PASCO COUNTY FLORIDA
OPEN SPACES. VIBRANT PLACES.

Pasco County Utilities Services Branch
Environmental Laboratory
8864 Government Dr.
New Port Richey, Fl 34654

Phone: (727) 847-8902
Fax: (727) 847-8112

DHRS No: E44123

20 January 2021

Waste Management Section
Florida Department of
Environmental Protection
13051 N. Telecom Pkwy.
Temple Terrace, FL 33637

RE: Pasco County Resource Recovery
WACs FAC ID: 45799
Semester II, 2020 – Resample Results

To Whom It May Concern:

This submittal contains the analytical results of nitrate analysis for resamples taken at the Pasco County Resource Recovery site. These resamples were taken as a result of samples being analyzed out of hold time for nitrates as defined in the submittal for the October, 2020 sampling event.

If you have any questions please feel free to contact me.

Sincerely,

Candia E. Mulhern
Laboratory Manager

cc: Charles Cullen, PI Engineering Director
Justin Roessler, Solid Waste Assistant Director

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 PASCO COUNTY RESOURCE RECOVERY

Address 14230 HAYS RD.

City SPRING HILL Zip 34610 County PASCO

Telephone Number (727) 856-0119

(2) WACS Facility ID 45799

(3) DEP Permit Number

(4) Authorized Representative's Name Candia E. Mulhern Title Laboratory Manager

Address 8864 Government Dr.

City New Port Richey Zip 34654 County PASCO

Telephone Number (727) 847-8902

Email address (if available) cmulhern@pascocountyfl.net

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.

01/20/2021
(Date)

Candia E. Mulhern
Digitally signed by Candia E. Mulhern
Date: 2021.01.20 09:42:07 -05'00'
(Owner or Authorized Representative's Signature)

PART II QUALITY ASSURANCE REQUIREMENTS

Sampling Organization Pasco County Utilities Environmental Laboratory

Analytical Lab NELAC / HRS Certification # E44123

Lab Name Pasco County Utilities Environmental Laboratory

Address 8864 Government Dr.

Phone Number (727) 847-8902

Email address (if available) cchildress@pascocountyfl.net

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20 January 2021

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DHRS #E44123

Case Narrative

CLIENT: Pasco County Solid Waste
Pasco County Resource Recovery
Facility #: 45799
Date Sampled: 09 December 2020

I. SAMPLING

Laboratory field staff began sampling the groundwater monitoring wells at the Pasco County Resource Recovery Facility for nitrate analysis on December 9th, 2020. These wells were resampled due to exceeded hold times for nitrate analysis in the October, 2020 sampling event. No unusual environmental conditions were noted during this sampling period.

II. SAMPLE RECEIVING/CUSTODY

The samples were delivered by laboratory field personnel to the Pasco County Environmental Laboratory, received on wet ice, and the temperature of the samples maintained at ≤ 6°C. Samples were processed by the Sample Custody section of the laboratory. The nitrate samples were retained at the Pasco County Environmental Laboratory for analysis. There were no significant logistics or quality problems unless noted below.

III. ANALYTICAL DATA

Nitrate was determined at the Pasco County Environmental Laboratory . No analytical anomalies were noted during analysis.

IV. QUALITY CONTROL

There were no significant quality control problems unless noted in the attached QC reports. The stabilization parameters and sampling logs have been updated to ensure that the appropriate information is included in the logs.

V. CONCLUSIONS AND RECOMMENDATIONS

The resampled wells all had Nitrate values <1.0 mg/L and were analyzed within hold time. This is consistent with historical data for this site. No additional sampling or analysis is required at this time.

Candia E. Mulhern
Laboratory Manager
cmulhern@pascocountyfl.net

PASCO COUNTY FLORIDA
OPEN SPACES. VIBRANT PLACES.

PASCO COUNTY RESOURCE RECOVERY
EXCEEDED ANALYTES
Semester II, 2020 - Resamples

WELL #	SAMPLE DATE	ANALYTE	RESULT	UNITS	REANALYZED	RESULT	UNITS
4MW-6	11-Dec-20	DO	6.08	mg/L	No	---	---

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Chris Childress, QA/QC Officer

Hours: Mon-Fri 8am-5pm

CLIENT/SAMPLE INFORMATION

Resource Recovery
Class I Landfill
Hays Road
Shady Hills, Fl

John Power

Report Date: 12/21/2020

Sample Number:	**AD03237**	Sample ID:	4MW27D @ RESREC
Sample Method:	SP	Sample Matrix:	AQUEOUS-Groundwater
Date Sampled:	12/17/2020	Date Received:	12/17/2020
Time Sampled:	16:16	Time Received:	16:45
Sampled By:	GTORREY	Received By:	TS
		Delivered By:	GT

REPORT OF ANALYSES These results relate only to the sample indicated above and meet all requirements of the 2016 TNI standards.

Analysis	Method	Date	Time	By	Result	Qualifier	Unit	Detection Limit
Nitrate (N)	EPA 300.0	12/18/2020	11:21	EC	0.008	I,J	mg/L	0.002
Color by Observation	Observation	12/17/2020	16:16	GST	CLEAR	D	ObsColor	0
Turbidity Field	FDEP FT 1600	12/17/2020	16:16	GST	13.2	D	NTU	0.00
Dissolved Oxygen Field	FDEP FT 1500	12/17/2020	16:16	GST	8.03	D	mg/L	0.01
Conductivity Field	FDEP FT 1200	12/17/2020	16:16	GST	276	D	umhos/cm	1
Temperature Field	FDEP FT 1400	12/17/2020	16:16	GST	22.75	D	Deg C	0.00
pH Field	FDEP FT 1100	12/17/2020	16:16	GST	7.44	D	Std Units	0.10
Water Level (NGVD)	DEP-SOP	12/17/2020	16:16	GST	32.43	D	Ft.	0

Analysis Comments

NO3IC: J - Sample DUP RPD >10%.

Candia E. Mulhern, Laboratory Manager

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EPA Lab Code: FL00137

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CLIENT/SAMPLE INFORMATION

West Pasco Landfill
Hays Road
Shady Hills, Fl

Report Date: 12/29/2020

John Power

Sample Number:	**AD03351**	Sample ID:	4MW22
Sample Method:	SP	Sample Matrix:	AQUEOUS-Groundwater
Date Sampled:	12/21/2020	Date Received:	12/21/2020
Time Sampled:	13:42	Time Received:	14:42
Sampled By:	GTORREY	Received By:	TA
		Delivered By:	GT

REPORT OF ANALYSES

These results relate only to the sample indicated above and meet all requirements of the 2016 TNI standards.

Analysis	Method	Date	Time	By	Result	Qualifier	Unit	Detection Limit
pH Field	FDEP FT 1100	12/21/2020	13:42	GST	6.99	D	Std Units	0.10
Nitrate (N)	EPA 300.0	12/22/2020	16:28	EC	0.05		mg/L	0.002
Color by Observation	Observation	12/21/2020	13:42	GST	CLEAR	D	ObsColor	0
Turbidity Field	FDEP FT 1600	12/21/2020	13:42	GST	10.1	D	NTU	0.00
Dissolved Oxygen Field	FDEP FT 1500	12/21/2020	13:42	GST	2.93	D	mg/L	0.01
Temperature Field	FDEP FT 1400	12/21/2020	13:42	GST	28.59	D	Deg C	0.00
Water Level (NGVD)	DEP-SOP	12/21/2020	13:42	GST	28.98	D	Ft.	0
Conductivity Field	FDEP FT 1200	12/21/2020	13:42	GST	463	D	umhos/cm	1

Analysis Comments

Candia E. Mulhern, Laboratory Manager

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CLIENT/SAMPLE INFORMATION

Resource Recovery
Class I Landfill
Hays Road
Shady Hills, Fl

John Power

Report Date: 12/29/2020

Sample Number:	**AD03378**	Sample ID:	2MW27D @ RESREC
Sample Method:	SP	Sample Matrix:	AQUEOUS-Groundwater
Date Sampled:	12/22/2020	Date Received:	12/22/2020
Time Sampled:	08:30	Time Received:	12:30
Sampled By:	GTORREY	Received By:	TA
		Delivered By:	GT

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Analysis	Method	Date	Time	By	Result	Qualifier	Unit	Detection Limit
Water Level (NGVD)	DEP-SOP	12/22/2020	08:30	GST	32.21	D	Ft.	0
Dissolved Oxygen Field	FDEP FT 1500	12/22/2020	08:30	GST	2.69	D	mg/L	0.01
pH Field	FDEP FT 1100	12/22/2020	08:30	GST	7.12	D	Std Units	0.10
Nitrate (N)	EPA 300.0	12/22/2020	16:28	EC	1.56		mg/L	0.02
Turbidity Field	FDEP FT 1600	12/22/2020	08:30	GST	11.9	D	NTU	0.00
Color by Observation	Observation	12/22/2020	08:30	GST	CLEAR	D	ObsColor	0
Temperature Field	FDEP FT 1400	12/22/2020	08:30	GST	23.75	D	Deg C	0.00
Conductivity Field	FDEP FT 1200	12/22/2020	08:30	GST	689	D	umhos/cm	1

Analysis Comments

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CLIENT/SAMPLE INFORMATION

Resource Recovery
Class I Landfill
Hays Road
Shady Hills, Fl

John Power

Report Date: 12/29/2020

Sample Number:	**AD03379**	Sample ID:	2MW-24S @ RESREC
Sample Method:	SP	Sample Matrix:	AQUEOUS-Groundwater
Date Sampled:	12/22/2020	Date Received:	12/22/2020
Time Sampled:	09:03	Time Received:	12:30
Sampled By:	GTORREY	Received By:	TA
		Delivered By:	GT

