LEE COUNTY
SOUTHWEST FLORIDA

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April 12, 2013

Mr. Albert D. McLaurin, PE
Director of District Management
Florida Department of Environmental Protection
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
First Semi-Annual 2013 Water Quality Monitoring Report

Dear Mr. McLaurin:

Enclosed please find the First Semi-Annual 2013 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 February 6, 2013. 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 six (6) shallow monitoring wells 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. The Total Dissolved Solids (TDS) concentration of ground water from well WTE-2S exceeded 500 mg/L, which is the secondary drinking water standard for Total Dissolved Solids (TDS) established by Rule 62-550, F.A.C. The concentrations of Iron and TDS in the wells that exceeded the MCL as noted above are provided in Table 1.

Table 1 – Summary of Results for Monitoring Wells which Exceeded the Water Quality Standards Established in Chapter 62-550, F.A.C.

Parameter (units)	WTE-1S	WTE-2S	WTE-3SR	WTE-4S	WTE-5S	WTE-6S
Iron (mg/L)	2.66	1.43	3.11	0.712	1.5	1.65
TDS (mg/L)	BS	568	BS	BS	BS	BS

BS-Below Standard

Electronic Data Files

In accordance with the Department's electronic reporting requirements, 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 Department's Standard Operating Procedures for Field Activities, DEP-SOP-001/01, and specifically per FS2200, Ground Water Sampling. The data used to determine the ground water elevations, i.e., top of casing elevations and depth to ground water measurements, is provided in the Attachments to this WQM Report.

Table 2 – Ground Water Elevations (ft., NGVD) Measured February 6, 2013

WELL ID	Elevation (ft., NGVD)	WELL ID	Elevation (ft., NGVD)
WTE-1S	17.72	WTE-1D	8.93
WTE-2S	17.11	WTE-2D	15.62
WTE-3S	16.08	WTE-3D	14.83
WTE-4S	14.46	WTE-4D	13.3
WTE-5S	16.78	WTE-5D	15.23
WTE-6S	13.81	WTE-6D	12.69

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 for the First Semi-Annual 2013 Water Quality Monitoring Report are consistent with prior monitoring results and background data for the RRF and the CDDRF and are typical for ground water from this geographical region. Based on these monitoring results, no additional ground water monitoring is recommended. The RRF and CDDRF will continue to implement the approved ground water monitoring plan and will report the results to the Department as required.

In accordance with the requirements of Chapter 62-701, F.A.C. for construction and demolition debris (CDD) facilities, and as noted in Department correspondence approving the current Groundwater Monitoring Plan, the CDDRF is required to prepare the biennial technical report of water quality monitoring data in accordance with Rule 62-701.510(8)(b), F.A.C. The technical report will include monitoring results from the CDDRF's monitoring wells for the period from February 2011 through February 2013 as stated in the above-referenced Department correspondence.

Please call me at (239) 533-8930 if you have any questions pertaining to this Water Quality Monitoring Report.

Sincerely,

4/15/13

Laura A. Gray, P.E. #50138
Engineering Manager
Solid Waste Division

LAURA A. GRAY
LICENSE
No. 50138
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Attachments

Cc: Bill Krumbholz, DEP
Jay Standiford, DEP
Lindsey J. Sampson, SWD
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 Forms (Shallow and
Sandstone Wells)

Attachment D – Sampling Documentation (Shallow Wells)

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

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

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

PART I GENERAL INFORMATION

(1) Facility Name Lee County Solid Waste Energy Recovery Facility

Address 10500 Buckingham Road

City Fort Myers Zip 33905 County Lee

Telephone Number (239) 533-8000

(2) WACS Facility ID 93715

(3) DEP Permit Number PA90-30H

(4) Authorized Representative's Name Lindsey J. Sampson Title Director

Address 10500 Buckingham Road

City Fort Myers Zip 33907 County Lee

Telephone Number (239) 533-8000

Email address (if available) lsampson@leegov.com

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submission of false information including the possibility of fine and imprisonment.

4/12/13 (Date)

Lindsey J. Sampson (Owner or Authorized Representative's Signature)

PART II QUALITY ASSURANCE REQUIREMENTS

Sampling Organization Flowers Chemical Laboratories, Inc.

