Sarasota County

Central County Solid Waste Disposal Complex

Permit Number: 130542-022-SO/01

WACS ID: SWD/58/51614

2019 Semi-Annual Groundwater Report (July – December 2019)

2019 Semi-Annual Surface Water Report (July – December 2019)

March 2020

Sarasota County Solid Waste Operations
4000 Knights Trail Rd
Nokomis Florida 34275

Sarasota County

Sarasota County

Public Utilities – Solid Waste

4000 Knights Trail Rd.
Nokomis, FL 34275

941-861-5000
scgov.net

March 20, 2020

Solid Waste Section
Department of Environmental Protection
South District Office
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33902-2549

RE: Central County Solid Waste Disposal Complex
Permit Number 130542-022-SO/01
2019 2nd Semi-Annual Groundwater Report (July – December 2019)
2019 2nd Semi-Annual Surface Water Report (July – December 2019)

To Whom It May Concern:

Enclosed are the 2nd Semi-Annual Groundwater and Surface Water Monitoring Reports for 2019 as specified in Appendix 3.II and 3.III, respectively, of the permit. Included as well are the associated ADaPT files as specified in Appendix 3.V.E.7 of the permit.

You will find included in this report; the Water Quality Monitoring Certification form, *Exceedance of MCLs Summary* table (Table 1), water elevation table and signed/sealed groundwater contour map, field sampling logs, and laboratory results provided by Pace Analytical and Benchmark EnviroAnalytical, Inc.

Specific Condition D.1 and 2 of the permit establishes primary and secondary zones of discharge as well as alternative background concentrations for four parameters. The primary zone of discharge shall not have Class G-II water quality standards and background water quality concentrations exceeded outside the boundary except for the following parameters: ammonia-N, arsenic, iron, TDS and manganese. Alternative background concentrations have also been established for sodium and chloride, at 456 mg/L and 643 mg/L, respectively.

The secondary zone of discharge shall not have Class G-II water quality standards and background water quality concentrations exceeded outside the boundary for the following parameters: ammonia-N, arsenic, iron, TDS and manganese. Alternative background concentrations have also been established for iron and total dissolved solids, at 6.3 mg/L and 1924 mg/L, respectively.

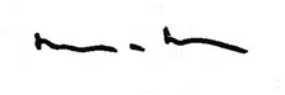
Once these Site-Specific Conditions are applied to the sampling results for the primary zone of discharge, only pH remains as an exceedance. The ADaPT program cannot accommodate these Site-Specific Conditions, therefore the ADaPT files will contain more exceedances which are not in this report.

Of the secondary zone of discharge wells, NAM-2 had an exceedance of arsenic at 12.10 ug/L which is consistent with the previous sampling events. The iron result for NAM -3 was reported at 7,270 ug/L exceeding the limit of 6300 ug/L, but within historical values.

There were no exceedances for Surface Water.

If you have any questions or concerns, please contact me at (941) 979-0450 or rlmoore@scgov.net.

Sincerely,



Ronald L. Moore
Environmental Specialist II
Sarasota County, Solid Waste

Cc: FDEP, Solid Waste, Tallahassee, FL

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 Central County Solid Waste Disposal Complex, Class I Landfill Operation

Address 4000 Knights Trail Rd

City Nokomis Zip 34275 County Sarasota

Telephone Number (941)861-1573

(2) WACS Facility ID SWD/58/51614

(3) DEP Permit Number 130542-007-SO/01

(4) Authorized Representative's Name Ronald L. Moore Title Environmental Specialist II

Address 4000 Knights Trail Rd

City Nokomis Zip 34275 County Sarasota

Telephone Number (941)979-0450

Email address (if available) rlmoore@scgov.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.

March 20, 2020
(Date)

(Owner or Authorized Representative's Signature)

PART II QUALITY ASSURANCE REQUIREMENTS

Sampling Organization Sarasota County

Analytical Lab NELAC / HRS Certification # E83079 E84167

Lab Name PAS, Inc Benchmark EnviroAnalytical, Inc

Address 8 East Tower Circle, Ormond Beach, FL 32174 1711 12th Street East, Palmetto, FL 34221

Phone Number (386)672-5668 (941) 723-9986

Email address (if available)

TABLE 1
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
EXCEEDENCE OF MCLs SUMMARY

2019 - 2nd Semi-Annual Groundwater Evaluation Monitoring Report - Groundwater Monitoring Wells

		20585	21455	4509	4510	23031	23032	23033	29095	27140	27141
		Background	Detection	Detection	Detection	Detection	Detection	Detection	Detection	Detection	Detection
Parameter	MCL	MW-1R	MW-8A	MW-9	MW-10R	MW-15	MW-16	MW-17	MW-18R	MW-19A	MW-20A
pH	6.5-8.5		**6.63**		**6.39**		**6.40**	**6.31**	**6.20**		
Sodium	456 mg/l*										
Chloride	643 mg/l*										

* Alternative MCL's as established in section D.3 of the permit

2019 - 2nd Semi-Annual Groundwater Evaluation Monitoring Report - Natural Attenuation Monitoring Wells

		29091	29092	29093	29094
		NAM	NAM	NAM	NAM
Parameter	MCL	NAM-1	NAM-2	NAM-3	NAM-4
pH	6.5-8.5				
Total Ammonia	2.8 mg/l				
Iron	6.3 mg/l*			**7.27**	
Manganese	50 ug/l				
Arsenic	10 ug/l		**12.10**		
Solids, Total Dissolved	1924 mg/l*				

* Alternative MCL's as established in section D.3 of the permit

2019 - 2nd Semi-Annual Surface Water Evaluation Monitoring Report

		28824	28825
		Surface water	Surface water
Parameter	MCL	Pond 1	Pond 2

There were no exceedences for Surface Water.