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Analysis	Method	Date	Time	By	Result	Qualifier	Unit	Detection Limit
Temperature Field	FDEP FT 1400	12/22/2020	09:03	GST	23.96	D	Deg C	0.00
pH Field	FDEP FT 1100	12/22/2020	09:03	GST	6.36	D	Std Units	0.10
Conductivity Field	FDEP FT 1200	12/22/2020	09:03	GST	372	D	umhos/cm	1
Dissolved Oxygen Field	FDEP FT 1500	12/22/2020	09:03	GST	4.82	D	mg/L	0.01
Turbidity Field	FDEP FT 1600	12/22/2020	09:03	GST	40.2	D	NTU	0.00
Color by Observation	Observation	12/22/2020	09:03	GST	CLOUDY	D	ObsColor	0
Nitrate (N)	EPA 300.0	12/22/2020	16:28	EC	2.50		mg/L	0.02
Water Level (NGVD)	DEP-SOP	12/22/2020	09:03	GST	28.06	D	Ft.	0

Analysis Comments

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CLIENT/SAMPLE INFORMATION

Resource Recovery
Class I Landfill
Hays Road
Shady Hills, Fl

John Power

Report Date: 12/29/2020

Sample Number:	**AD03380**	Sample ID:	2MW-24D @ RESREC
Sample Method:	SP	Sample Matrix:	AQUEOUS-Groundwater
Date Sampled:	12/22/2020	Date Received:	12/22/2020
Time Sampled:	09:45	Time Received:	12:30
Sampled By:	GTORREY	Received By:	TA
		Delivered By:	GT

REPORT OF ANALYSES These results relate only to the sample indicated above and meet all requirements of the 2016 TNI standards.

Analysis	Method	Date	Time	By	Result	Qualifier	Unit	Detection Limit
Water Level (NGVD)	DEP-SOP	12/22/2020	09:45	GST	30.01	D	Ft.	0
Nitrate (N)	EPA 300.0	12/22/2020	16:28	EC	1.29		mg/L	0.02
Color by Observation	Observation	12/22/2020	09:45	GST	CLEAR	D	ObsColor	0
Turbidity Field	FDEP FT 1600	12/22/2020	09:45	GST	6.6	D	NTU	0.00
Dissolved Oxygen Field	FDEP FT 1500	12/22/2020	09:45	GST	2.73	D	mg/L	0.01
Conductivity Field	FDEP FT 1200	12/22/2020	09:45	GST	522	D	umhos/cm	1
Temperature Field	FDEP FT 1400	12/22/2020	09:45	GST	24.40	D	Deg C	0.00
pH Field	FDEP FT 1100	12/22/2020	09:45	GST	7.15	D	Std Units	0.10

Analysis Comments

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CLIENT/SAMPLE INFORMATION Hours: Mon-Fri 8am-5pm

West Pasco Landfill
Hays Road
Shady Hills, Fl

Report Date: 12/29/2020

John Power

Sample Number:	**AD03350**	Sample ID:	4MW21 @ RES REC
Sample Method:	SP	Sample Matrix:	AQUEOUS-Groundwater
Date Sampled:	12/21/2020	Date Received:	12/21/2020
Time Sampled:	13:01	Time Received:	14:42
Sampled By:	GTORREY	Received By:	TA
		Delivered By:	GT

REPORT OF ANALYSES These results relate only to the sample indicated above and meet all requirements of the 2016 TNI standards.

Analysis	Method	Date	Time	By	Result	Qualifier	Unit	Detection Limit
Color by Observation	Observation	12/21/2020	13:01	GST	CLEAR	D	ObsColor	0
Turbidity Field	FDEP FT 1600	12/21/2020	13:01	GST	11.8	D	NTU	0.00
Dissolved Oxygen Field	FDEP FT 1500	12/21/2020	13:01	GST	6.55	D	mg/L	0.01
Conductivity Field	FDEP FT 1200	12/21/2020	13:01	GST	144	D	umhos/cm	1
Temperature Field	FDEP FT 1400	12/21/2020	13:01	GST	24.84	D	Deg C	0.00
pH Field	FDEP FT 1100	12/21/2020	13:01	GST	5.43	D	Std Units	0.10
Water Level (NGVD)	DEP-SOP	12/21/2020	13:01	GST	30.31	D	Ft.	0
Nitrate (N)	EPA 300.0	12/22/2020	16:28	EC	6.24		mg/L	0.05

Analysis Comments

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CLIENT/SAMPLE INFORMATION

Resource Recovery
Class I Landfill
Hays Road
Shady Hills, Fl

John Power

Report Date: 12/29/2020

Sample Number:	**AD03348**	Sample ID:	4MW2 @ RESREC
Sample Method:	SP	Sample Matrix:	AQUEOUS-Groundwater
Date Sampled:	12/21/2020	Date Received:	12/21/2020
Time Sampled:	11:02	Time Received:	14:42
Sampled By:	GTORREY	Received By:	TA
		Delivered By:	GT

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Analysis	Method	Date	Time	By	Result	Qualifier	Unit	Detection Limit
Dissolved Oxygen Field	FDEP FT 1500	12/21/2020	11:02	GST	3.13	D	mg/L	0.01
Water Level (NGVD)	DEP-SOP	12/21/2020	11:02	GST	34.56	D	Ft.	0
pH Field	FDEP FT 1100	12/21/2020	11:02	GST	7.56	D	Std Units	0.10
Conductivity Field	FDEP FT 1200	12/21/2020	11:02	GST	217	D	umhos/cm	1
Turbidity Field	FDEP FT 1600	12/21/2020	11:02	GST	5.6	D	NTU	0.00
Color by Observation	Observation	12/21/2020	11:02	GST	CLEAR	D	ObsColor	0
Nitrate (N)	EPA 300.0	12/22/2020	16:28	EC	0.99		mg/L	0.01
Temperature Field	FDEP FT 1400	12/21/2020	11:02	GST	22.19	D	Deg C	0.00

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CLIENT/SAMPLE INFORMATION

West Pasco Landfill
Hays Road
Shady Hills, Fl

Report Date: 12/29/2020

John Power

Sample Number:	**AD03349**	Sample ID:	4MW23 @ RES REC
Sample Method:	SP	Sample Matrix:	AQUEOUS-Groundwater
Date Sampled:	12/21/2020	Date Received:	12/21/2020
Time Sampled:	12:26	Time Received:	14:42
Sampled By:	GTORREY	Received By:	TA
		Delivered By:	GT

REPORT OF ANALYSES

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Analysis	Method	Date	Time	By	Result	Qualifier	Unit	Detection Limit
Turbidity Field	FDEP FT 1600	12/21/2020	12:26	GST	12.9	D	NTU	0.00
Color by Observation	Observation	12/21/2020	12:26	GST	CLEAR	D	ObsColor	0
Water Level (NGVD)	DEP-SOP	12/21/2020	12:26	GST	28.37	D	Ft.	0
Dissolved Oxygen Field	FDEP FT 1500	12/21/2020	12:26	GST	2.76	D	mg/L	0.01
Nitrate (N)	EPA 300.0	12/22/2020	16:28	EC	0.013	I	mg/L	0.002
Conductivity Field	FDEP FT 1200	12/21/2020	12:26	GST	550	D	umhos/cm	1
Temperature Field	FDEP FT 1400	12/21/2020	12:26	GST	23.28	D	Deg C	0.00
pH Field	FDEP FT 1100	12/21/2020	12:26	GST	7.27	D	Std Units	0.10

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Well Data						Field Analysis							Labworks	Lab Analysis						
WELL I.D.	DATE	SAMPLE TIME 24hr.	T.O.P. ELEV. (ft)	STATIC WATER LEVEL (ft)	N.G.V.D (ft)	pH (S.U.)	TEMP (°C)	COND (µS/cm)	D.O. (mg/L)	TURB (NTU)	Color (Observed)	Analyst	LIMS ID	CL^-(mg/L)	TDS (mg/L)	NH3-N (mg/L)	NO3 (mg/L)	Fe (µg/L)	Hg (µg/L)	Na+ (µg/L)
2MW1			49.95									GT								
2MW2			56.41									GT								
2MW3A			50.01									GT								
2MW4			54.77									GT								
2MW5			49.17									GT								
2MW6			56.11									GT								
2MW7			52.75									GT								
2MW8			51.97									GT								
2MW9			52.29									GT								
2MW10			52.63									GT								
2MW13D			52.39									GT								
2MW15AD	16-Dec	956	54.71	21.14	22.86	7.30	24.30	298	3.04	11.3	clear	GT	ad03202							
2MW17S			53.42									GT								
2MW18D	16-Dec	1035	52.75	25.5	27.29	7.02	24.07	465	2.25	2.8	clear	GT	ad03203							
2MW19D	16-Dec	1122	52.25	24.27	27.98	7.06	24.87	438	1.97	6.2	clear	GT	ad03204							
2MW24D	22-Dec	945	50.55	20.54	30.01	7.15	24.40	2.73	6.60	6.6	clear	GT	3380							
2MW24S	12//22/2	903	50.37	22.31	28.06	6.36	23.96	372	4.82	40.2	cloudy	GT	3379							
2MW25D			47.87									GT								
2MW25S			47.84									GT								
2MW26D			54.13									GT								
2MW26S			54.16									GT								
2MW27D	22-Dec	830	50.32	18.11	32.21	7.12	23.75	689	2.69	11.9	clear	GT	3378							
2MW27S			50.44									GT								
4MW1			50.34									GT								
4MW2	21-Dec	1102	56.11	21.55	34.56	7.56	22.19	217	3.13	5.6	clear	GT	3350							
4MW3A	10-Dec	1314	52.92	24.18	28.74	7.21	23.32	440	2.33	2.6	clear	GT	2958							
4MW4	9-Dec	1014	50.81	23.4	27.41	7.17	24.17	438	3.32	5.7	clear	GT	2894							
4MW5			49.06									GT								
4MW6	11-Dec	13-02	55.93	23.8	32.15	7.85	24.22	155	6.08	1.7	clear	GT	3009							
4MW7	10-Dec	950	52.62	21.85	30.77	7.23	23.13	366	2.05	1.9	clear	GT	2956							