Analytical Lab NELAC / HRS Certification # E83018

Lab Name Flowers Chemical Laboratories, Inc

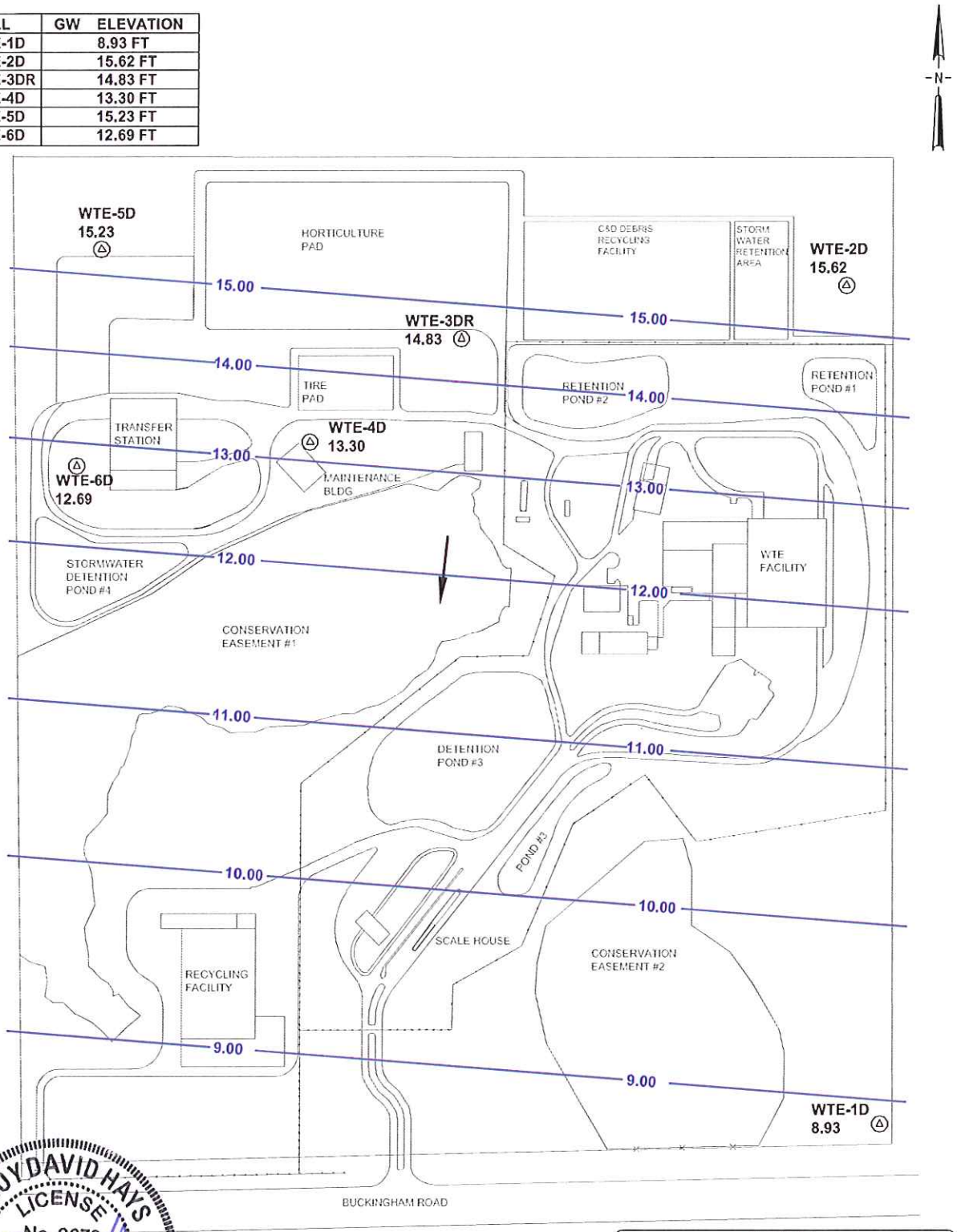
Address P.O. Box 150597, Altamonte Springs, FL 32715-0597

Phone Number (407) 339-5984

Email address (if available)

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

WELL	GW ELEVATION
WTE-1D	8.93 FT
WTE-2D	15.62 FT
WTE-3DR	14.83 FT
WTE-4D	13.30 FT
WTE-5D	15.23 FT
WTE-6D	12.69 FT



TROY DAVID HAYS
LICENSE
No. 2679
STATE OF
FLORIDA
PROFESSIONAL GEOLOGIST
4/10/13

LEGEND

WTE-1D 8.93	GROUNDWATER MONITORING WELL WITH GROUNDWATER ELVATION (ft)
	GROUNDWATER ELEVATION CONTOUR
	GROUNDWATER FLOW DIRECTION