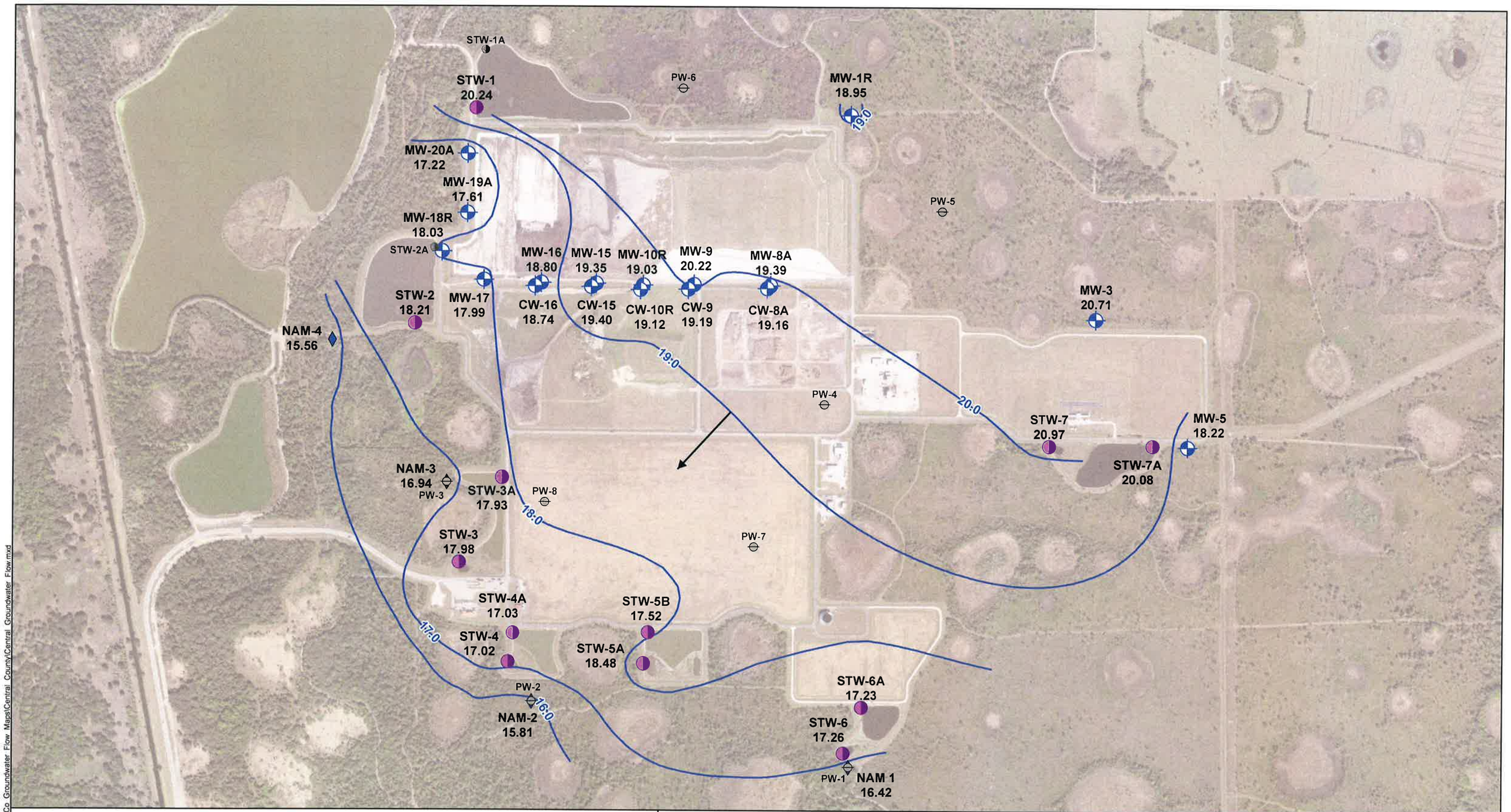
Central County Solid Waste Disposal Complex
Water Elevation Table 11/20/2019