Well Data						Field Analysis							Labworks	Lab Analysis						
WELL I.D.	DATE	SAMPLE TIME 24hr.	T.O.P. ELEV. (ft)	STATIC WATER LEVEL (ft)	N.G.V.D (ft)	pH (S.U.)	TEMP (°C)	COND (µS/cm)	D.O. (mg/L)	TURB (NTU)	Color (Observed)	Analyst	LIMS ID	CL^-(mg/L)	TDS (mg/L)	NH3-N (mg/L)	NO3 (mg/L)	Fe (µg/L)	Hg (µg/L)	Na+ (µg/L)
4MW8	9-Dec	1435	51.87	21.08	30.78	7.20	22.56	392	2.30	1.5	clear	GT	2896							
4MW9	9-Dec	1304	52.78	23.47	29.31	7.16	22.92	452	2.26	7.20	clear	GT	2895							
4MW11D	10-Dec	1131	65.00	33.55	31.45	7.37	24.48	377	3.34	2.30	clear	GT	2957							
4MW12D	16-Dec	1211	55.03	24.77	30.26	7.18	24.98	319	3.47	1.2	clear	GT	3205							
4MW13D												GT								
4MW14D	16-Dec	1340	52.00	21.35	30.65	7.20	26.49	373	2.46	5.80	clear	GT	3206							
4MW21	21-Dec	1301	51.46	21.15	30.31	5.43	24.84	144	6.55	11.8	clear	GT	3350							
4MW22	21-Dec	1342	53.44	24.46	28.98	6.99	23.59	463	2.93	10.1	clear	10.1	3351							
4MW23	112/21/2	1226	53.69	26.32	28.37	7.27	23.28	550	2.76	12.90	clear	GT	3349							
4MW27			49.60									GT								
4MW27D	17-Dec	1616	49.28	16.85	32.43	7.44	22.75	276	8.03	13.2	clear	GT	3237							

BILLING DATE:		**SAMPLE TIME:**		**MILEAGE:**					
AMBIENT FIELD CONDITIONS									
METER:		**CALIBRATION DATE:**							
PRESERVATIVES		**PURGING EQUIPMENT: Bladder pump and Micro Purge MP-50 QED compressor**							
TYPE	LOT #								

DEP Form FD 9000-24: Groundwater Sampling Log

GROUNDWATER SAMPLING DATA SHEET - PASCO COUNTY UTILITIES ENVIRONMENTAL LAB

SITE NAME:	RESOURCE RECOVERY	SITE LOCATION:	Hays Rd.		
WELL NO.	19766	SAMPLE ID:	2MW-15DA	SAMPLE DATE:	December 16, 2020

PURGING DATA

WELL DIAMETER(INCHES)	TUBING DIAM (INCHES)	WELL SCREEN INTERVAL DEPTH: ft to ft	TOP Elevation (NGVD)	PUMP TYPE OR BAILER:
2	½"	34.0 to 44.0	54.71	BP

WELL VOLUME PURGE: 1 WELL VOL.= (TWD-STATIC DEPTH TO WATER) X WELL CAPACITY

TWD(ft):	44.00	STATIC WATER:	21.14	GALLONS / FOOT:	0.16	1 WELL VOLUME(gals)=	3.65

EQUIPMENT VOLUME PURGE (only fill out if applicable)

PUMP VOL (GAL):	0.26	TUBING CAP.(G/ft)	0.010	TUBING LENGTH ft		FLOW CELLVOL.	N/A	1 EQ. VOL. PURGE:	

INITIAL PUMP OR TUBING DEPTH IN WELL (FEET):	FINAL PUMP OR TUBING DEPTH IN WELL (FEET):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (GALLONS):
	30.3	0930	0954	12.00

TIME (24 hr)	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (GPM)	DEPTH TO WATER (FEET)	Ph (S.U.)	TEMP. (C°)	COND. (umhos/cm)	D.O. (mg/L)	TURB. (NTUs)	COLOR (describe)	ODOR (describe)
0930	0.00	0.00	0.00	21.14	7.43	21.87	338	3.84	12.5	clear	bad
0938	4.00	4.00	0.50	21.14	7.30	23.75	298	2.82	29.9	clear	bad
0946	4.00	8.00	0.50	21.13	7.32	24.20	297	2.87	16.3	clear	bad
0954	4.00	12.00	0.50	21.14	7.30	24.30	298	3.04	11.3	clear	bad

***WATER LEVEL IS BELOW TOP OF PUMP.

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

SAMPLING DATA

SAMPLED BY/AFFILIATION	GTORREY - Pasco County Environmental Laboratory	SAMPLER SIGNATURE:	SAMPLING INITIATED AT:	956	SAMPLING ENDED AT:	958
Pump or tubing depth in well		RATE (ML/MIN.):		TUBING MATERIAL CODE:		PE/T
DECONTAMINATION:	NO	FIELD FILTERED:	NO	FILTER SIZE (UM):		DUPLICATE	NO

SAMPLE CONTAINER SPECIFICATION AND PRESERVATION							INTENDED ANAYSIS and/or METHOD	BOTTLE		EQUIP. CODE:
Sample ID;	# of Conts.	Material Code	Volume	Preservative	mls Added	FINAL PH		DATE	SERIES	
	1	HDPE	1 Liter	Wet Ice	None		SM2540C - TDS	Eurofins Bottle		BP
	1	HDPE	250 mls	Wet Ice	None		Chlorides	Eurofins Bottle		BP
	2	HDPE	250 mls	H2SO4	2.0 1:1	<2	Ammonia/; NO3	Eurofins Bottle		BP
	1	HDPE	250 mls	HNO3	2.5/1:4	<2	App I Metals Fe, Hg, Na	Eurofins Bottle		BP
	3	CG	40 mls	HCl	.25/1:1	<2	App I VOCs	Eurofins Bottle		BP
	3	CG	40 mls	Wet Ice	None		8011-EDB, DBCP	Eurofins Bottle		BP

NGVD:	22.86	LAB SAMPLE ID #:ad03202

MATERIAL CODES: AG=AMBER GLASS; **CG**=CLEAR GLASS; **PE**=POLYETHYLENE; **PP**=POLYPROPYLENE; **S**=SILICONE; **T**=TEFLON; **O**=OTHER

SAMPLING/PURGING **APP**=After Peristalic Pump; **B**=Bailer; **BP**=Bladder Pump; **ESP**=Electric Submersible Pump; **PP**=Peristalic Pump
EQUIPMENT CODES: **RFPP**=Reverse Flow Peristalic Pump; **SM**=Straw Method(Tube Gravity Drain); **VT**=Vacuum Trap; **O**=Other(Specify)

NOTES: 1. The above does 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, +/- 0.2mg/L or +/-10%(whichever is greater) **Turbidity**: all readings <20 NTU; optionally+/- 5NTU or +/- 10% (whichever is greater)

DEP Form FD 9000-24: Groundwater Sampling Log

GROUNDWATER SAMPLING DATA SHEET - PASCO COUNTY UTILITIES ENVIRONMENTAL LAB

SITE NAME:	RESOURCE RECOVERY	SITE LOCATION:	Hays Rd.		
WELL NO.	19759	SAMPLE ID:	2MW18D	SAMPLE DATE:	December 16, 2020

PURGING DATA

DIAMETER(INCHES)	TUBING DIAM (INCHES)	WELL SCREEN INTERVAL DEPTH: ft to ft	TOP Elevation (NGVD)	PUMP TYPE OR BAILER:
2	½"	25.0 to 40.0	52.75	BP

WELL VOLUME PURGE: 1 WELL VOL.= (TWD-STATIC DEPTH TO WATER) X WELL CAPACITY

TWD(ft):	40.00	STATIC WATER:	25.5	GALLONS / FOOT:	0.16	1 WELL VOLUME(gals)=	2.32

EQUIPMENT VOLUME PURGE (only fill out if applicable)

PUMP VOL (GAL):	0.26	TUBING CAP.(G/ft)	0.010	TUBING LENGTH ft	34	FLOW CELLVOL.	N/A	1 EQ. VOL. PURGE:	

INITIAL PUMP OR TUBING DEPTH IN WELL (FEET):	FINAL PUMP OR TUBING DEPTH IN WELL (FEET):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (GALLONS):
34	34	1021	1033	6.00

TIME (24 hr)	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (GPM)	DEPTH TO WATER (FEET)	Ph (S.U.)	TEMP. (C°)	COND. (umhos/cm)	D.O. (mg/L)	TURB. (NTUs)	COLOR (describe)	ODOR (describe)
1021	0.00	0.00	0.00	25.50	6.95	23.39	464	2.66	3.9	clear	bad
1025	2.00	2.00	0.50	25.60	6.95	23.97	468	2.49	4.6	clear	bad
1029	2.00	4.00	0.50	25.60	7.01	24.12	462	2.75	2.8	clear	bad
1033	2.00	6.00	0.50	25.60	7.02	24.07	465	2.25	2.8	clear	bad