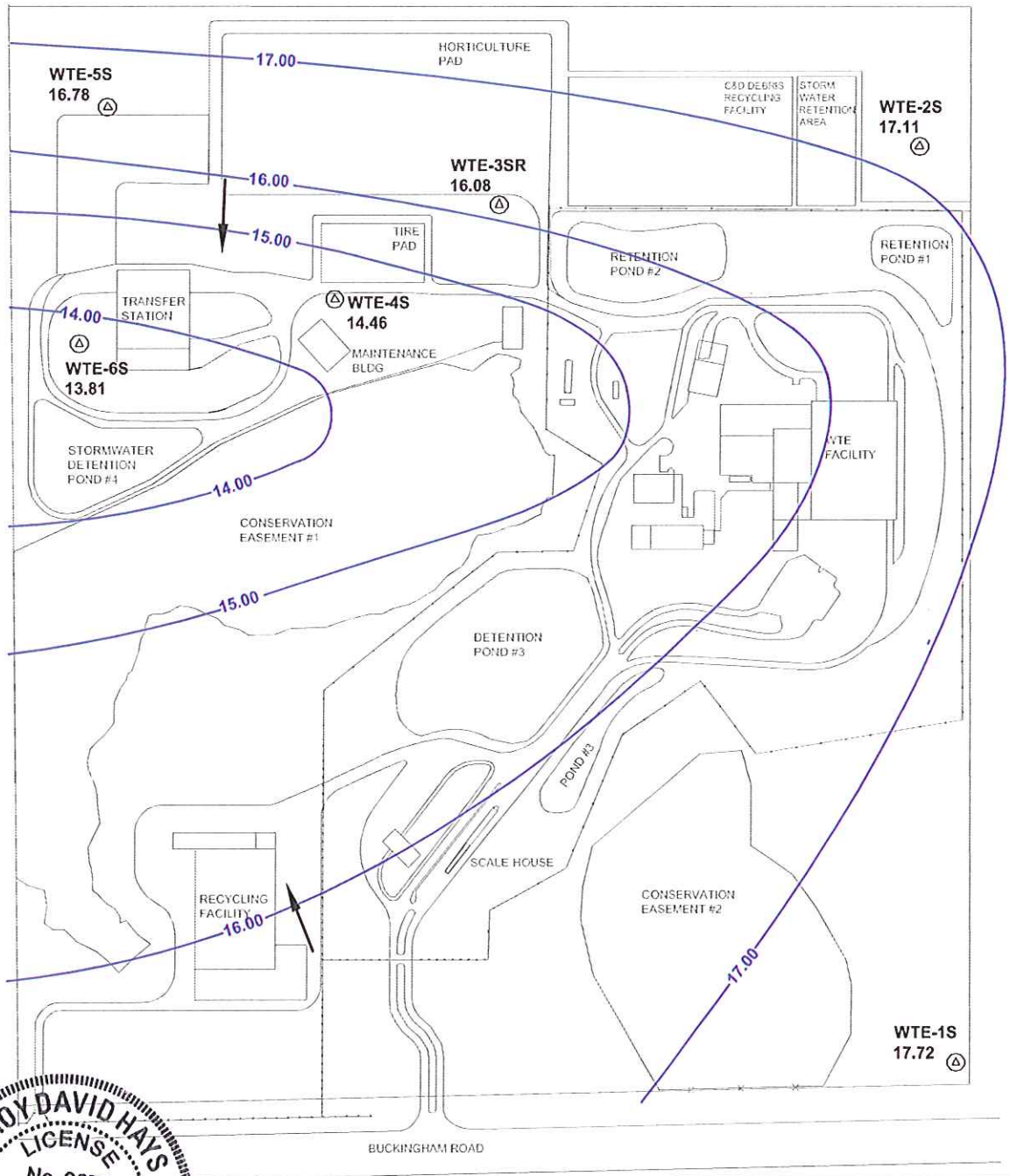
NOTE: NOT TO SCALE

DEEP AQUIFER WELLS
FEBRUARY 6, 2013
SOLID WASTE ENERGY RECOVERY FACILITY
LEE COUNTY SOLID WASTE DIVISION

JONES EDMUNDS

PLOTTED: 4/11/2013 07:48 AM TROY HAYS 12345-005-01
SAVED: 4/11/2013 7:46 AM THAYS K:\JONES EDMUNDS\LEE COUNTY\WTE PLANT\1351\WTE DEEP 2-6-2013.DWG

WELL	GW ELEVATION
WTE-1S	17.72 FT
WTE-2S	17.11 FT
WTE-3SR	16.08 FT
WTE-4S	14.46 FT
WTE-5S	16.78 FT
WTE-6S	13.81 FT



TROY DAVID HAYS
LICENSE
No. 2679
STATE OF FLORIDA
PROFESSIONAL GEOLOGIST
4/10/13

SHALLOW AQUIFER WELLS
FEBRUARY 6, 2013
SOLID WASTE ENERGY RECOVERY FACILITY
LEE COUNTY SOLID WASTE DIVISION

LEGEND

WTE-1S 17.72	GROUNDWATER MONITORING WELL WITH GROUNDWATER ELVATION (ft)
	GROUNDWATER ELEVATION CONTOUR
	GROUNDWATER FLOW DIRECTION

NOTE: NOT TO SCALE

JONES EDMUNDS

PLOTTED: 4/11/2013 07:47 AM TROY HAYS 12345-005-01

SAVED: 4/11/2013 7:46 AM THAYS K:\JONES EDMUNDS\LEE COUNTY\WTE PLANT\1351\WTE SHALLOW2-6-2013.DWG

Lee County Resource Recovery Facility
Ground Water Elevations for February 6, 2013

Well ID	GW Elevation (ft, NGVD)	Well ID	GW Elevation (ft, NGVD)
WTE-1S	17.72	WTE-1D	8.93
WTE-2S	17.11	WTE-2D	15.62
WTE-3SR	16.08	WTE-3DR	14.83
WTE-4S	14.46	WTE-4D	13.3
WTE-5S	16.78	WTE-5D	15.23
WTE-6S	13.81	WTE-6D	12.69

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	Total Depth (ft)
WTE-1S	21.91	4.19	**17.72**	14.6
WTE-1D	22.96	14.03	**8.93**	93.55
WTE-2S	24.18	7.07	**17.11**	12
WTE-2D	23.52	7.9	15.62	93
WTE-3SR	23.98	7.9	**16.08**	16.95
WTE-3DR	23.91	9.08	**14.83**	92
WTE-4S	22.48	8.02	**14.46**	13.4
WTE-4D	23.81	10.51	**13.3**	96
WTE-5S	23.81	7.03	**16.78**	17.41
WTE-5D	24.5	9.27	**15.23**	94
WTE-6S	23.66	9.85	**13.81**	19.98
WTE-6D	22.91	10.22	**12.69**	96