Well	Date Measured	Depth to Water (ft)	Top of Casing (ft) NGVD 1929	Calculated Water Elevation (ft) NGVD 1929
MW-3	4/30/2019	2.63	23.340	20.71
MW-5	4/30/2019	4.97	23.190	18.22
MW-1R	4/30/2019	5.48	24.428	18.95
MW-8A	4/30/2019	16.01	35.400	19.39
MW-9	4/30/2019	11.86	32.08	20.22
MW-10R	4/30/2019	20.46	39.49	19.03
CW-8A	4/30/2019	15.88	35.040	19.16
CW-9	4/30/2019	7.39	26.582	19.19
CW-10R	4/30/2019	7.86	26.982	19.12
MW-15	4/30/2019	24.97	44.320	19.35
MW-16	4/30/2019	24.93	43.730	18.80
MW-17	4/30/2019	28.16	46.150	17.99
MW-18R	4/30/2019	10.30	28.330	18.03
CW-15	4/30/2019	10.77	30.173	19.40
CW-16	4/30/2019	10.84	29.578	18.74
MW-19A	4/30/2019	9.91	27.52	17.61
MW-20A	4/30/2019	10.16	27.38	17.22
NAM-1	4/30/2019	3.45	19.87	16.42
NAM-2	4/30/2019	4.21	20.02	15.81
NAM-3	4/30/2019	3.68	20.62	16.94
NAM-4	4/30/2019	7.10	22.66	15.56

Staff Gauge		Staff Gauge Reading (ft)	Staff Gauge Elevation (ft)	Calculated Water Elevation (ft)
STW1	4/30/2019	2.05	21.187 (3')	20.24
STW1A	4/30/2019	*	22.52 (6')	*
STW2	4/30/2019	1.90	20.305 (4')	18.21
STW2A	4/30/2019	*	21.50 (6')	*
STW3	4/30/2019	1.79	20.191 (4')	17.98
STW3A	4/30/2019	3.50	18.43 (4')	17.93
STW4	4/30/2019	1.68	19.342 (4')	17.02
STW4A	4/30/2019	4.18	18.85 (6')	17.03
STW5A	4/30/2019	2.69	19.788 (4')	18.48
STW5B	4/30/2019	3.60	19.92 (6')	17.52
STW6	4/30/2019	1.89	19.37 (4')	17.26
STW6A	4/30/2019	4.56	17.67 (5')	17.23
STW7	4/30/2019	2.68	22.287 (4')	20.97
STW7A	4/30/2019	5.06	19.02 (4')	20.08

* Not readable due to vegetation coverage.

Measured by Ronald Moore on 11/20/2019



Legend

- Monitoring Well
- Natural Attenuation Monitoring Well
- Staff Gauge
- Piezometer Well*
- Staff Gauge*
- Approximate Groundwater Elevation Contour (Feet NGVD)
- Approximate Groundwater Flow Direction
- 50.0 Groundwater Elevation (Feet NGVD)

Notes:
NGVD = National Geodetic Vertical Datum
* = Not used for contouring

WHITNEY L. RODRIGUEZ LICENSE No 82430 STATE OF FLORIDA PROFESSIONAL ENGINEER

CENTRAL COUNTY
SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CONTOUR MAP
NOVEMBER 20, 2019
SARASOTA COUNTY, FLORIDA

SCS ENGINEERS
Tampa, FL | February 2020

0 450 900 Feet

N

Document Path: G:\GIS\PROJECTS\Sarasota Co Groundwater Flow Maps\Central County\Central Groundwater Flow.mxd

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Sarasota County	Report To:	Heather Bryen	Attention:	
Address:	1255 T. Mabry Carlton Parkway	Copy To:		Company Name:	
Venice, FL 34293				Address:	
Email:	hbryen@scgov.net	Purchase Order #:		Pace Quote:	
Phone:	(941) 650-1112 Fax:	Project Name:	Central County Landfill Semiannual GW	Pace Project Manager:	martha.montero@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	833 L7

Regulatory Agency	
State / Location	FL

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analyses Test: Total ammonia - N	Metals by 6010/6020 As Fe M	Total Dissolved Solids TDS	Residual Chlorine (Y/N)	
1	NAM-1 (29091)	WT	G	10/28/19	0915	—			3	1	1	1							A	B	C		Metals: As, Fe, Mn
2	NAM-2 (29092)	WT	G	10/28/19	1055	—			3	1	1	1							A	B	C		Metals: As, Fe, Mn
3	NAM-3 (29093)	WT	G	10/28/19	1205	—			3	1	1	1							A	B	C		Metals: As, Fe, Mn
4	NAM-4 (29094)	WT	G	10/28/19	1310	—			3	1	1	1							A	B	C		Metals: As, Fe, Mn
5	Equipment Blank	WT	G	10/28/19	0815	—			3	1	1	1							A	B	C		Metals: As, Fe, Mn
6	DUP	WT	G	10/28/19	0915	—			3	1	1	1							A	B	C		Metals: As, Fe, Mn
7																							
8																							
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
PLEASE USE ADAPT	Sarasota County	10-28-19	1435	MC PACE	10/28/19	1433	

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Ronald L. Moore					
SIGNATURE of SAMPLER:		DATE Signed: 10-28-19				

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **NAM-1**	SAMPLE ID: **29091**	DATE: 10-28-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.25**	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 2.24	PURGE PUMP TYPE OR BAILER: **PP**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (**14.5** feet – 2.24 feet) X **0.16** gallons/foot = 2.0 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): 3.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 3.5	PURGING INITIATED AT: 0845	PURGING ENDED AT: 0913	TOTAL VOLUME PURGED (gallons): 3.0