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

SAMPLING DATA

SAMPLED BY/AFFILIATION	GTORREY - Pasco County Environmental Laboratory	SAMPLER SIGNATURE:	SAMPLING INITIATED AT:	1035	SAMPLING ENDED AT:	1036

Pump or tubing depth in wel	34	RATE (ML/MIN.):			1	PE/T
DECONTAMINATION:	NO	FIELD FILTERED:	NO	FILTER SIZE (UM):		DUPLICATE	NO

SAMPLE CONTAINER SPECIFICATION AND PRESERVATION							INTENDED ANAYSIS and/or METHOD	BOTTLE		EQUIP. CODE:
Sample ID;	# of Conts.	Material Code	Volume	Preservative	mls Added	FINAL PH		DATE	SERIES	
	1	HDPE	1 Liter	Wet Ice	None		SM2540C - TDS	Eurofins Bottle		BP
	1	HDPE	250 mls	Wet Ice	None		Chlorides	Eurofins Bottle		BP
	2	HDPE	250 mls	H2SO4	2.0 1:1	<2	Ammonia/; NO3	Eurofins Bottle		BP
	1	HDPE	250 mls	HNO3	2.5/1:4	<2	App I Metals Fe, Hg, Na	Eurofins Bottle		BP
	3	CG	40 mls	HCl	.25/1:1	<2	App I VOCs	Eurofins Bottle		BP
	3	CG	40 mls	Wet Ice	None		8011-EDB, DBCP	Eurofins Bottle		BP

NGVD: **27.29** **LAB SAMPLE ID #:003203**

MATERIAL CODES: AG=AMBER GLASS; **CG**=CLEAR GLASS; **PE**=POLYETHYLENE; **PP**=POLYPROPYLENE; **S**=SILICONE; **T**=TEFLON; **O**=OTHER

SAMPLING/PURGING **APP**=After Peristalic Pump; **B**=Bailer; **BP**=Bladder Pump; **ESP**=Electric Submersible Pump; **PP**=Peristalic Pump
EQUIPMENT CODES: **RFPP**=Reverse Flow Peristalic Pump; **SM**=Straw Method(Tube Gravity Drain); **VT**=Vacuum Trap; **O**=Other(Specify)

NOTES: 1. The above does 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, +/-0.2mg/L or +/-10%(whichever is greater) **Turbidity**: all readings <20 NTU; optionally+/- 5NTU or +/- 10% (whichever is greater)

DEP Form FD 9000-24: Groundwater Sampling Log

GROUNDWATER SAMPLING DATA SHEET - PASCO COUNTY UTILITIES ENVIRONMENTAL LAB

SITE NAME:	RESOURCE RECOVERY	SITE LOCATION:	Hays Rd.		
WELL NO.	19764	SAMPLE ID:	2MW19D	SAMPLE DATE:	December 16, 2020

PURGING DATA

WELL DIAMETER(INCHES)	TUBING DIAM (INCHES)	WELL SCREEN INTERVAL DEPTH: ft to ft	TOP Elevation (NGVD)	PUMP TYPE OR BAILER:
2	½"	45.0 to 55.0	52.25	BP

WELL VOLUME PURGE: 1 WELL VOL.= (TWD-STATIC DEPTH TO WATER) X WELL CAPACITY

TWD(ft):	55.00	STATIC WATER:	24.27	GALLONS / FOOT:	0.16	1 WELL VOLUME(gals)=	4.9

EQUIPMENT VOLUME PURGE (only fill out if applicable)

PUMP VOL (GAL):	0.26	TUBING CAP.(G/ft)	0.010	TUBING LENGTH ft	30.6	FLOW CELLVOL.	N/A	1 EQ. VOL. PURGE:	

INITIAL PUMP OR TUBING DEPTH IN WELL (FEET):	FINAL PUMP OR TUBING DEPTH IN WELL (FEET):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (GALLONS):
30.6	30.6	1050	1120	15.00

TIME (24 hr)	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (GPM)	DEPTH TO WATER (FEET)	Ph (S.U.)	TEMP. (C°)	COND. (umhos/cm)	D.O. (mg/L)	TURB. (NTUs)	COLOR (describe)	ODOR (describe)
1050	0.00	0.00	0.00	24.27	7.40	21.95	286	6.72	9.4	cloudy	bad
1100	5.00	5.00	0.50	24.26	7.24	24.70	437	2.40	4.5	clear	bad
1110	5.00	10.00	0.50	24.25	7.06	24.74	440	2.64	1.5	clear	bad
1120	5.00	15.00	0.50	24.21	7.06	24.87	438	1.97	6.2	clear	bad

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

SAMPLING DATA

SAMPLED BY/AFFILIATION	GTORREY - Pasco County Environmental Laboratory	SAMPLER SIGNATURE:	SAMPLING INITIATED AT:	1122	SAMPLING ENDED AT:	1124

Pump or tubing depth in well	30.6	RATE (ML/MIN.):		1124	PE/T
DECONTAMINATION:	NO	FIELD FILTERED:	NO	FILTER SIZE (UM):	DUPLICATE: NO

SAMPLE CONTAINER SPECIFICATION AND PRESERVATION							INTENDED ANAYSIS and/or METHOD	BOTTLE		EQUIP. CODE:
Sample ID;	# of Conts.	Material Code	Volume	Preservative	mls Added	FINAL PH		DATE	SERIES	
	1	HDPE	1 Liter	Wet Ice	None		SM2540C - TDS	Eurofins Bottle		BP
	1	HDPE	250 mls	Wet Ice	None		Chlorides	Eurofins Bottle		BP
	2	HDPE	250 mls	H2SO4	2.0 1:1	<2	Ammonia/; NO3	Eurofins Bottle		BP
	1	HDPE	250 mls	HNO3	2.5/1:4	<2	App I Metals Fe, Hg, Na	Eurofins Bottle		BP
	3	CG	40 mls	HCl	.25/1:1	<2	App I VOCs	Eurofins Bottle		BP
	3	CG	40 mls	Wet Ice	None		8011-EDB, DBCP	Eurofins Bottle		BP

NGVD: **27.98** **LAB SAMPLE ID #:03204**

MATERIAL CODES: AG=AMBER GLASS; **CG**=CLEAR GLASS; **PE**=POLYETHYLENE; **PP**=POLYPROPYLENE; **S**=SILICONE; **T**=TEFLON; **O**=OTHER

SAMPLING/PURGING **APP**=After Peristalic Pump; **B**=Bailer; **BP**=Bladder Pump; **ESP**=Electric Submersible Pump; **PP**=Peristalic Pump
EQUIPMENT CODES: **RFPP**=Reverse Flow Peristalic Pump; **SM**=Straw Method(Tube Gravity Drain); **VT**=Vacuum Trap; **O**=Other(Specify)

NOTES: 1. The above does 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, +/- 0.2mg/L or +/-10%(whichever is greater) **Turbidity**: all readings <20 NTU; optionally+/- 5NTU or +/- 10% (whichever is greater)

DEP Form FD 9000-24: Groundwater Sampling Log

GROUNDWATER SAMPLING DATA SHEET - PASCO COUNTY UTILITIES ENVIRONMENTAL LAB

SITE NAME:	RESOURCE RECOVERY	SITE LOCATION:	Hays Rd.		
WELL NO.	19670	SAMPLE ID:	4MW-3A	SAMPLE DATE:	December 10, 2020

PURGING DATA

DIAMETER(INCHES)	TUBING DIAM (INCHES)	WELL SCREEN INTERVAL DEPTH: ft to ft	TOP Elevation (NGVD)	PUMP TYPE OR BAILER:
4	½"	22.0 to 50.0	52.92	BP

WELL VOLUME PURGE: 1 WELL VOL.= (TWD-STATIC DEPTH TO WATER) X WELL CAPACITY

TWD(ft):	50.00	STATIC WATER:	24.18	GALLONS / FOOT:	0.16	1 WELL VOLUME(gals)=	4.29

EQUIPMENT VOLUME PURGE (only fill out if applicable)

PUMP VOL (GAL):	0.26	TUBING CAP.(G/ft)	0.010	TUBING LENGTH ft		FLOW CELLVOL.	N/A	1 EQ. VOL. PURGE:	

INITIAL PUMP OR TUBING DEPTH IN WELL (FEET):	FINAL PUMP OR TUBING DEPTH IN WELL (FEET):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (GALLONS):
33.4	33.4	1248	1312	12.00

TIME (24 hr)	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (GPM)	DEPTH TO WATER (FEET)	Ph (S.U.)	TEMP	COND. (umhos/cm)	D.O. (mg/L)	TURB. (NTUs)	COLOR (describe)	ODOR (describe)
1248	0.00	0.00	0.00	24.18	7.46	22.62	443	3.84	1.1	cloudy	
1256	4.00	4.00	0.50	24.17	7.25	23.39	445	2.05	3.8	cloudy	
1304	4.00	8.00	0.50	24.17	7.21	23.64	440	2.24	2.7	clear	
1312	4.00	12.00	0.50	24.18	7.21	23.32	440	2.33	2.6	clear	

SAMPLING DATA

SAMPLED BY/AFFILIATION	GTORREY - Pasco County Environmental Laboratory	SAMPLER SIGNATURE:	SAMPLING INITIATED AT:	1314	SAMPLING ENDED AT:	1316

Pump or tubing depth in wel	33.4	RATE (ML/MIN.):		TUBING MATERIAL CODE:	PE/T
DECONTAMINATION:	NO	FIELD FILTERED:	NO	FILTER SIZE (UM):	DUPLICATE: NO