Note: WTE-3SR and WTE-3DR were installed on 9/15/10 and 10/1/10, respectively, to replace WTE-3S and WTE-3D which were relocated due to development of area for the C&D recycling facility. The Department approved the relocation of WTE-3S (to WTE-3SR) and WTE-3D (to WTE-3DR) on June 18, 2010 in letter which approved the C&D facility & its' GWM network. The C&D Facility's GWM network consists of WTE-2S (upgradient), WTE-3SR and WTE-4S (both downgradient)

Lee County Resource Recovery Facility
Ground Water Elevations for February 6, 2013

Well ID	GW Elevation (ft, NGVD)		Well ID	GW Elevation (ft, NGVD)
WTE-1S	17.72		WTE-1D	8.93
WTE-2S	17.11		WTE-2D	15.62
WTE-3SR	16.08		WTE-3DR	14.83
WTE-4S	14.46		WTE-4D	13.3
WTE-5S	16.78		WTE-5D	15.23
WTE-6S	13.81		WTE-6D	12.69

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	Total Depth (ft)
WTE-1S	21.91		4.19	**17.72**	14.6
WTE-1D	22.96		14.03	**8.93**	93.55
WTE-2S	24.18		7.07	**17.11**	12
WTE-2D	23.52		7.9	15.62	93
WTE-3SR	23.98		7.9	**16.08**	16.95
WTE-3DR	23.91		9.08	**14.83**	92
WTE-4S	22.48		8.02	**14.46**	13.4
WTE-4D	23.81		10.51	**13.3**	96
WTE-5S	23.81		7.03	**16.78**	17.41
WTE-5D	24.5		9.27	**15.23**	94
WTE-6S	23.66		9.85	**13.81**	19.98
WTE-6D	22.91		10.22	**12.69**	96

Note: WTE-3SR and WTE-3DR were installed on 9/15/10 and 10/1/10, respectively, to replace WTE-3S and WTE-3D which were relocated due to development of area for the C&D recycling facility. The Department approved the relocation of WTE-3S (to WTE-3SR) and WTE-3D (to WTE-3DR) on June 18, 2010 in letter which approved the C&D facility & its' GWM network. The C&D Facility's GWM network consists of WTE-2S (upgradient), WTE-3SR and WTE-4S (both downgradient)

Attachment C – Ground Water Monitoring Well Inspection Forms (Shallow and Sandstone Wells)

FLOWERS CHEMICAL LABORATORIES INC.
P.O. BOX 150597, ALTAMONTE SPRINGS FL 32715-0597 PHONE (407) 339-5084 FAX (407) 260-6110 www.flowerslabs.com

FCL/LCSWD
Monitoring Well Inspection Form

DATE: 2/6/13

SITE NAME: WTE

SITE LOCATION: Lee County

WELL NUMBER: WTE-15 ✓ Shallow ___ Deep WELL DIAMETER: 2.00"

LOCATION: ___ Landfill ___ Percolation Pond ___ O&M Building X WTE Site

WELL TYPE: X Background ___ Detection ___ Compliance

TOC Elevation: 21.91' TOTAL WELL DEPTH: 14.60' STATIC DEPTH TO WATER 4.19'

GROUNDWATER NGVD: (TOC Elevation – Static Depth to Water) 17.72'

Comments: (PER Monitoring Well Inspection on A12 of A19 of Contract):
Everything was Inspected, Everything was ok.

DATE: 2/6/13

SITE NAME: WTE

SITE LOCATION: Lee County

WELL NUMBER: WTE-10 ___ Shallow ✓ Deep WELL DIAMETER: 4.00"

LOCATION: ___ Landfill ___ Percolation Pond ___ O&M Building ✓ WTE Site

WELL TYPE: ✓ Background ___ Detection ___ Compliance

TOC Elevation: 22.96' TOTAL WELL DEPTH: 93.55' STATIC DEPTH TO WATER 14.03'

GROUNDWATER NGVD: (TOC Elevation – Static Depth to Water) 8.93'

Comments: (PER Monitoring Well Inspection on A12 of A19 of Contract):
Everything was Inspected, Everything was O.K.

FLOWERS CHEMICAL LABORATORIES INC.
P.O. BOX 150597, ALTAMONTE SPRINGS FL 32715-0597 PHONE (407) 339-5984 FAX (407) 260-6110 www.flowerslabs.com

FCL/LCSWD
Monitoring Well Inspection Form

DATE: 2/6/13

SITE NAME: WTE

SITE LOCATION: Lee County

WELL NUMBER: WTE-2S ✓ Shallow ___ Deep WELL DIAMETER: 2.00"

LOCATION: ___ Landfill ___ Percolation Pond ___ O&M Building ✓ WTE Site

WELL TYPE: ___ Background ✓ Detection ___ Compliance

TOC Elevation: 24.18' TOTAL WELL DEPTH: 12.00' STATIC DEPTH TO WATER 7.07'

GROUNDWATER NGVD: (TOC Elevation – Static Depth to Water) 17.11

Comments: (PER Monitoring Well Inspection on A12 of A19 of Contract): Everything was Inspected, lock rusty + needs to be replaced, Everything Else ok.