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)
0903	2.0	2.0	0.11	2.79	7.06	26.4	747	0.47	4.12	Clear	None
0908	0.5	2.5	0.11	2.82	7.06	26.4	748	0.51	3.97	Clear	None
0913	0.5	3.0	0.11	2.86	7.05	26.5	747	0.52	2.74	Clear	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0915	SAMPLING ENDED AT: 0925
PUMP OR TUBING DEPTH IN WELL (feet): 3.5	TUBING MATERIAL CODE: **S / HDPE**	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N (replaced))	DUPLICATE: (Y) ~~(N)~~ RLM	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
B	1	HDPE	250 mL	HNO3 & wet ice	N/A	\	Metals	APP	400
A	1	HDPE	250 mL	H2SO4 & wet ice	N/A	\	Total Ammonia-N	APP	400
C	1	HDPE	1 L	Wet ice	N/A	N/A	TDS	APP	400

REMARKS: Equipment Blank and DUP taken next to and at this well.

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **NAM-2**	SAMPLE ID: **29092**	DATE: 10-28-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.25**	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 2.56	PURGE PUMP TYPE OR BAILER: **PP**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (**14.5** feet − 2.56 feet) X **0.16** gallons/foot = 1.9 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): 3.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 3.5	PURGING INITIATED AT: 1025	PURGING ENDED AT: 1052	TOTAL VOLUME PURGED (gallons): 2.9

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)
1042	1.9	1.9	0.11	2.70	6.99	27.2	746	0.24	1.24	Clear	None
1047	0.5	2.4	0.11	2.74	6.99	27.1	749	0.39	1.06	Clear	None
1052	0.5	2.9	0.11	2.76	7.00	27.1	748	0.29	0.69	Clear	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1055	SAMPLING ENDED AT: 1100
PUMP OR TUBING DEPTH IN WELL (feet): 3.5	TUBING MATERIAL CODE: **S / HDPE**	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 (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
B	1	HDPE	250 mL	HNO3 & wet ice	N/A	\	Metals	APP	400
A	1	HDPE	250 mL	H2SO4 & wet ice	N/A	\	Total Ammonia-N	APP	400
C	1	HDPE	1 L	Wet ice	N/A	N/A	TDS	APP	400

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **NAM-3**	SAMPLE ID: **29093**	DATE: 10-28-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.25**	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 2.38	PURGE PUMP TYPE OR BAILER: **PP**

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (**14.5** feet − 2.38 feet) X **0.16** gallons/foot = 2.0 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): 3.2	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 3.2	PURGING INITIATED AT: 1135	PURGING ENDED AT: 1203	TOTAL VOLUME PURGED (gallons): 3.0

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)
1153	2.0	2.0	0.11	2.84	6.87	25.9	614	0.16	1.57	Clear	None
1158	0.5	2.5	0.11	2.84	6.86	26.0	613	0.30	2.61	Clear	None
1203	0.5	3.0	0.11	2.86	6.86	26.1	613	0.28	2.82	Clear	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1205	SAMPLING ENDED AT: 1210
PUMP OR TUBING DEPTH IN WELL (feet): 3.2	TUBING MATERIAL CODE: **S / HDPE**	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 (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
B	1	HDPE	250mL	HNO3 & wet ice	N/A	<2	Metals	APP	400
A	1	HDPE	250 mL	H2SO4 & wet ice	N/A	<2	Total Ammonia-N	APP	400
C	1	HDPE	1 L	Wet ice	N/A	N/A	TDS	APP	400

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **NAM-4**	SAMPLE ID: **29094**	DATE: 10-28-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.25**	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 5.95	PURGE PUMP TYPE OR BAILER: **PP**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (**14.5** feet − 5.95 feet) X **0.16** gallons/foot = 1.4 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): 6.9	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 6.9	PURGING INITIATED AT: 1245	PURGING ENDED AT: 1306	TOTAL VOLUME PURGED (gallons): 2.2

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)
1258	1.4	1.4	0.11	6.29	6.51	26.7	553	0.45	0.57	Clear	None
1302	0.4	1.8	0.11	6.30	6.50	26.6	565	0.46	0.67	Clear	None
1306	0.4	2.2	0.11	6.32	6.50	26.6	565	0.31	0.93	Clear	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1310	SAMPLING ENDED AT: 1315
PUMP OR TUBING DEPTH IN WELL (feet): 6.9	TUBING MATERIAL CODE: **S / HDPE**	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 (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
B	1	HDPE	250 mL	HNO3 & wet ice	N/A		Metals	APP	400
A	1	HDPE	250 mL	H2SO4 & wet ice	N/A		Total Ammonia-N	APP	400
C	1	HDPE	1 L	Wet ice	N/A	N/A	TDS	APP	400

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 2 + RL

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Sarasota County	Report To:	Heather Bryen	Attention:	
Address:	1255 T. Mabry Carlton Parkway	Copy To:		Company Name:	
	Venice, FL 34293			Address:	
Email:	hbryen@scgov.net	Purchase Order #:		Pace Quote:	
Phone:	941-650-1112 Fax:	Project Name:	Central County Landfill Semiannual GW	Pace Project Manager:	martha.montero@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	833 #1