SAMPLE CONTAINER SPECIFICATION AND PRESERVATION							INTENDED ANAYSIS and/or METHOD	BOTTLE		EQUIP. CODE:
Sample ID;	# of Conts.	Material Code	Volume	Preservative	mls Added	FINAL PH		DATE	SERIES	
	1	HDPE	1 Liter	Wet Ice	None		SM2540C - TDS	Eurofins Bottle		BP
	1	HDPE	250 mls	Wet Ice	None		Chlorides	Eurofins Bottle		BP
	2	HDPE	250 mls	H2SO4	2.0 1:1	<2	Ammonia/; NO3	Eurofins Bottle		BP
	1	HDPE	250 mls	HNO3	2.5/1:4	<2	App I Metals Fe, Hg, Na	Eurofins Bottle		BP
	3	CG	40 mls	HCl	.25/1:1	<2	App I VOCs	Eurofins Bottle		BP
	3	CG	40 mls	Wet Ice	None		8011-EDB, DBCP	Eurofins Bottle		BP

NGVD:	28.74	2958

MATERIAL CODES: AG=AMBER GLASS; **CG**=CLEAR GLASS; **PE**=POLYETHYLENE; **PP**=POLYPROPYLENE; **S**=SILICONE; **T**=TEFLON; **O**=OTHER

SAMPLING/PURGING **APP**=After Peristalic Pump; **B**=Bailer; **BP**=Bladder Pump; **ESP**=Electric Submersible Pump; **PP**=Peristalic Pump
EQUIPMENT CODES: **RFPP**=Reverse Flow Peristalic Pump; **SM**=Straw Method(Tube Gravity Drain); **VT**=Vacuum Trap; **O**=Other(Specify)

NOTES: 1. The above does 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, +/- 0.2mg/L or +/-10%(whichever is greater) **Turbidity**: all readings <20 NTU; optionally+/- 5NTU or +/- 10% (whichever is greater)

DEP Form FD 9000-24: Groundwater Sampling Log

GROUNDWATER SAMPLING DATA SHEET - PASCO COUNTY UTILITIES ENVIRONMENTAL LAB

SITE NAME:	RESOURCE RECOVERY	SITE LOCATION:	Hays Rd.		
WELL NO.	2388	SAMPLE ID:	4MW-4	SAMPLE DATE:	December 9, 2020

PURGING DATA

WELL DIAMETER(INCHES)	TUBING DIAM (INCHES)	WELL SCREEN INTERVAL DEPTH: ft to ft	TOP Elevation (NGVD)	PUMP TYPE OR BAILER:
4	½"	22.0 to 50.0	50.81	BP

WELL VOLUME PURGE: 1 WELL VOL.= (TWD-STATIC DEPTH TO WATER) X WELL CAPACITY

TWD(ft):	50.00	STATIC WATER:	23.4	GALLONS / FOOT:	0.65	1 WELL VOLUME(gals)=	17.29

EQUIPMENT VOLUME PURGE (only fill out if applicable)

PUMP VOL (GAL):	0.26	TUBING CAP.(G/ft)	0.010	TUBING LENGTH ft		FLOW CELLVOL.	N/A	1 EQ. VOL. PURGE:	

INITIAL PUMP OR TUBING DEPTH IN WELL (FEET):	FINAL PUMP OR TUBING DEPTH IN WELL (FEET):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (GALLONS):
38.9	38.9	0830	1012	51.00

TIME (24 hr)	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (GPM)	DEPTH TO WATER (FEET)	Ph (S.U.)	TEMP. (C°)	COND. (umhos/cm)	D.O. (mg/L)	TURB. (NTUs)	COLOR (describe)	ODOR (describe)
0830	0.00	0.00	0.00	23.40	7.28	22.07	427	5.25	7.8	clear	mild
0904	17.00	17.00	0.50	23.40	7.14	23.10	435	3.34	12.9	clear	mild
0938	17.00	34.00	0.50	23.40	7.14	23.59	439	2.82	9.2	clear	mild
1012	17.00	51.00	0.50	23.40	7.17	24.17	438	3.32	5.7	clear	mild

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

SAMPLING DATA

SAMPLED BY/AFFILIATION	GTORREY - Pasco County Environmental Laboratory	SAMPLER SIGNATURE:	SAMPLING INITIATED AT:	1014	SAMPLING ENDED AT:	1016

Pump or tubing depth in well	38.9	RATE (ML/MIN.):		TUBING MATERIAL CODE:	PE/T
DECONTAMINATION:	NO	FIELD FILTERED:	NO	FILTER SIZE (UM):	DUPLICATE NO

SAMPLE CONTAINER SPECIFICATION AND PRESERVATION							INTENDED ANAYSIS and/or METHOD	BOTTLE		EQUIP. CODE:
Sample ID;	# of Conts.	Material Code	Volume	Preservative	mls Added	FINAL PH		DATE	SERIES	
	1	HDPE	1 Liter	Wet Ice	None		SM2540C - TDS	Eurofins Bottle		BP
	1	HDPE	250 mls	Wet Ice	None		Chlorides	Eurofins Bottle		BP
	2	HDPE	250 mls	H2SO4	2.0 1:1	<2	Ammonia/; NO3	Eurofins Bottle		BP
	1	HDPE	250 mls	HNO3	2.5/1:4	<2	App I Metals Fe, Hg, Na	Eurofins Bottle		BP
	3	CG	40 mls	HCl	.25/1:1	<2	App I VOCs	Eurofins Bottle		BP
	3	CG	40 mls	Wet Ice	None		8011-EDB, DBCP	Eurofins Bottle		BP

NGVD: 27.41 **LAB SAMPLE ID #:02894**

MATERIAL CODES: AG=AMBER GLASS; **CG**=CLEAR GLASS; **PE**=POLYETHYLENE; **PP**=POLYPROPYLENE; **S**=SILICONE; **T**=TEFLON; **O**=OTHER

SAMPLING/PURGING **APP**=After Peristalic Pump; **B**=Bailer; **BP**=Bladder Pump; **ESP**=Electric Submersible Pump; **PP**=Peristalic Pump
EQUIPMENT CODES: **RFPP**=Reverse Flow Peristalic Pump; **SM**=Straw Method(Tube Gravity Drain); **VT**=Vacuum Trap; **O**=Other(Specify)

NOTES: 1. The above does 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, +/- 0.2mg/L or +/-10%(whichever is greater) **Turbidity**: all readings <20 NTU; optionally+/- 5NTU or +/- 10% (whichever is greater)

DEP Form FD 9000-24: Groundwater Sampling Log

GROUNDWATER SAMPLING DATA SHEET - PASCO COUNTY UTILITIES ENVIRONMENTAL LAB

SITE NAME:	RESOURCE RECOVERY	SITE LOCATION:	Hays Rd.		
WELL NO.	2390	SAMPLE ID:	4MW-6	SAMPLE DATE:	December 11, 2020

PURGING DATA

WELL DIAMETER(INCHES)	TUBING DIAM (INCHES)	WELL SCREEN INTERVAL DEPTH: ft to ft	TOP Elevation (NGVD)	PUMP TYPE OR BAILER:
4	½"	73.0 - 100.0	55.95	BP

WELL VOLUME PURGE: 1 WELL VOL.= (TWD-STATIC DEPTH TO WATER) X WELL CAPACITY

TWD(ft):	100.00	STATIC WATER:	23.80	GALLONS / FOOT:	0.65	1 WELL VOLUME(gals)=	49.5

EQUIPMENT VOLUME PURGE (only fill out if applicable)

PUMP VOL (GAL):	0.26	TUBING CAP.(G/ft)	0.010	TUBING LENGTH ft		FLOW CELLVOL.	N/A	1 EQ. VOL. PURGE:	

INITIAL PUMP OR TUBING DEPTH IN WELL (FEET):	FINAL PUMP OR TUBING DEPTH IN WELL (FEET):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (GALLONS):
77	77	0800	1300	150.00

TIME (24 hr)	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (GPM)	DEPTH TO WATER (FEET)	Ph (S.U.)	TEMP. (C°)	COND. (umhos/cm)	D.O. (mg/L)	TURB. (NTUs)	COLOR (describe)	ODOR (describe)
0800	0.00	0.00	0.00	23.80	7.77	22.23	160	7.02	5.8	clear	mild
0940	50.00	50.00	0.50	23.80	7.99	23,32	156	6.04	8.9	clear	mild
1120	50.00	100.00	0.50	23.90	7.84	23.80	155	5.83	2.6	clear	mild
1300	50.00	150.00	0.50	23.90	7.85	24.22	155	6.08	1.7	clear	nild

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

SAMPLING DATA

SAMPLED BY/AFFILIATION	GTORREY - Pasco County Environmental Laboratory	SAMPLER SIGNATURE:	SAMPLING INITIATED AT:	1300	SAMPLING ENDED AT:	1304

Pump or tubing depth in well	77	RATE (ML/MIN.):		TUBING MATERIAL CODE:	PE/T
DECONTAMINATION:	NO	FIELD FILTERED:	NO	FILTER SIZE (UM):	DUPLICATE: NO

SAMPLE CONTAINER SPECIFICATION AND PRESERVATION							INTENDED ANAYSIS and/or METHOD	BOTTLE		EQUIP. CODE:
Sample ID;	# of Conts.	Material Code	Volume	Preservative	mls Added	FINAL PH		DATE	SERIES	
	1	HDPE	1 Liter	Wet Ice	None		SM2540C - TDS	Eurofins Bottle		BP
	1	HDPE	250 mls	Wet Ice	None		Chlorides	Eurofins Bottle		BP
	2	HDPE	250 mls	H2SO4	2.0 1:1	<2	Ammonia/; NO3	Eurofins Bottle		BP
	1	HDPE	250 mls	HNO3	2.5/1:4	<2	App I Metals Fe, Hg, Na	Eurofins Bottle		BP
	3	CG	40 mls	HCl	.25/1:1	<2	App I VOCs	Eurofins Bottle		BP
	3	CG	40 mls	Wet Ice	None		8011-EDB, DBCP	Eurofins Bottle		BP

