	FLOW CELL	VOLUME	=
(only fill o	ut if applicable) =	7.23	-11 (/	5009		1417-142-17						
INSTINCT DUM	P OR TUBING	ga	allons + (gai JMP OR TUB	llons/foot X	feet) +			gallons			
	WELL (feet): 8.0				L (feet): 8.0			GING FIATED AT: 9:30	PURGING ENDED 9:4	1.00	TAL VOLUM	77
	1	CUM		PURGE	DEPTH	pH.	TEMP.	COND.	DISSOLVED 9:4		_	gal): 2.40
	1	VOL	- 1	RATE	ТО	(standard units)	(°C)	(orde units)	OXYGEN	TURBIDITY (NTUs)	COLO (descrit	
1		PUR	GED	(apm)	WATER	(0.3.03.0 0.20)	(0)	pmhos/om-	(circle units)	(14105)	(descrit	(describe)
	VOLUME PURGED	(gall	ons)		(feet)			or µS/cm	mg/L or			
TIME	(gallons)				10000000				% caturation			
9:40	1.50	1.8	50	0.15	4.03	7.02	30.0	650.0	0.60	2.84	NON	IE NONE
9:43	0.45	1.9	95	0.15	4.03	7.02	30.0	650.0	0.60	2.68	NON	IE NONE
9:46	0.45	2.4	40	0.15	4.03	7.02	30.0	650.0	0.59	2.57	NON	E NONE
											1	
											-	
								·				
		10000									1	
WELL CAPAC	CITY (Gallons Per Foot) 0.	75" = 0.02,	1" = 0.04;	1.25" = 0.00	6, 2" = 0.16, 3	3" = 0.37; 4" = 0.65;	5" = 1.02 6"	" = 1.47. 12" = 5.68				
TUBING INSI	DE DIA, CAPACITY (Gal./Ft	.) 1/3" = 0	.0006, 3/16	= 0.0014,	1/4" = 0.0026	5/16" = 0.004, 3/8" =			6			
PURGING EQ	UIPMENT CODES: B =	Baller,	BP = Bladder	Pump, ES	SP = Electric Subma		Peristaltic Pump,	O = Other (Specif	0			
				-		SAMPLING	DATA	2				
	BY (PRINT) / AFF	LIATIO	N:	SAN	IPLER(S) SIG	NATURE(S):			SAMPLING		SAMPLI	
PUMP OF	RAYBURN/FCL			TUD	ING			Teres	INITIATED			AT: 9:51
1000	WELL (feet): 8.0				ING ERIAL CODE	. D.C		(A. 1000)	D-FILTERED:		ILTER S	IZE: mm
	CONTAMINATION:	P	UMP	Vo IMAI		BING Repla	ncod	Filtra	DUPLICATI		Nie	
	SAMPLE CONTAINER SE		- TOWN BO		100	SAMPLE PRESE				-	No	Uni E Bi Ala
						JANTLE PRESE	AVAIION	- 1	INTENDED ANALYSIS		SA	MPLE PUMP
SAMPLE		MATERIAL			PRESERVATIVE		OTAL VOL	FINAL	AND/OR	SAMPLING EQUI	PMENT FLO	OWRATE (Gal / Min)
ID CODE	# CONTAINERS	CODE	VOLUME		USED	ADDE	D IN FIELD (mL)	pН	METHOD	CODE	2072252322	
		-						7.02	SEE COC	RFPP		0.15
									_			
REMARKS: HE	AVY TRAFFIC AREA											
REMARKS, FIE	AVI TRAFFIC AREA											
MATERIAL CO	DDES: AG = Amber GI:	ess: CG:	= Clear Glass;	PE = Polye	thulana DD - D	olypropylene; S = Sito		0-00-00	a a			
			eristaltic Pump	B = Ball			trio Submersible F		"			
						Tubing Gravity Drain).						1
					1			- followed and the second				

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pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2);
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2, 2009