Regulatory Agency

State / Location: FL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Y/N	Analyses Test: metals by 6010/6020/7470	TDS NO3 Cl SO4	NH3 Total Ammonia-N	Voc by 8260 Appendix 1	EDB and DBCP EPA 8011	Trip Blank 8260	Trip Blank 8011	Residual Chlorine (Y/N)	
1	MW-1R (20585)	WT	G	10/29/19	0850				8	3	1	1	3						A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
2	~~MW-8A~~ RLM ~~(21453)~~	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
3	~~MW-9~~ RLM ~~(4509)~~	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
4	~~MW-10R~~ RLM ~~(4510)~~	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
5	~~MW-15~~ RLM ~~(23031)~~	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
6	~~MW-16~~ RLM (23032)	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
7	~~MW-17~~ RLM ~~(23033)~~	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						A	B	C	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
8	~~MW-18R~~ RLM ~~(29095)~~	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
9	MW-19A (27140)	WT	G	10/29/19	1205				8	3	1	1	3						A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
10	MW-20A (27141)	WT	G	10/29/19	1025				8	3	1	1	3						A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
11	DUP-1	WT	G	10/29/19	1205				8	3	1	1	3						A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
12	Equipment Blank 1	WT	G	10/29/19	0750				8	3	1	1	3						A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Central county Monitoring wells Adapt	R L M / Sarasota County	10/29/19	1405				
PLEASE USE ADAPT							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ronald L. Moore

SIGNATURE of SAMPLER: R L M

DATE Signed: 10-29-19

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Sarasota County	Report To:	Heather Bryen	Attention:	
Address:	1255 T. Mabry Carlton Parkway	Copy To:		Company Name:	
	Venice, FL 34293			Address:	
Email:	hbryen@scgov.net	Purchase Order #:		Pace Quote:	
Phone:	941-650-1112 Fax:	Project Name:	Central County Landfill Semiannual GW	Pace Project Manager:	martha.montero@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	833 #1

Regulatory Agency

State / Location: FL

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analyses Test: metals by 6010/6020/7470	TDS NO3 Cl SO4	NH3 Total Ammonia-N	Voc by 8260 Appendix 1	EDB and DBCP EPA 8011	Trip Blank 8260	Trip Blank 8011	Residual Chlorine (Y/N)	
13	~~Equipment Blank 2~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~					~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~					Metals:Fe,Hg,Na,Mn
14	~~Equipment Blank 3~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~					A	B	C	~~D,E,F~~	~~G,H~~					Metals:Fe,Hg,Na,Mn
15	Trip Blank 8260 1	WT		10/29/19					2				2										2				
16	~~Trip Blank 8260 2~~ RLM	WT							~~2~~				~~2~~										~~2~~				
17	~~Trip Blank 8260 3~~ RLM	WT							~~2~~				~~2~~										~~2~~				
18	Trip Blank 8011 1	WT		10/29/19					2	2														2			
19	~~Trip Blank 8011 2~~ RLM	WT							~~2~~	~~2~~														~~2~~			
20	~~Trip Blank 8011 3~~ RLM	WT							~~2~~	~~2~~														~~2~~			
21																											
22																											
23																											
24																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Central county Monitoring wells Adapt	R. L. M. / Sarasota County	10-29-19	1405				
Please use ADAPT							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ronald L. Moore

SIGNATURE of SAMPLER: R. L. M.

DATE Signed: 10-29-19

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **MW-1R**	SAMPLE ID: **20585**	DATE: 10-29-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.25**	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 3.36	PURGE PUMP TYPE OR BAILER: **PP**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (**15.7** feet − 3.36 feet) X **0.16** gallons/foot = 2.0 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): 4.3	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 4.3	PURGING INITIATED AT: 0810	PURGING ENDED AT: 0849	TOTAL VOLUME PURGED (gallons): 3.0

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)
0835	2.0	2.0	0.08	3.90	6.58	26.2	299	0.52	1.53	lt Amber	None
0842	0.5	2.5	0.08	3.92	6.58	26.3	308	0.43	1.52	lt Amber	None
0849	0.5	3.0	0.08	3.95	6.59	26.3	310	0.42	1.24	lt Amber	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0850	SAMPLING ENDED AT: 0900
PUMP OR TUBING DEPTH IN WELL (feet): 4.3	TUBING MATERIAL CODE: **S / HDPE**	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 (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
D,E,F	3	CG	40 mL	HCl & wet ice	N/A	\	8260-vocs App. I	APP	300
G,H	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I	APP	\
A	1	HDPE	250 mL	HNO3 & wet ice	N/A	\	Metals – App. I	APP	\
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A	\	Total Ammonia-N	APP	\
B	1	HDPE	1 L	Wet ice	N/A	N/A	TDS,NO3,Cl,SO4	APP	\

REMARKS: Equipment Blank 1 was filled next to this well.