DATE:

SITE NAME: WTE

SITE LOCATION: Lee County

WELL NUMBER: WTE-2D ___ Shallow ✓ Deep WELL DIAMETER: 4.00"

LOCATION: ___ Landfill ___ Percolation Pond ___ O&M Building ✓ WTE Site

WELL TYPE: ___ Background ✓ Detection ___ Compliance

TOC Elevation: 23.52' TOTAL WELL DEPTH: 93.00' STATIC DEPTH TO WATER 7.9

GROUNDWATER NGVD: (TOC Elevation – Static Depth to Water) 15.62

Comments: (PER Monitoring Well Inspection on A12 of A19 of Contract): Everything was Inspected, lock rusty + needs to be replaced, Everything Else O.k.

FLOWERS CHEMICAL LABORATORIES INC.

P.O. BOX 150997, ALTAMONTE SPRINGS FL 32715-0997 PHONE (407) 339-5984 FAX (407) 260-6110 www.flowerslabs.com

FCL/LCSWD
Monitoring Well Inspection Form

DATE: 2/6/13

SITE NAME: WTE

SITE LOCATION: Lee County

WELL NUMBER: WTE-35R ✓ Shallow ___ Deep WELL DIAMETER: 2.00"

LOCATION: ___ Landfill ___ Percolation Pond ___ O&M Building ✓ WTE Site

WELL TYPE: ___ Background ✓ Detection ___ Compliance

TOC Elevation: 23.98' TOTAL WELL DEPTH: 16.15' STATIC DEPTH TO WATER 7.90'

GROUNDWATER NGVD: (TOC Elevation – Static Depth to Water) 16.08'

Comments: (PER Monitoring Well Inspection on A12 of A19 of Contract):
Everything was Inspected, Everything was O.K.

//

DATE: 2/6/13

SITE NAME: WTE

SITE LOCATION: Lee County

WELL NUMBER: WTE-3DR ___ Shallow ✓ Deep WELL DIAMETER: 4.00"

LOCATION: ___ Landfill ___ Percolation Pond ___ O&M Building ✓ WTE Site

WELL TYPE: ___ Background ✓ Detection ___ Compliance

TOC Elevation: 23.91' TOTAL WELL DEPTH: 82.00' STATIC DEPTH TO WATER 9.08'

GROUNDWATER NGVD: (TOC Elevation – Static Depth to Water) 14.83'

Comments: (PER Monitoring Well Inspection on A12 of A19 of Contract):
Everything was Inspected, Everything was O.K.

FLOWERS CHEMICAL LABORATORIES INC.
P.O. BOX 150597, ALTAMONTE SPRINGS FL 32715-0597 PHONE (407) 339-5984 FAX (407) 260-6110 www.flowerslabs.com

FCL/LCSWD
Monitoring Well Inspection Form

DATE: 2/6/13

SITE NAME: WTE

SITE LOCATION: Lee County

WELL NUMBER: WTE-4S ✓ Shallow ___ Deep WELL DIAMETER: 2.00"

LOCATION: ___ Landfill ___ Percolation Pond ___ O&M Building ✓ WTE Site

WELL TYPE: ___ Background ✓ Detection ___ Compliance

TOC Elevation: 22.48' TOTAL WELL DEPTH: 13.40' STATIC DEPTH TO WATER 8.02'

GROUNDWATER NGVD: (TOC Elevation – Static Depth to Water) 14.46'

Comments: (PER Monitoring Well Inspection on A12 of A19 of Contract):
Everything was Inspected, Everything was O.K.

DATE: 2/6/13

SITE NAME: WTE

SITE LOCATION: Lee County

WELL NUMBER: WTE-4D ___ Shallow ✓ Deep WELL DIAMETER: 4.00"

LOCATION: ___ Landfill ___ Percolation Pond ___ O&M Building ✓ WTE Site

WELL TYPE: ___ Background ✓ Detection ___ Compliance

TOC Elevation: 23.81' TOTAL WELL DEPTH: 96.00' STATIC DEPTH TO WATER 10.51'

GROUNDWATER NGVD: (TOC Elevation – Static Depth to Water) 13.30'

Comments: (PER Monitoring Well Inspection on A12 of A19 of Contract):
Everything was Inspected, Everything was O.K.

FLOWERS CHEMICAL LABORATORIES INC.

P.O. BOX 150597, ALTAMONTE SPRINGS FL 32715-0597 PHONE (407) 339-5994 FAX (407) 260-6110 www.flowerslabs.com

FCL/LCSWD

Monitoring Well Inspection Form

DATE: 2/6/13

SITE NAME: WTE

SITE LOCATION: Lee County

WELL NUMBER: WTE-5S ✓ Shallow ___ Deep WELL DIAMETER: 2.00"

LOCATION: ___ Landfill ___ Percolation Pond ___ O&M Building ✓ WTE Site

WELL TYPE: ___ Background ✓ Detection ___ Compliance

TOC Elevation: 23.81' TOTAL WELL DEPTH: 17.45' STATIC DEPTH TO WATER 7.03'

GROUNDWATER NGVD: (TOC Elevation – Static Depth to Water) 16.78'

Comments: (PER Monitoring Well Inspection on A12 of A19 of Contract): Everything was Inspected, rusty lock + needs to be replaced, Everything Else O.K.