SITE						ISI	TE								
	EE COUNTY SOLID	WASTE-	WTE S/A WE	LLS		1.00	CATION: WI	TE							
WELL N					SAMPL	E ID: 3064770		1.1.		DAT	re:	8/8/20	016		
						PURGING	DATA						- 1-		
WELL		TUE	BING		1.000	ELL SCREEN IN	NTERVAL		STATIC	3.	.08 PU	JRGE PU	IMP TYP	E RFPF)
DIAME	TCD (l	l		8 5 55	DE	EPTH: fee	et to fe		DEPTH(fe	eet):					
DIAME	TER (inches): 2.0	DIA	AMETER (inche	es): 0.25	DEDT				TOC (feet	1): 23.	81 OF	RBAILER	t:		
only fill	VOLUME PURGE: 1 l out if applicable)	WELL	/OLUME = (I	OTAL WELL	DEBIL	1 - STATICT	DEPTH TO M	VATER	3) X V	VELL CAPA	CITY				
(Orny in	= (17.41	1 feet -	3.08	for	W V 016	aallana	woo!	- 22	^	0.20				
EQUIP	MENT VOLUME PUR	GE: 1 E	OUIPMENT	OI . = PUME	VOLII	et) X 0.16	gallons/	лоот Х		9 galloi NG LENGT		LOMICE	LLVOLL	DATE:	
(only fill	out if applicable)	· · · · ·	qui ii	OLI -, O	VOLU.	ML . (IODIIIO	UNI AGITT	^	100	NO LLING I	1) 11	LUVVCL	LL VOL	JIVIE	
		gallon	15 + (gallons/fo	ot X	feet) +	ga	llons	=	gallons					
	JMP OR TUBING		FINAL PUMP C					IGING		PURGING	ĺ.	TOT	TAL VOLUM	Ε	
DEPTH	IN WELL (feet): 8.0	-		WELL (feet):			INI	TIATE	D AT: 10:	10 ENDEC			JRGED (0
		CUMU			PTH	рН	TEMP.	1 7	COND.	DISSOLVED	T	URBIDITY	C	OLOR	ODOR
		VOLU	100000	80474	то	(standard units)	(°C)	8.	irde units)	OXYGEN		(NTUs)	(de	scribe)	(describe)
		PURG!	1990	Men 11455	ATER			1	mhos/om-	(circle units)					
TIM	VOLUME PURGED (gallons)) (gallor	ns)	to the	eet)			<u>Cri</u>	<u>r</u> μS/cm	mg/L <u>or</u>					
10:2	12	2.50	0.1	5 3	.15	6.83	28.8	+	719.0	% caturation 0.55	-	4.89	- NI	ONE	NONE
10:3	100	3.25	200	1970	.15	6.83	28.8		719.0	0.55		4.89		ONE	NONE
10:3		4.00	15.4.4	1997	.15	6.83	28.8	_	719.0	0.55		4.71		ONE	
				<u> </u>	10	0.00	20.0	-	19.0	0.54		4.54	140	DIVE	NONE
								+-							
					-			-					-		
					_			+					_		
								-					_	-	
								_			-		_	-	
								+					_		
								\vdash					_	-	
WELL CAP	ACITY (Gallons Per Foot) 0.	.75" = 0.02,	1" = 0.04; 1.2'	5" = 0.06, 2" = 1	0.16: 3"	= 0.37. 4" = 0.65	5" = 1.02 6"	" = 1.47	12" = 5.8/						
TUBING IN	SIDE DIA. CAPACITY (Gal. Ft	L) 1/8" = 0.0	.0006, 3/16" = 0.0	0014, 1/4" = 0.0	026, 5/	16" = 0.004, 3/8"	= 0.006, 1/2" =	= 0.010,	5/3" = 0.01						
PURGING E			BP = Bladder Pump,				Peristaltic Pump;		Other (Specif						
DAMBLE.				Towns and the second		SAMPLING	DATA								
	ED BY (PRINT) / AFFI I C RAYBURN/FCL	ILIATION	1:	SAMPLER(3) SIGN	NATURE(S):				SAMPLI		er 165 (15	SAMP		
	OR TUBING			TUBING				1. 2 1		INITIAT				D AT: 10	
	IN WELL (feet): 8.0			MATERIAL	CODE	D-E				D-FILTERE		No	FILTER	R SIZE:	mm
	ECONTAMINATION:	: PL	UMP No	IMPATERIAL	TUBI	W-1100-110-7	aced		Irmud	tion Equipm		pe:	No		
	SAMPLE CONTAINER SI	PECIFICATION	ON			SAMPLE PRESI				INTEND			110	SAMPLE	PLIMP
SAMPLE				DDESE	RVATIVE		TOTAL VOL		FINAL	ANALYS	SIS				
ID CODE	#CONTAINERS	MATERIAL CODE	VOLUME	1	SED		D IN FIELD (mL)		FINAL	AND/O METHO		AMPLING E		FLOWRA	ATE (Gal / Min)
				1.	20	Con	Ula ricco (mc)		6.83	SEE C		RFF		-	0.15
								-	0.00	022.5		141.			J. 10
				1				-+			-				
										_	-				
								-+			_				
								-			_			-	
REMAR	.KS:	-													
MATERIAL						ypropytene; S = Site			Other (Specif	y)					
SAMPLING			eristaltic Pump, E Flow Peristaltic Pum			Pump, ESP = Electrology (Pain);									
	10		TOTAL CHISCOLOGIC CIT	P. OM - CUGW	wenion ()	July Gravity Diani,	U = Other (Spec	OTY)							