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **MW-20A**	SAMPLE ID: **27141**	DATE: 10-29-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.25**	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 8.93	PURGE PUMP TYPE OR BAILER: **PP**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (**22.5** feet – 8.93 feet) X **0.16** gallons/foot = 2.2 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): 10.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 11.2	PURGING INITIATED AT: 0940	PURGING ENDED AT: 1022	TOTAL VOLUME PURGED (gallons): 3.4

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)
1008	2.2	2.2	0.08	10.38	6.51	28.2	535	0.18	1.09	Clear	None
1015	0.6	2.8	0.08	10.49	6.52	28.2	543	0.15	0.93	Clear	None
1022	0.6	3.4	0.08	10.64	6.53	28.2	543	0.17	0.81	Clear	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1025	SAMPLING ENDED AT: 1035
PUMP OR TUBING DEPTH IN WELL (feet): 11.2	TUBING MATERIAL CODE: **S / HDPE**	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 (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
D,E,F	3	CG	40 mL	HCl & wet ice	N/A	\	8260-vocs App. I	APP	300
G,H	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I	APP	|
A	1	HDPE	250 mL	HNO3 & wet ice	N/A	<2	Metals – App. I	APP	|
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A	<2	Total Ammonia-N	APP	|
B	1	HDPE	1 L	Wet ice	N/A	N/A	TDS,NO3,Cl,SO4	APP	|

REMARKS: Slight odor in air while sampling. (Downwind from Active Face of Landfill)

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **MW-19A**	SAMPLE ID: **27140**	DATE: 10-29-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.25**	WELL SCREEN INTERVAL DEPTH: 12 feet to 22 feet	STATIC DEPTH TO WATER (feet): 8.08	PURGE PUMP TYPE OR BAILER: **PP**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (22.5 feet – 8.08 feet) X 0.16 gallons/foot = 2.3 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): 9.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10.0	PURGING INITIATED AT: 1120	PURGING ENDED AT: 1205	TOTAL VOLUME PURGED (gallons): 3.5

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)
1149	2.3	2.3	0.08	9.13	6.72	29.3	894	0.45	0.76	Clear	None
1157	0.6	2.9	0.08	9.16	6.72	29.3	905	0.40	0.53	Clear	None
1205	0.6	3.5	0.08	9.18	6.72	29.2	908	0.35	0.55	Clear	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1205	SAMPLING ENDED AT: 1225
PUMP OR TUBING DEPTH IN WELL (feet): 10.0	TUBING MATERIAL CODE: **S / HDPE**	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N (replaced))	DUPLICATE: (Y) (~~N~~) RLM	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
D,E,F	3	CG	40 mL	HCl & wet ice	N/A		8260-vocs App. I	APP	300
G,H	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I	APP	
A	1	HDPE	250 mL	HNO3 & wet ice	N/A		Metals – App. I	APP	
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A		Total Ammonia-N	APP	
B	1	HDPE	1 L	Wet ice	N/A	N/A	TDS,NO3,Cl,SO4	APP	

REMARKS: DUP-1 was filled from this well.

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Sarasota County	Report To:	Heather Bryen	Attention:	
Address:	1255 T. Mabry Carlton Parkway	Copy To:		Company Name:	
Venice, FL 34293				Address:	
Email:	hbryen@scgov.net	Purchase Order #:		Pace Quote:	
Phone:	941-650-1112 Fax:	Project Name:	Central County Landfill Semiannual GW	Pace Project Manager:	martha.montero@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	833 #1

Regulatory Agency

State / Location: FL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)		MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	metals by 6010/6020/7470	TDS NO3 Cl SO4	NH3 Total Ammonia-N	Voc by 8260 Appendix 1	EDB and DBCP EPA 8011	Trip Blank 8260	Trip Blank 8011	Residual Chlorine (Y/N)	
1	~~MW-1R~~	(20585) RLM	WT	G						8	3	1	1	3					A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
2	MW-8A	(21453)	WT	G	10/30/19	1105				8	3	1	1	3					A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
3	MW-9	(4509)	WT	G	10/30/19	0825				8	3	1	1	3					A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
4	~~MW-10R~~	(4510) RLM	WT	G						8	3	1	1	3					A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
5	~~MW-15~~	(23031) RLM	WT	G						8	3	1	1	3					A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
6	~~MW-16~~	(23032) RLM	WT	G						8	3	1	1	3					A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
7	MW-17	(23033)	WT	G	10/30/19	1245				8	3	1	1	3					A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
8	MW-18R	(29095)	WT	G	10/30/19	1000				8	3	1	1	3					A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
9	~~MW-19A~~	(27140) RLM	WT	G						8	3	1	1	3					A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
10	~~MW-20A~~	(27141) RLM	WT	G						8	3	1	1	3					A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
11	~~DUP-1~~		WT	G						8	3	1	1	3					A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
12	~~Equipment Blank 1~~		WT	G						8	3	1	1	3					A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Central county Monitoring wells Adapt	Sarasota County	10/30/19	1435	Pace	10/30/19	1435	
PLEASE USE ADAPT							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ronald L. Moore

SIGNATURE of SAMPLER: Ronald L. Moore DATE Signed: 10-30-19

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Sarasota County	Report To:	Heather Bryen	Attention:	
Address:	1255 T. Mabry Carlton Parkway	Copy To:		Company Name:	
Venice, FL 34293				Address:	
Email:	hbryen@scgov.net	Purchase Order #:		Pace Quote:	
Phone:	941-650-1112 Fax:	Project Name:	Central County Landfill Semiannual GW	Pace Project Manager:	martha.montero@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	833 #1