NGVD: 32.15 **LAB SAMPLE ID #:03009**

MATERIAL CODES: AG=AMBER GLASS; **CG**=CLEAR GLASS; **PE**=POLYETHYLENE; **PP**=POLYPROPYLENE; **S**=SILICONE; **T**=TEFLON; **O**=OTHER

SAMPLING/PURGING **APP**=After Peristalic Pump; **B**=Bailer; **BP**=Bladder Pump; **ESP**=Electric Submersible Pump; **PP**=Peristalic Pump

EQUIPMENT CODES: **RFPP**=Reverse Flow Peristalic Pump; **SM**=Straw Method(Tube Gravity Drain); **VT**=Vacuum Trap; **O**=Other(Specify)

NOTES: 1. The above does 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, +/- 0.2mg/L or +/-10%(whichever is greater) **Turbidity**: all readings <20 NTU; optionally+/- 5NTU or +/- 10% (whichever is greater)

DEP Form FD 9000-24: Groundwater Sampling Log

GROUNDWATER SAMPLING DATA SHEET - PASCO COUNTY UTILITIES ENVIRONMENTAL LAB

SITE NAME:	RESOURCE RECOVERY	SITE LOCATION:	Hays Rd.		
WELL NO.	4MW-7	SAMPLE ID:	4MW-7	SAMPLE DATE:	December 10, 2020

PURGING DATA

WELL DIAMETER(INCHES)	TUBING DIAM (INCHES)	WELL SCREEN INTERVAL DEPTH: ft to ft	TOP Elevation (NGVD)	PUMP TYPE OR BAILER:
4	½"	22.0 - 47.0	52.62	BP

WELL VOLUME PURGE: 1 WELL VOL.= (TWD-STATIC DEPTH TO WATER) X WELL CAPACITY

TWD(ft):	50.00	STATIC WATER:	21.85	GALLONS / FOOT:	0.65	1 WELL VOLUME(gals)=	18.2

EQUIPMENT VOLUME PURGE (only fill out if applicable)

PUMP VOL (GAL):	0.26	TUBING CAP.(G/ft)	0.010	TUBING LENGTH ft		FLOW CELLVOL.	N/A	1 EQ. VOL. PURGE:	

INITIAL PUMP OR TUBING DEPTH IN WELL (FEET):	FINAL PUMP OR TUBING DEPTH IN WELL (FEET):	**PURGING INITIATED AT:**	**PURGING ENDED AT:**	TOTAL VOLUME PURGED (GALLONS):
42.1	42.1	0800	0948	54.00

TIME (24 hr)	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (GPM)	DEPTH TO WATER (FEET)	Ph (S.U.)	TEMP. (C°)	COND. (umhos/cm)	D.O. (mg/L)	TURB. (NTUs)	COLOR (describe)	ODOR (describe)
0800	0.00	0.00	21.85	21.85	7.34	20.96	368	2.99	8.2	clear	mild
0836	18.00	0.50	21.85	21.85	7.22	23.27	356	2.49	11.1	clear	mild
0912	18.00	0.50	21.85	21.85	7.21	23.15	364	2.11	4.3	clear	mild
0948	18.00	0.50	21.85	21.85	7.23	23.13	366	2.05	1.9	clear	mild

*****WATER LEVEL IS BELOW TOP OF PUMP.**

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

SAMPLING DATA

SAMPLED BY/AFFILIATION	GTORREY - Pasco County Environmental Laboratory	SAMPLER SIGNATURE:	SAMPLING INITIATED AT:	950	SAMPLING ENDED AT:	952

Pump or tubing depth in well	42.1	RATE (ML/MIN.):		TUBING MATERIAL CODE:	PE/T
DECONTAMINATION:	NO	FIELD FILTERED:	NO	FILTER SIZE (UM):	DUPLICATE: NO

SAMPLE CONTAINER SPECIFICATION AND PRESERVATION							INTENDED ANAYSIS and/or METHOD	BOTTLE		EQUIP. CODE:
Sample ID;	# of Conts.	Material Code	Volume	Preservative	mls Added	FINAL PH		DATE	SERIES	
	1	HDPE	1 Liter	Wet Ice	None		SM2540C - TDS	Eurofins Bottle		BP
	1	HDPE	250 mls	Wet Ice	None		Chlorides	Eurofins Bottle		BP
	2	HDPE	250 mls	H2SO4	2.0 1:1	<2	Ammonia/; NO3	Eurofins Bottle		BP
	1	HDPE	250 mls	HNO3	2.5/1:4	<2	App I Metals Fe, Hg, Na	Eurofins Bottle		BP
	3	CG	40 mls	HCl	.25/1:1	<2	App I VOCs	Eurofins Bottle		BP
	3	CG	40 mls	Wet Ice	None		8011-EDB, DBCP	Eurofins Bottle		BP

NGVD:	**30.77**	**LAB SAMPLE ID #:02956**

MATERIAL CODES: AG=AMBER GLASS; **CG**=CLEAR GLASS; **PE**=POLYETHYLENE; **PP**=POLYPROPYLENE; **S**=SILICONE; **T**=TEFLON; **O**=OTHER

SAMPLING/PURGING **APP**=After Peristalic Pump; **B**=Bailer; **BP**=Bladder Pump; **ESP**=Electric Submersible Pump; **PP**=Peristalic Pump
EQUIPMENT CODES: **RFPP**=Reverse Flow Peristalic Pump; **SM**=Straw Method(Tube Gravity Drain); **VT**=Vacuum Trap; **O**=Other(Specify)

NOTES: 1. The above does 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, +/- 0.2mg/L or +/-10%(whichever is greater) **Turbidity**: all readings <20 NTU; optionally+/- 5NTU or +/- 10% (whichever is greater)

DEP Form FD 9000-24: Groundwater Sampling Log

GROUNDWATER SAMPLING DATA SHEET - PASCO COUNTY UTILITIES ENVIRONMENTAL LAB

SITE NAME:	RESOURCE RECOVERY	SITE LOCATION:	Hays Rd.		
WELL NO.	2341	SAMPLE ID:	4MW-8	SAMPLE DATE:	December 9, 2020

PURGING DATA

WELL DIAMETER(INCHES)	TUBING DIAM (INCHES)	WELL SCREEN INTERVAL DEPTH: ft to ft	TOP Elevation (NGVD)	PUMP TYPE OR BAILER:
4	½"	32.0 - 65.0	51.87	BP

WELL VOLUME PURGE: 1 WELL VOL.= (TWD-STATIC DEPTH TO WATER) X WELL CAPACITY

TWD(ft):	65.00	STATIC WATER:	21.08	GALLONS / FOOT:	0.65	1 WELL VOLUME(gals)=	12.91

EQUIPMENT VOLUME PURGE (only fill out if applicable)

PUMP VOL (GAL):	0.26	TUBING CAP.(G/ft)	0.010	TUBING LENGTH ft		FLOW CELLVOL.	N/A	1 EQ. VOL. PURGE:	

INITIAL PUMP OR TUBING DEPTH IN WELL (FEET):	FINAL PUMP OR TUBING DEPTH IN WELL (FEET):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (GALLONS):
31	31	0013	1433	39.00

TIME (24 hr)	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (GPM)	DEPTH TO WATER (FEET)	Ph (S.U.)	TEMP. (C°)	COND. (umhos/cm)	D.O. (mg/L)	TURB. (NTUs)	COLOR (describe)	ODOR (describe)
1315	0.00	0.00	0.00	21.08	7.63	22.32	330	6.24	8.9	clear	mild
1341	13.00	13.00	0.50	21.08	7.32	22.44	392	2.34	5.6	clear	mild
1407	13.00	26.00	0.50	21.08	7.21	22.31	394	2.99	5.9	clear	mild
1433	13.00	39.00	0.50	21.08	7.20	22.56	392	2.30	1.5	clear	mild

*****WATER LEVEL IS BELOW TOP OF PUMP.**

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

SAMPLED BY/AFFILIATION	GTORREY - Pasco County Environmental Laboratory	SAMPLER SIGNATURE:	SAMPLING INITIATED AT:	1435	SAMPLING ENDED AT:	1437
Pump or tubing depth in well	31	RATE (ML/MIN.):		TUBING MATERIAL CODE:		PE/T
DECONTAMINATION:	NO	FIELD FILTERED:	NO	FILTER SIZE (UM):		DUPLICATE	NO

SAMPLE CONTAINER SPECIFICATION AND PRESERVATION							INTENDED ANAYSIS and/or METHOD	BOTTLE		EQUIP. CODE:
Sample ID;	# of Conts.	Material Code	Volume	Preservative	mls Added	FINAL PH		DATE	SERIES	
	1	HDPE	1 Liter	Wet Ice	None		SM2540C - TDS	Eurofins Bottle		BP
	1	HDPE	250 mls	Wet Ice	None		Chlorides	Eurofins Bottle		BP
	2	HDPE	250 mls	H2SO4	2.0 1:1	<2	Ammonia/; NO3	Eurofins Bottle		BP
	1	HDPE	250 mls	HNO3	2.5/1:4	<2	App I Metals Fe, Hg, Na	Eurofins Bottle		BP
	3	CG	40 mls	HCl	.25/1:1	<2	App I VOCs	Eurofins Bottle		BP
	3	CG	40 mls	Wet Ice	None		8011-EDB, DBCP	Eurofins Bottle		BP