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SITE			marana ang ang			SIT	ΓE							
SITE: LEE WELL NO:	COUNTY SOLID	WASTE-	WTE S/A WE				CATION: W	/TE						
WELL NO.	WTE-6S				SAMPLE	ID: 306477G				DATE:	8/8/2	.016		
WELL		ITU	BING		IWEL	L SCREEN IN		STAT	TIC	5 70	PURGE PU	TAD TVD	T. DCC	-
					DEPT				TH(feet		JUKGE FO	MPITE	:: Krr	þ
DIAMETER	R (inches); 2.0	DIA	AMETER (inch	es): 0.25				TOC	(foot)	22.66	OR BAILER	₹:		
WELL VOL	LUME PURGE: 1	1 WELL V	/OLUME = (TOTAL WELL	. DEPTH	- STATIC D	EPTH TO V	WATER) X	WEL	L CAPACITY				
(only till out	t if applicable) = (19,9	98 feet -	F 70	for	V 0	13 malla							
EQUIPMEN	NT VOLUME PUR	RGE: 1 E	OUIPMENT \	- 5.79 /OL = PLIMP	MILION	et) X 0.	16 gallo	ons/foot =		27 gallons	TOWACEL			
(only fill out	t if applicable)		QUI IIILIT. V	OL FOIM	VOLUME	: T (TUBING	CAPACITI	λ 1	LORING	LENGTH) + F	-LOW CELI	L VOLUM	E	
200 80 1	= ga	allons + (gallons/fo	ot X	feet) +		gallons =	gallor	ns					
INITIAL PUMP O			FINAL PUVP (OR TUBING				RGING		PURGING	тот	AL VOLUME		
DEPTH IN	WELL (feet): 8.0		DEPTH IN	WELL (feet):	: 8.0		INI	TIATED AT:	: 11:05	ENDED 11:33		RGED (G		.00
		CUM			EPTH	βH	TEMP.	COND.		ISSOLVED	TUREIDITY		LOR	ODOR
		VOLU	-0.000			(standard units)	(°C)	(oirde unit	0.07	OXYGEN	(NTUs)	(des	icrbe)	(describe)
		PURG	1975	1000	ATER			µmhee/ en		oirde units)				
TIME	VOLUVE PURGED (gallons)	o (gaffor	15)	Ç1-	feet)			cr µS/cm		mg/L or				
11:23	2.50	2.5	0.1	5 5	.82	7.21	28.6	516.0		0.46	1.94	N/C	NE	NONE
11:28	0.75	3.2			.82	7.21	28.6	516.0		0.46	1.80		NE	NONE
11:33	0.75	4.0			.82	7.21	28.6	516.0		0.45	1.62)NE	NONE
					0.2	1,4.	20,0	010.0	-	0.43	1.02	INC	MAC	NONE
WELL CAPACIT	TY (Gallons Per Foot): 0.	.75" = 0.02,	1" = 0.04; 1.25	5" = 0.06, 2" = (J. 16, 3" = 0	J.37, 4" = 0.65;	5" = 1.02, 6	5" = 1.47, 12"	= 5.83					
TUBING INSIDE	DIA CAPACITY (Gal./FI	t) 1/3" = 0.0	2006, 3/16" = 0.0	J014; 1/4" = 0.0°	026, 5/16"	= 0.004, 3/8" =								
PURGING EQUIP	MENT CODES: B	= Baler, E	BP = Bladder Pump	ESP = Electri			Peristaltic Pump;	O = Other ((Specify)					
SAMPLED F	BY (PRINT) / AFF	MOITALIE	1.	SAMPLER(S		SAMPLING I	DATA			SAMPLING		SAMPLII	10	
DUSTIN C F	RAYBURN/FCL		*	Or unit ELI MA	3) 01014/1	TORL(O).		13,-		SAMPLING INITIATED AT		ENDED	33.33	-38
PUMP OR T				TUBING						ILTERED:		FILTER S		
	NELL (feet): 8,0			MATERIAL						n Equipment T			,,,	
	ONTAMINATION:		JMP No		TUBING					DUPLICATE:		No		
	SAMPLE CONTAINER S	PECIFICATION	NC			SAMPLE PRESER	RVATION						SAMPLE	
SAMPLE		WATERIAL		PRESE	RVATIVE	т.	OTAL VOL	FIN	(AL	INTENDED				RATE (Gal /
ID CODE	# CONTAINERS	CODE	VOLUME	US	SED	ADDEC	D IN FIELD (mL)	pi	H ľ	ANALYSIS AND/OR METHOD	COD			
		\perp						7.3	21	SEE COC	RFF	op.	(0.15
		+												
		-												
REMARKS														
KEWAKKS.	ž.													
MATERIAL CODE	ES: AG = Amber G/	lass, CG =	Clear Glass, PE	= Polyethylene:	PP = Polyon	ondere S=Str	one I = Tefo	n: O = Other (Cossell				_	
SAMPLING EQUI						πρ, ESP = Elect			Speciff.					
	RF	PP Reverse f	Flow Peristaltic Pum											