Regulatory Agency

State / Location: FL

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analyses Test: metals by 6010/6020/7470	TDS NO3 Cl SO4	NH3 Total Ammonia-N	Voc by 8260 Appendix 1	EDB and DBCP EPA 8011	Trip Blank 8260	Trip Blank 8011	Residual Chlorine (Y/N)	
13	~~Equipment Blank 2~~ RLM	WT	G						8	3	1	1	3					A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
14	~~Equipment Blank 3~~ RLM	WT	G						8	3	1	1	3					A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
15	~~Trip Blank 8260 1~~ RLM	WT							2				2										2			
16	Trip Blank 8260 2	WT		10/30 RLM					2				2										2			
17	~~Trip Blank 8260 3~~ RLM	WT							2				2										2			
18	~~Trip Blank 8011 1~~ RLM	WT							2	2														2		
19	Trip Blank 8011 2	WT		1038					2	2														2		
20	~~Trip Blank 8011 3~~ RLM	WT							2	2														2		
21																										
22																										
23																										
24																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Central county Monitoring wells Adapt	Sarasota County	10-30-19	1435	Pace	10/30/19	1435	
Please use ADAPT							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ronald L. Moore

SIGNATURE of SAMPLER: [signature] DATE Signed: 10-30-19

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **MW-9**	SAMPLE ID: **4509**	DATE: 10-30-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.25**	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 12.20	PURGE PUMP TYPE OR BAILER: **PP**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (**22.8** feet – 12.20 feet) X **0.16** gallons/foot = 1.7 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): 13.2	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 13.5	PURGING INITIATED AT: 0755	PURGING ENDED AT: 0821	TOTAL VOLUME PURGED (gallons): 2.7

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)
0811	1.7	1.7	0.11	12.69	6.59	29.5	1643	0.31	0.89	lt. Amber	None
0816	0.5	2.2	0.11	12.72	6.57	29.6	1635	0.32	1.27	lt. Amber	None
0821	0.5	2.7	0.11	12.74	6.57	29.6	1633	0.32	1.54	lt. Amber	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0825	SAMPLING ENDED AT: 0840
PUMP OR TUBING DEPTH IN WELL (feet): 13.5	TUBING MATERIAL CODE: **S / HDPE**	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 (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
D,E,F	3	CG	40 mL	HCl & wet ice	N/A	\	8260-vocs App. I	APP	400
G,H	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I	APP	|
A	1	HDPE	250 mL	HNO3 & wet ice	N/A	\	Metals – App. I	APP	|
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A	\	Total Ammonia-N	APP	|
B	1	HDPE	1 L	Wet ice	N/A	N/A	TDS	APP	|

REMARKS:
VOCs difficult to fill headspace free due to interaction with HCl.

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **MW-18R**	SAMPLE ID: **29095**	DATE: 10-30-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.25**	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 9.67	PURGE PUMP TYPE OR BAILER: **PP**

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (**18.63** feet – 9.67 feet) X **0.16** gallons/foot = 1.5 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): 10.6	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 11.0	PURGING INITIATED AT: 0930	PURGING ENDED AT: 0959	TOTAL VOLUME PURGED (gallons): 2.3

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)
0949	1.5	1.5	0.08	10.21	6.21	29.3	572	0.25	1.86	lt. Amber	None
0954	0.4	1.9	0.08	10.25	6.21	29.3	576	0.33	1.77	lt. Amber	None
0959	0.4	2.3	0.08	10.28	6.20	29.3	575	0.30	1.75	lt. Amber	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1000	SAMPLING ENDED AT: 1015
PUMP OR TUBING DEPTH IN WELL (feet): 11.0	TUBING MATERIAL CODE: **S / HDPE**	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 (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
D,E,F	3	CG	40 mL	HCl & wet ice	N/A	\	8260-vocs App. I	APP	300
G,H	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I	APP	\
A	1	HDPE	250 mL	HNO3 & wet ice	N/A	\	Metals – App. I	APP	\
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A	\	Total Ammonia-N	APP	\
B	1	HDPE	1 L	Wet ice	N/A	N/A	TDS,NO3,Cl,SO4	APP	\

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **MW-8A**	SAMPLE ID: **21453**	DATE: 10-30-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.25**	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 15.62	PURGE PUMP TYPE OR BAILER: **PP**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (**22.4** feet – 15.62 feet) X **0.16** gallons/foot = 1.1 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): 16.6	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 17.0	PURGING INITIATED AT: 1040	PURGING ENDED AT: 1102	TOTAL VOLUME PURGED (gallons): 1.7

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)
1054	1.1	1.1	0.08	16.19	6.40	28.0	1171	0.35	1.22	lt. Amber	None
1058	0.3	1.4	0.08	16.21	6.39	28.0	1157	0.32	1.50	lt. Amber	None
1102	0.3	1.7	0.08	16.22	6.39	28.0	1164	0.31	1.28	lt. Amber	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1105	SAMPLING ENDED AT: 1120
PUMP OR TUBING DEPTH IN WELL (feet): 17.0	TUBING MATERIAL CODE: **S / HDPE**	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 (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
D,E,F	3	CG	40 mL	HCl & wet ice	N/A	\	8260-vocs App. I	APP	300
G,H	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I	APP	\
A	1	HDPE	250 mL	HNO3 & wet ice	N/A	\	Metals – App. I	APP	\
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A	\	Total Ammonia-N	APP	\
B	1	HDPE	1 L	Wet ice	N/A	N/A	TDS,NO3,Cl,SO4	APP	\