DATE: 2/6/13

SITE NAME: WTE

SITE LOCATION: Lee County

WELL NUMBER: WTE-5D ___ Shallow ✓ Deep WELL DIAMETER: 4.00"

LOCATION: ___ Landfill ___ Percolation Pond ___ O&M Building ✓ WTE Site

WELL TYPE: ___ Background ✓ Detection ___ Compliance

TOC Elevation: 24.50' TOTAL WELL DEPTH: 94.00' STATIC DEPTH TO WATER 9.27'

GROUNDWATER NGVD: (TOC Elevation – Static Depth to Water) 15.23'

Comments: (PER Monitoring Well Inspection on A12 of A19 of Contract): Everything was Inspected, rusty lock + needs to be replaced, Everything Else O.K.

FLOWERS CHEMICAL LABORATORIES INC.
P.O. BOX 150597, ALTAMONTE SPRINGS FL 32715-0597 PHONE (407) 339-5984 FAX (407) 260-6110 www.flowerslabs.com

FCL/LCSWD
Monitoring Well Inspection Form

DATE: 2/6/13

SITE NAME: WTE

SITE LOCATION: Lee County

WELL NUMBER: WTE-6S ✓ Shallow ___ Deep WELL DIAMETER: 2.00"

LOCATION: ___ Landfill ___ Percolation Pond ___ O&M Building ✓ WTE Site

WELL TYPE: ___ Background ✓ Detection ___ Compliance

TOC Elevation: 23.66' TOTAL WELL DEPTH: 19.98' STATIC DEPTH TO WATER 9.85'

GROUNDWATER NGVD: (TOC Elevation – Static Depth to Water) 13.81'

Comments: (PER Monitoring Well Inspection on A12 of A19 of Contract):
Everything was Inspected, rusty lock + needs to be replaced, Everything Else O.K.

DATE: 2/6/13

SITE NAME: WTE

SITE LOCATION: Lee County

WELL NUMBER: WTE-6D ___ Shallow ✓ Deep WELL DIAMETER: 4.00"

LOCATION: ___ Landfill ___ Percolation Pond ___ O&M Building ✓ WTE Site

WELL TYPE: ___ Background ✓ Detection ___ Compliance

TOC Elevation: 22.91' TOTAL WELL DEPTH: 96.00' STATIC DEPTH TO WATER 10.22'

GROUNDWATER NGVD: (TOC Elevation – Static Depth to Water) 12.69'

Comments: (PER Monitoring Well Inspection on A12 of A19 of Contract):
Everything Inspected, rusty lock needs to be replaced, Everything Else O.K.

Attachment D – Sampling Documentation (Shallow Wells)

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

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: WTE	SITE LOCATION: Lee County	
WELL NO: WTE – 1S	SAMPLE ID: WTE – 1S	DATE: 2/6/13

PURGING DATA

WELL DIAMETER (inches): 2.00	TUBING DIAMETER (inches): 0.25	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 4.19	PURGE PUMP TYPE OR BAILER: RFPP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (14.60 feet – 4.19 feet) X 0.16 gallons/foot = 1.67 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10.00	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10.00	PURGING INITIATED AT: 0917	PURGING ENDED AT: 0931	TOTAL VOLUME PURGED (gallons): 2.75

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or mS/cm	DISSOLVED OXYGEN (circle units) mg/l or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
0925	1.75	1.75	0.20	4.32	6.79	21.9	472.0	1.90	2.21	none	none
0928	0.50	2.25	0.20	4.32	6.76	21.9	472.5	1.81	1.80	none	none
0931	0.50	2.75	0.20	4.32	6.76	21.9	472.9	1.81	1.54	none	none

WELL CAPACITY (Gallons Per Foot): 0.75" = 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
TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Tommy Cross/ FCL	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0935	SAMPLING ENDED AT: 0940
PUMP OR TUBING DEPTH IN WELL (feet): 10.00	TUBING MATERIAL CODE: S + PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
				See C.O.C.					

REMARKS:

No sheen observed.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (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)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: WTE		SITE LOCATION: Lee County
WELL NO: WTE – 2S	SAMPLE ID: WTE – 2S	DATE: 2/6/13

PURGING DATA

WELL DIAMETER (inches): 2.00	TUBING DIAMETER (inches): 0.25	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 7.07	PURGE PUMP TYPE OR BAILER: RFPP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (12.00 feet – 7.07 feet) X 0.16 gallons/foot = 0.79 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10.00	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10.00	PURGING INITIATED AT: 0951	PURGING ENDED AT: 1009	TOTAL VOLUME PURGED (gallons): 1.50

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/l or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1001	1.00	1.00	0.09	7.09	6.96	21.4	539.0	2.85	0.71	none	none
1004	0.25	1.25	0.09	7.09	6.93	21.5	543.0	2.77	0.70	none	none
1007	0.25	1.50	0.09	7.09	6.90	21.6	547.0	2.77	0.59	none	none

WELL CAPACITY (Gallons Per Foot): 0.75" = 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
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Tommy Cross/ FCL	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1010	SAMPLING ENDED AT: 1015
PUMP OR TUBING DEPTH IN WELL (feet): 10.00	TUBING MATERIAL CODE: S + PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N (replaced)) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
				See L.O.C.A					

REMARKS:

No sheen observed.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (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)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: WTE	SITE LOCATION: Lee County	
WELL NO: WTE – 4S	SAMPLE ID: WTE – 4S	DATE: 2/6/13