NGVD: **30.78** **LAB SAMPLE ID #:02896**

MATERIAL CODES: AG=AMBER GLASS; **CG**=CLEAR GLASS; **PE**=POLYETHYLENE; **PP**=POLYPROPYLENE; **S**=SILICONE; **T**=TEFLON; **O**=OTHER

SAMPLING/PURGING **APP**=After Peristalic Pump; **B**=Bailer; **BP**=Bladder Pump; **ESP**=Electric Submersible Pump; **PP**=Peristalic Pump
EQUIPMENT CODES: **RFPP**=Reverse Flow Peristalic Pump; **SM**=Straw Method(Tube Gravity Drain); **VT**=Vacuum Trap; **O**=Other(Specify)

NOTES: 1. The above does 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, +/- 0.2mg/L or +/-10%(whichever is greater) **Turbidity**: all readings <20 NTU; optionally+/- 5NTU or +/- 10% (whichever is greater)

DEP Form FD 9000-24: Groundwater Sampling Log

GROUNDWATER SAMPLING DATA SHEET - PASCO COUNTY UTILITIES ENVIRONMENTAL LAB

SITE NAME:	RESOURCE RECOVERY	SITE LOCATION:	Hays Rd.		
WELL NO.	2342	SAMPLE ID:	4MW-9	SAMPLE DATE:	December 9, 2020

PURGING DATA

WELL DIAMETER(INCHES)	TUBING DIAM (INCHES)	WELL SCREEN INTERVAL DEPTH: ft to ft	TOP Elevation (NGVD)	PUMP TYPE OR BAILER:
4	½"	30.0 - 60.0	52.78	BP

WELL VOLUME PURGE: 1 WELL VOL.= (TWD-STATIC DEPTH TO WATER) X WELL CAPACITY

TWD(ft):	60.00	STATIC WATER:	23.47	GALLONS / FOOT:	0.65	1 WELL VOLUME(gals)=	17.80

EQUIPMENT VOLUME PURGE (only fill out if applicable)

PUMP VOL (GAL):	0.26	TUBING CAP.(G/ft)	0.010	TUBING LENGTH ft		FLOW CELLVOL.	N/A	1 EQ. VOL. PURGE:	

INITIAL PUMP OR TUBING DEPTH IN WELL (FEET):	FINAL PUMP OR TUBING DEPTH IN WELL (FEET):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (GALLONS):
29	29	1114	1302	54.00

TIME (24 hr)	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (GPM)	DEPTH TO WATER (FEET)	Ph (S.U.)	TEMP. (C°)	COND. (umhos/cm)	D.O. (mg/L)	TURB. (NTUs)	COLOR (describe)	ODOR (describe)
1114	0.00	0.00	0.00	23.47	7.31	22.46	451	4.54	7.6	clear	mild
1150	18.00	18.00	0.50	23.45	7.19	22.93	453	1.97	7.7	clear	mild
1226	18.00	36.00	0.50	23.47	7.17	23.03	448	1.87	6.6	clear	mild
1302	18.00	54.00	0.50	23.47	7.16	22.92	452	2.26	7.2	clear	mild

SAMPLING DATA

SAMPLED BY/AFFILIATION	GTORREY - Pasco County Environmental Laboratory	SAMPLER SIGNATURE:	SAMPLING INITIATED AT:	1304	SAMPLING ENDED AT:	1306

Pump or tubing depth in well	29	RATE (ML/MIN.):		TUBING MATERIAL CODE:	PE/T
DECONTAMINATION:	NO	FIELD FILTERED:	NO	FILTER SIZE (UM):	DUPLICATE: NO

SAMPLE CONTAINER SPECIFICATION AND PRESERVATION							INTENDED ANAYSIS and/or METHOD	BOTTLE		EQUIP. CODE:
Sample ID;	# of Conts.	Material Code	Volume	Preservative	mls Added	FINAL PH		DATE	SERIES	
	1	HDPE	1 Liter	Wet Ice	None		SM2540C - TDS	Eurofins Bottle		BP
	1	HDPE	250 mls	Wet Ice	None		Chlorides	Eurofins Bottle		BP
	2	HDPE	250 mls	H2SO4	2.0 1:1	<2	Ammonia/; NO3	Eurofins Bottle		BP
	1	HDPE	250 mls	HNO3	2.5/1:4	<2	App I Metals Fe, Hg, Na	Eurofins Bottle		BP
	3	CG	40 mls	HCl	.25/1:1	<2	App I VOCs	Eurofins Bottle		BP
	3	CG	40 mls	Wet Ice	None		8011-EDB, DBCP	Eurofins Bottle		BP

NGVD: 29.31 **LAB SAMPLE ID #:02895**

MATERIAL CODES: AG=AMBER GLASS; **CG**=CLEAR GLASS; **PE**=POLYETHYLENE; **PP**=POLYPROPYLENE; **S**=SILICONE; **T**=TEFLON; **O**=OTHER

SAMPLING/PURGING **APP**=After Peristalic Pump; **B**=Bailer; **BP**=Bladder Pump; **ESP**=Electric Submersible Pump; **PP**=Peristalic Pump
EQUIPMENT CODES: **RFPP**=Reverse Flow Peristalic Pump; **SM**=Straw Method(Tube Gravity Drain); **VT**=Vacuum Trap; **O**=Other(Specify)

NOTES: 1. The above does 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, +/- 0.2mg/L or +/-10%(whichever is greater) **Turbidity**: all readings <20 NTU; optionally+/- 5NTU or +/- 10% (whichever is greater)

DEP Form FD 9000-24: Groundwater Sampling Log

GROUNDWATER SAMPLING DATA SHEET - PASCO COUNTY UTILITIES ENVIRONMENTAL LAB

SITE NAME:	RESOURCE RECOVERY	SITE LOCATION:	Hays Rd.		
WELL NO.	2510	SAMPLE ID:	4MW-11D	SAMPLE DATE:	December 10, 2020

PURGING DATA

WELL DIAMETER(INCHES)	TUBING DIAM (INCHES)	WELL SCREEN INTERVAL DEPTH: ft to ft	TOP Elevation (NGVD)	PUMP TYPE OR BAILER:
2	½"	27.0 - 52.0	65.00	BP

WELL VOLUME PURGE: 1 WELL VOL.= (TWD-STATIC DEPTH TO WATER) X WELL CAPACITY

TWD(ft):	52.00	STATIC WATER:	33.55	GALLONS / FOOT:	0.16	1 WELL VOLUME(gals)=	11.9

EQUIPMENT VOLUME PURGE (only fill out if applicable)

PUMP VOL (GAL):	0.26	TUBING CAP.(G/ft)	0.010	TUBING LENGTH ft		FLOW CELLVOL.	N/A	1 EQ. VOL. PURGE:	

INITIAL PUMP OR TUBING DEPTH IN WELL (FEET):	FINAL PUMP OR TUBING DEPTH IN WELL (FEET):	**PURGING INITIATED AT:**	**PURGING ENDED AT:**	TOTAL VOLUME PURGED (GALLONS):
44.5	44.5	1005	1129	36.00

TIME (24 hr)	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (GPM)	DEPTH TO WATER (FEET)	Ph (S.U.)	TEMP. (C°)	COND. (umhos/cm)	D.O. (mg/L)	TURB. (NTUs)	COLOR (describe)	ODOR (describe)
1005	0.00	0.00	0.00	33.55	7.35	22.75	381	5.38	3.6	clear	bad
1029	12.00	12.00	0.50	33.57	7.31	23.98	380	3.96	5.1	clear	bad
1053	12.00	24.00	0.50	33.57	7.35	24.15	376	3.62	2.9	clear	bad
1129	12.00	36.00	0.50	33.57	7.37	24.48	377	3.34	2.3	clear	bad

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

SAMPLING DATA

SAMPLED BY/AFFILIATION	GTORREY - Pasco County Environmental Laboratory	SAMPLER SIGNATURE:	SAMPLING INITIATED AT:	1131	SAMPLING ENDED AT:	1133

Pump or tubing depth in well	44.5	RATE (ML/MIN.):		TUBING MATERIAL CODE:	PE/T
DECONTAMINATION:	NO	FIELD FILTERED:	NO	FILTER SIZE (UM):	DUPLICATE: NO

SAMPLE CONTAINER SPECIFICATION AND PRESERVATION							INTENDED ANAYSIS and/or METHOD	BOTTLE		EQUIP. CODE:
Sample ID;	# of Conts.	Material Code	Volume	Preservative	mls Added	FINAL PH		DATE	SERIES	
	1	HDPE	1 Liter	Wet Ice	None		SM2540C - TDS	Eurofins Bottle		BP
	1	HDPE	250 mls	Wet Ice	None		Chlorides	Eurofins Bottle		BP
	2	HDPE	250 mls	H2SO4	2.0 1:1	<2	Ammonia/; NO3	Eurofins Bottle		BP
	1	HDPE	250 mls	HNO3	2.5/1:4	<2	App I Metals Fe, Hg, Na	Eurofins Bottle		BP
	3	CG	40 mls	HCl	.25/1:1	<2	App I VOCs	Eurofins Bottle		BP
	3	CG	40 mls	Wet Ice	None		8011-EDB, DBCP	Eurofins Bottle		BP

NGVD: **31.45** **LAB SAMPLE ID #:02957**

31.45

SAMPLING/PURGING **APP**=After Peristalic Pump; **B**=Bailer; **BP**=Bladder Pump; **ESP**=Electric Submersible Pump; **PP**=Peristalic Pump
EQUIPMENT CODES: **RFPP**=Reverse Flow Peristalic Pump; **SM**=Straw Method(Tube Gravity Drain); **VT**=Vacuum Trap; **O**=Other(Specify)