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2, 2009

Field Data Sheets

FCL Field

Calibration Sheet

Sampler:

DUSTIN C RAYBURN

Project:

LEE COUNTY SOLID WASTE-WTE S/A WELLS

Date:

8/8/2016

Equipment Used:

RFPP

Weather conditions:

CLOUDY/HOT

Starting Calibration Values:

7:00

L. Jack A.

	Unit	Standard	Reading	Standard	Reading	Standard	Reading
рН	рН	4.00	4.00	7.00	7.00	10.00	10.00
Conductivity	us	1413	1413	25000			
Turbidity	NTU	1.00		10.00	10.02		
DO	%	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	100.00%

Ending Calibration Values:

18:40

	Unit	Standard	Reading			
рН	рН	7.00	7.00			
Conductivity	us	1413	1410			
Turbidity	NTU	10.00	10.04			
DO	%	xxxxxx	99.60%			

Field

SOP2.08

Determination of Field

INST. Field

	Т	INST.	T -	1							
Analyst:	DCR	Date:	08-08-16	1							
Employee#:		Time:									
			Field DO	Field Tem	p. Field Condu	Field pH	Field Turbi	Field Elevation	Field Water	ITOC	
Sample#			Field DO	Field Tem	o. Field Condu	Field pH	Field Turbi	Field Elevation	Field Water	ITOC	
Unit			mg/L	оС	umhos/cm	рН	NTU	ft	ft	ft	
306477GW1			0.81	26.2	807.0	6.98	6.44	21.14	3.04	24.18	WTE-2S
306477GW2			0.66	29.4	659.0	7.09	5.19	20.17	3.81	23.98	WTE-3SR
306477GW3			0.59	30.0	650.0	7.02	2.57	18.47	4.01	22.48	WTE-4S
306477GW4			0.54	28.8	719.0	6.83	4.54	20.73	3.08	23.81	WTE-5S
306477GW5			0.45	28.6	516.0	7.21	1.62	17.87	5.79	23.66	WTE-6S
306477GW6			0.43	25.2	625.0	6.92	2.75	21.68	0.23	21.91	WTE-1S
	-										

Chain of Custodies

Check Box That Applies To Your Location

Dirwers Chemical

481 Newburyport Ave. laborators, inc.

Hewers Chemical Lalin Scutti

Labs Merilli

Howas Chemical

Dewers Chemical Lainters

512 S.W. Hanvey Greene Dr Madison, PL 22340 Bus. 850-973-6878 Fax 850-973-5878



3380 Overseas Highway, Ste. 103 Marahon, FL 23050 Bus: 302-743-8598 Fax: 305-743-8598 DOWNLOAD REPORTS, INVOICES AND CHAINS OF CUSTODY WWW.flowerslabs.com West Park Industrial Plaza 571 N.W. Morcanillo P., Sig. 111 Port St. Lucie, Pt. 34986 Sus. 772-343-8009 Fax: 772-343-8069 Altamonte Springs, FL 32701 BLS: 407-339-5984 Fax: 407-260-6110

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	w Remit		c	COMMENTS	500												8	+
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					di.	OWLY)	120	N	m	2	V	0	1					7 6
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			Dusta Raybula	J	DW ² drinking water SO - soli/solid S	DATE	918-8						>				Till S	8816/750
427	The second secon		3	17	SOS		(io									-	and G	3 816
Lee County			十000	Jak	water water	E 10	S	5.6	37	30	500	2	a.k					
9			1 1	and .	GW - ground water SW - surface water	SAMPLEID	WTE -28	WTE-35K	WIE - 48	WTE-58	WTE-ES	WTE- 18	Trip Black				Petinguished By Attliance	Cank
374	i i		Living ya cooping	Sample: Sammura	GW.	20	3				3	3	1				elnquiso	" Trans
Action	505		7	8		Mah OM	-	64	in	17	ii)	ω	r-	1/2	in	0;	a .	5

FINANCE CHARGES APPLIED TO PAST DUE INVOICES

8/9/16 1031

YELLOW - Client Copy