PURGING DATA

WELL DIAMETER (inches): 2.00	TUBING DIAMETER (inches): 0.25	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 8.02	PURGE PUMP TYPE OR BAILER: RFPP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (13.40 feet – 8.02 feet) X 0.16 gallons/foot = 0.86 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10.00	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10.00	PURGING INITIATED AT: 1021	PURGING ENDED AT: 1038	TOTAL VOLUME PURGED (gallons): 1.50

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or ~~µS/cm~~	DISSOLVED OXYGEN (circle units) mg/L or ~~% saturation~~	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1032	1.00	1.00	0.09	8.06	6.97	26.3	508.0	1.44	1.31	none	none
1035	0.25	1.25	0.09	8.06	6.97	26.5	510.0	1.47	0.99	none	none
1038	0.25	1.50	0.09	8.06	6.97	26.5	510.0	1.59	0.56	none	none

WELL CAPACITY (Gallons Per Foot): 0.75" = 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
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Tommy Cross/ FCL	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1041	SAMPLING ENDED AT: 1046
PUMP OR TUBING DEPTH IN WELL (feet): 10.00	TUBING MATERIAL CODE: S + PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
				See C.O.C.					

REMARKS:

No sheen observed.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (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)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: WTE	SITE LOCATION: Lee County	
WELL NO: WTE – 6S	SAMPLE ID: WTE – 6S	DATE: 2/6/13

PURGING DATA

WELL DIAMETER (inches): 2.00	TUBING DIAMETER (inches): 0.25	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 9.85	PURGE PUMP TYPE OR BAILER: RFPP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (19.98 feet – 9.85 feet) X 0.16 gallons/foot = 1.62 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10.00	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10.00	PURGING INITIATED AT: 1053	PURGING ENDED AT: 1107	TOTAL VOLUME PURGED (gallons): 1.75

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1101	1.75	1.75	0.20	9.89	7.06	24.8	500.3	1.62	1.02	none	none
1104	0.50	2.25	0.20	9.89	7.00	24.8	504.0	1.50	0.33	none	none
1107	0.50	2.75	0.20	9.89	6.95	24.9	507.0	1.59	2.35	none	none

WELL CAPACITY (Gallons Per Foot): 0.75" = 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
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Tommy Cross/ FCL	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1110	SAMPLING ENDED AT: 1115
PUMP OR TUBING DEPTH IN WELL (feet): 10.00	TUBING MATERIAL CODE: S + PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
				See C.O.C.					

REMARKS:

No sheen observed.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (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)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: WTE	SITE LOCATION: Lee County	
WELL NO: WTE – 5S	SAMPLE ID: WTE – 5S	DATE: 2/6/13

PURGING DATA

WELL DIAMETER (inches): 2.00	TUBING DIAMETER (inches): 0.25	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 7.03	PURGE PUMP TYPE OR BAILER: RFPP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (17.45 feet – 7.07 feet) X 0.16 gallons/foot = 1.67 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10.00	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10.00	PURGING INITIATED AT: 1122	PURGING ENDED AT: 1136	TOTAL VOLUME PURGED (gallons): 1.75

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or mS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1130	1.75	1.75	0.20	7.22	6.90	24.0	503.1	1.51	1.46	none	none
1133	0.50	2.25	0.20	7.22	6.85	24.1	508.2	1.44	1.12	none	none
1136	0.50	2.75	0.20	7.22	6..82	24.1	511.0	1.38	0.82	none	none

WELL CAPACITY (Gallons Per Foot): 0.75" = 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
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Tommy Cross/ FCL	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1140	SAMPLING ENDED AT: 1145
PUMP OR TUBING DEPTH IN WELL (feet): 10.00	TUBING MATERIAL CODE: S + PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
				See C.O.C.					

REMARKS:

No sheen observed.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (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)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: WTE	SITE LOCATION: Lee County	
WELL NO: WTE – 3SR	SAMPLE ID: WTE – 3RS	DATE: 2/6/13

PURGING DATA

WELL DIAMETER (inches): 2.00	TUBING DIAMETER (inches): 0.25	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 7.90	PURGE PUMP TYPE OR BAILER: RFPP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (16.15 feet – 7.90 feet) X 0.16 gallons/foot = 1.32 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10.00	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10.00	PURGING INITIATED AT: 1150	PURGING ENDED AT: 1214	TOTAL VOLUME PURGED (gallons): 3.00

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or mS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1202	1.50	1.50	0.13	7.92	6.84	25.2	534.0	1.18	22.70	none	none
1206	0.50	2.00	0.13	7.92	6.84	25.1	534.0	1.45	19.70	none	none
1210	0.50	2.50	0.13	7.92	6.84	25.2	535.0	1.54	14.90	none	none
1214	0.50	3.00	0.13	7.92	6.83	25.3	538.0	1.44	12.40		

WELL CAPACITY (Gallons Per Foot): 0.75" = 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
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Tommy Cross/ FCL	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1217	SAMPLING ENDED AT: 1222
PUMP OR TUBING DEPTH IN WELL (feet): 10.00	TUBING MATERIAL CODE: S + PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
				See C.O.C.					