NOTES: 1. The above does 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, +/- 0.2mg/L or +/-10%(whichever is greater) **Turbidity**: all readings <20 NTU; optionally+/- 5NTU or +/- 10% (whichever is greater)

DEP Form FD 9000-24: Groundwater Sampling Log

GROUNDWATER SAMPLING DATA SHEET - PASCO COUNTY UTILITIES ENVIRONMENTAL LAB

SITE NAME:	RESOURCE RECOVERY	SITE LOCATION:	HAYS ROAD		
WELL NO.	2511	SAMPLE ID:	4MW-12D	SAMPLE DATE:	December 26, 2020

PURGING DATA

WELL DIAMETER(INCHES)	TUBING DIAM (INCHES)	WELL SCREEN INTERVAL DEPTH: ft to ft	TOP Elevation (NGVD)	PUMP TYPE OR BAILER:
2	½"	30.0 - 55.0	55.03	BP

WELL VOLUME PURGE: 1 WELL VOL.= (TWD-STATIC DEPTH TO WATER) X WELL CAPACITY

TWD(ft):	55.00	STATIC WATER:	24.77	GALLONS / FOOT:	0.16	1 WELL VOLUME(gals)=	4.83

EQUIPMENT VOLUME PURGE (only fill out if applicable)

PUMP VOL (GAL):	0.26	TUBING CAP.(G/ft)	0.010	TUBING LENGTH ft		FLOW CELLVOL.	N/A	1 EQ. VOL. PURGE:	

INITIAL PUMP OR TUBING DEPTH IN WELL (FEET):	FINAL PUMP OR TUBING DEPTH IN WELL (FEET):	**PURGING INITIATED AT:**	**PURGING ENDED AT:**	TOTAL VOLUME PURGED (GALLONS):
30	30	1140	1210	15.00

TIME (24 hr)	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (GPM)	DEPTH TO WATER (FEET)	Ph (S.U.)	TEMP. (C°)	COND. (umhos/cm)	D.O. (mg/L)	TURB. (NTUs)	COLOR (describe)	ODOR (describe)
1140	0.00	0.00	0.00	24.77	7.09	24.40	392	4.30	1.6	clear	mild
1150	5.00	5.00	0.50	24.77	7.13	24.97	383	2.97	1.8	clear	mild
1200	5.00	10.00	0.50	24.70	7.17	25.04	378	2.55	1.9	clear	mild
1210	5.00	15.00	0.50	24.83	7.18	24.98	379	3.47	1.2	clear	mild

SAMPLING DATA

SAMPLED BY/AFFILIATION	GTORREY - Pasco County Environmental Laboratory	SAMPLER SIGNATURE:	SAMPLING INITIATED AT:	1211	SAMPLING ENDED AT:	1215

Pump or tubing depth in well	30	RATE (ML/MIN.):		TUBING MATERIAL CODE:	PE/T
DECONTAMINATION:	NO	FIELD FILTERED:	NO	FILTER SIZE (UM):	DUPLICATE NO

SAMPLE CONTAINER SPECIFICATION AND PRESERVATION							INTENDED ANAYSIS and/or METHOD	BOTTLE		EQUIP. CODE:
Sample ID;	# of Conts.	Material Code	Volume	Preservative	mls Added	FINAL PH		DATE	SERIES	
	1	HDPE	1 Liter	Wet Ice	None		SM2540C - TDS	Eurofins Bottle		BP
	1	HDPE	250 mls	Wet Ice	None		Chlorides	Eurofins Bottle		BP
	2	HDPE	250 mls	H2SO4	2.0 1:1	<2	Ammonia/; NO3	Eurofins Bottle		BP
	1	HDPE	250 mls	HNO3	2.5/1:4	<2	App I Metals Fe, Hg, Na	Eurofins Bottle		BP
	3	CG	40 mls	HCl	.25/1:1	<2	App I VOCs	Eurofins Bottle		BP
	3	CG	40 mls	Wet Ice	None		8011-EDB, DBCP	Eurofins Bottle		BP

NGVD: 30.26 **LAB SAMPLE ID #:**03205

MATERIAL CODES: AG=AMBER GLASS; **CG**=CLEAR GLASS; **PE**=POLYETHYLENE; **PP**=POLYPROPYLENE; **S**=SILICONE; **T**=TEFLON; **O**=OTHER

SAMPLING/PURGING EQUIPMENT CODES: **APP**=After Peristalic Pump; **B**=Bailer; **BP**=Bladder Pump; **ESP**=Electric Submersible Pump; **PP**=Peristalic Pump **RFPP**=Reverse Flow Peristalic Pump; **SM**=Straw Method(Tube Gravity Drain); **VT**=Vacuum Trap; **O**=Other(Specify)

NOTES: 1. The above does 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, +/- 0.2mg/L or +/-10%(whichever is greater) **Turbidity**: all readings <20 NTU; optionally+/- 5NTU or +/- 10% (whichever is greater)

DEP Form FD 9000-24: Groundwater Sampling Log

GROUNDWATER SAMPLING DATA SHEET - PASCO COUNTY UTILITIES ENVIRONMENTAL LAB

SITE NAME:	RESOURCE RECOVERY	SITE LOCATION:	Hays Rd.		
WELL NO.	2512	SAMPLE ID:	4MW-14D	SAMPLE DATE:	December 16, 2020

PURGING DATA

WELL DIAMETER(INCHES)	TUBING DIAM (INCHES)	WELL SCREEN INTERVAL DEPTH: ft to ft	TOP Elevation (NGVD)	PUMP TYPE OR BAILER:
2	½"	25.0 to 50.0	52.00	BP

WELL VOLUME PURGE: 1 WELL VOL.= (TWD-STATIC DEPTH TO WATER) X WELL CAPACITY

TWD(ft):	50.00	STATIC WATER:	21.35	GALLONS / FOOT:	0.16	1 WELL VOLUME(gals)=	12.5

EQUIPMENT VOLUME PURGE (only fill out if applicable)

PUMP VOL (GAL):	0.26	TUBING CAP.(G/ft)	0.010	TUBING LENGTH ft		FLOW CELLVOL.	N/A	1 EQ. VOL. PURGE:	

INITIAL PUMP OR TUBING DEPTH IN WELL (FEET):	FINAL PUMP OR TUBING DEPTH IN WELL (FEET):	**PURGING INITIATED AT:**	**PURGING ENDED AT:**	TOTAL VOLUME PURGED (GALLONS):
40.2	40.2	1244	1339	39.00

TIME (24 hr)	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (GPM)	DEPTH TO WATER (FEET)	Ph (S.U.)	TEMP. (C°)	COND. (umhos/cm)	D.O. (mg/L)	TURB. (NTUs)	COLOR (describe)	ODOR (describe)
1244	0.00	0.00	0.00	21.35	7.24	26.07	380	3.44	5.4	clear	bad
1300	13.00	13.00	0.50	21.39	7.21	26.52	379	3.15	4.6	clear	mild
1326	13.00	26.00	0.50	21.38	7.17	26.50	378	2.41	5.8	clear	mild
1339	13.00	39.00	0.50	21.38	7.20	26.49	373	2.46	5.8	clear	mild

SAMPLING DATA

SAMPLED BY/AFFILIATION	GTORREY - Pasco County Environmental Laboratory	**SAMPLER SIGNATURE:**	SAMPLING INITIATED AT:	1340	SAMPLING ENDED AT:	1342

Pump or tubing depth in well	40.2	RATE (ML/MIN.):		TUBING MATERIAL CODE:	PE/T
DECONTAMINATION:	NO	FIELD FILTERED:	NO	FILTER SIZE (UM):	DUPLICATE NO

SAMPLE CONTAINER SPECIFICATION AND PRESERVATION							INTENDED ANAYSIS and/or METHOD	BOTTLE		EQUIP. CODE:
Sample ID;	# of Conts.	Material Code	Volume	Preservative	mls Added	FINAL PH		DATE	SERIES	
	1	HDPE	1 Liter	Wet Ice	None		SM2540C - TDS	Eurofins Bottle		BP
	1	HDPE	250 mls	Wet Ice	None		Chlorides	Eurofins Bottle		BP
	2	HDPE	250 mls	H2SO4	2.0 1:1	<2	Ammonia/; NO3	Eurofins Bottle		BP
	1	HDPE	250 mls	HNO3	2.5/1:4	<2	App I Metals Fe, Hg, Na	Eurofins Bottle		BP
	3	CG	40 mls	HCl	.25/1:1	<2	App I VOCs	Eurofins Bottle		BP
	3	CG	40 mls	Wet Ice	None		8011-EDB, DBCP	Eurofins Bottle		BP

NGVD: **30.65** **LAB SAMPLE ID #:03206**

MATERIAL CODES: AG=AMBER GLASS; **CG**=CLEAR GLASS; **PE**=POLYETHYLENE; **PP**=POLYPROPYLENE; **S**=SILICONE; **T**=TEFLON; **O**=OTHER

SAMPLING/PURGING **APP**=After Peristalic Pump; **B**=Bailer; **BP**=Bladder Pump; **ESP**=Electric Submersible Pump; **PP**=Peristalic Pump
EQUIPMENT CODES: **RFPP**=Reverse Flow Peristalic Pump; **SM**=Straw Method(Tube Gravity Drain); **VT**=Vacuum Trap; **O**=Other(Specify)

NOTES: 1. The above does 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, +/- 0.2mg/L or +/-10%(whichever is greater) **Turbidity**: all readings <20 NTU; optionally+/- 5NTU or +/- 10% (whichever is greater)