REMARKS:

No sheen observed.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (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)

Revision Date: February 12, 2009

WS #PL. 197215

FIELD DATA SHEET

FLOWERS CHEMICAL LABORATORIES INCORPORATED

Sampler(s) Tommy Cross Date 2/6/13 Page 1 of 7

Project Name Lee Co.: WTE S/A MW's

Sample Type	WW	SW	GW	DW	Reag.Wtr.	Sludge	Sediment	Soil	Other

Sample Site Indentification WTE-1S, WTE-2S, WTE-4S, WTE-6S, WTE-5S, WTE-3SR

Sampling Method	Grab ☐	Composite ☐	Monitoring Well ☑	Bailer ☐	Pump ☑

Sampling Equipment peristaltic pump, polyethylene + silicon tubing

Site & Weather Conditions clear + warm

Field Instrument Beginning Calibration

											Slope
pH Meter	YES	✓	NO		Buffer	4.0	4.01	7.0	7.00	10.0	10.01
Conductivity Meter	YES	✓	NO		Buffer	147		~~1414~~ 1413	1413	12900	
Turbidity Meter	YES	✓	NO		Buffer	0.5		~~5.0~~ 10.00	10.06	40	
DO Meter	YES	✓	NO		Buffer	99.8% saturation		Adjust		From	

Field Filtered	☐ YES ☑ NO	Duplicate	☐ YES ☑ NO	Field Decontamination	☑ YES ☐ NO

Parameter	Sample Containers	pH Check
☑ Nutrient	Plastic - H_2SO_4	< 2
☑ Metals	Plastic - HNO_3	< 2
☐ Sulfide	Plastic - NaDH / Zn Acetate	< 12
☐ Cyanide	Plastic - NaDH / Zn (No sulfide)/Ascorbic Acid	> 12
☐ Bacteriological	Glass - Thiosulfate (DW NO Chlorine Res)	
☐ Oil & Grease	Glass - HCl	< 2
☐ TOC	Plastic - HCl	< 2
☑ VOA	Glass - HCl	< 2
☐ SVOC	Glass - HCl (DW NO Chlorine Res)	
☐ Phenols	Glass - H_2SO_4	< 2
☑ Other	Unpreserved	

Well Diameter	Multiplier
1.5 inches	0.092
2.0 inches	0.163
4.0 inches	0.653
6.0 inches	1.469

Field Instrument Ending Calibration

pH Meter	YES	✓	NO		Buffer	4.0		7.0	6.96	10.0	
Conductivity Meter	YES	✓	NO		Buffer	147		~~1414~~ 1413	1461	12900	
Turbidity Meter	YES	✓	NO		Buffer	0.5		~~5.0~~ 10.00	10.00	20.0	
DO Meter	YES	✓	NO		Buffer	99.5% saturation		Adjust		From	

General Site Information / Comments

Check Box That Applies To Your Location

☐ **Flowers Chemical Laboratories, Inc.**
481 Newburyport Ave.
Altamonte Springs, FL 32701
Bus: 407-339-5984
Fax: 407-260-6110

☐ **Flowers Chemical Labs-South**
West Park Industrial Plaza
571 N.W. Mercantile Pl., Ste. 111
Port St. Lucie, FL 34986
Bus: 772-343-8006
Fax: 772-343-8089

☐ **Flowers Chemical Labs-North**
812 S.W. Harvey Greene Dr.
Madison, FL 32340
Bus: 850-973-6878
Fax: 850-973-6878

☐ **Flowers Chemical Labs-Keys**
3980 Overseas Highway, Ste. 103
Marathon, FL 33050
Bus: 305-743-8598
Fax: 305-743-8598

FLOWERS CHEMICAL LABORATORIES INCORPORATED

DOWNLOAD REPORTS, INVOICES AND CHAINS OF CUSTODY www.flowerslabs.com

Client: Lee County Solid Waste
Address:
Phone:
Sampled By (PRINT): Tommy Cross
Sampler Signature:
Date Sampled: 2/7/13

Project Name: SWERF-WTE Wells - 5/14
Client Contact: Laura Gray
FCL Project Manager: Phil Loucks
Requested Due Date: 10 Day Standard OR
Pick-Up Fee: $
Vehicle Surcharge: $
P.O. #:
FAX:
E-MAIL:
Rush Charges May Apply
Quick List Lee Co. - WTE new permit
Sampling Fee: $ 76

GW - ground water DW - drinking water WW - wastewater
SW - surface water SO - soil/solid SL - sludge HW - waste

ITEM NO.	SAMPLE ID	DATE	TIME	MATRIX	(LAB USE ONLY) LAB NO.	NONE	H_2SO_4	HNO_3	HCl	$Na_2S_2O_3$		ANALYSES REQUEST: NH3	Cl, TDS, SO4, NO3	As, Cd, Cu, Pb	Hg, Fe, Mn, Al	EPA 8260 Lee CD Compounds						COMMENTS	Total # Containers
1	WTE-1S	2/6/13	0935	GW	1924-15 GW 1	X	X	X	X			X	X	X	X	X							6
2	2S		1010		2																		
3	4S		1041		3																		
4	6S		1110		4																		
5	5S		1122		5																		
6	3SR		1217		6																		
7	Trip Blank	2/6/13	—	D.I.	7																		2
8																							
9																							
10																							

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
							2/6/13	1350		2/7/13	1354

FINANCE CHARGES APPLIED TO PAST DUE INVOICES

• WHITE - Lab Copy - To Be Scanned • YELLOW - Client Copy