REMARKS: Difficult to fill VOCs headspace free due to interaction with HCl,

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **MW-17**	SAMPLE ID: **23033**	DATE: 10-30-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.375**	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 27.68	PURGE PUMP TYPE OR BAILER: **ESP**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (**32.6** feet – 27.68 feet) X **0.16** gallons/foot = 0.8 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): 28.6	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 28.6	PURGING INITIATED AT: 1220	PURGING ENDED AT: 1244	TOTAL VOLUME PURGED (gallons): 1.2

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)
1236	0.8	0.8	0.05	27.77	6.33	29.2	1810	0.32	9.11	Amber	None
1240	0.2	1.0	0.05	27.80	6.31	29.2	1811	0.34	12.31	Amber	None
1244	0.2	1.2	0.05	27.82	6.31	29.2	1808	0.41	16.49	Amber	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1245	SAMPLING ENDED AT: 1305
PUMP OR TUBING DEPTH IN WELL (feet): 28.6	TUBING MATERIAL CODE: **LDPE**	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 (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
D,E,F	3	CG	40 mL	HCl & wet ice	N/A		8260-vocs App. I	ESP	200
G,H	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I	ESP	
A	1	HDPE	250 mL	HNO3 & wet ice	N/A	<2	Metals – App. I	ESP	
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A	<2	Total Ammonia-N	ESP	
B	1	HDPE	1 L	Wet ice	N/A	N/A	TDS,NO3,Cl,SO4	ESP	

REMARKS:
Heavy sheen on water. Difficult filling VOCs ~~with~~ no headspace free due to interaction with HCl.

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 2 + RL

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Sarasota County	Report To:	Heather Bryen	Attention:	
Address:	1255 T. Mabry Carlton Parkway	Copy To:		Company Name:	
	Venice, FL 34293			Address:	
Email:	hbryen@scgov.net	Purchase Order #:		Pace Quote:	
Phone:	941-650-1112 Fax:	Project Name:	Central County Landfill Semiannual GW	Pace Project Manager:	martha.montero@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	833 #1

Regulatory Agency	State / Location
	FL

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Y/N	Analyses Test: metals by 6010/6020/7470	TDS NO3 Cl SO4	NH3 Total Ammonia-N	Voc by 8260 Appendix 1	EDB and DBCP EPA 8011	Trip Blank 8260	Trip Blank 8011	Residual Chlorine (Y/N)	
1	~~MW-1R (20585)~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
2	~~MW-8A (21453)~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
3	~~MW-9 (4509)~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
4	MW-10R (4510)	WT	G	10/31/19	1235				8	3	1	1	3						A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
5	MW-15 (23031)	WT	G	10/31/19	1035				8	3	1	1	3						A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
6	MW-16 (23032)	WT	G	10/31/19	0830				8	3	1	1	3						A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
7	~~MW-17 (23033)~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
8	~~MW-18R (29095)~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
9	~~MW-19A (27140)~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
10	~~MW-20A (27141)~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
11	~~DUP-1~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
12	~~Equipment Blank 1~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Central county Monitoring wells Adapt	/Sarasota County	10-31-19	1420		10/31/19	1420	
PLEASE USE ADAPT							

SAMPLER NAME AND SIGNATURE					
PRINT Name of SAMPLER:	Ronald L. Moore				
SIGNATURE of SAMPLER:		DATE Signed:	10-31-19		

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Sarasota County	Report To:	Heather Bryen	Attention:	
Address:	1255 T. Mabry Carlton Parkway	Copy To:		Company Name:	
Venice, FL 34293				Address:	
Email:	hbryen@scgov.net	Purchase Order #:		Pace Quote:	
Phone:	941-650-1112 Fax:	Project Name:	Central County Landfill Semiannual GW	Pace Project Manager:	martha.montero@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	833 #1

Regulatory Agency

State / Location: FL

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Y/N	Analyses Test: metals by 6010/6020/7470	TDS NO3 Cl SO4	NH3 Total Ammonia-N	Voc by 8260 Appendix 1	EDB and DBCP EPA 8011	Trip Blank 8260	Trip Blank 8011	Residual Chlorine (Y/N)	
13	Equipment Blank 2	WT	G	10/31/19	0915				8	3	1	1	3					A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
14	~~Equipment Blank 3~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~					A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
15	~~Trip Blank 8260 1~~ RLM	WT							~~2~~				~~3~~										~~2~~			
16	~~Trip Blank 8260 2~~ RLM	WT							~~2~~				~~3~~										~~2~~			
17	Trip Blank 8260 3	WT		10/31/19					2				2										2			
18	~~Trip Blank 8011 1~~ RLM	WT							~~2~~	~~2~~														~~2~~		
19	~~Trip Blank 8011 2~~ RLM	WT							~~2~~	~~2~~														~~2~~		
20	Trip Blank 8011 3	WT		10/31/19					2	2														2		
21																										
22																										
23																										
24																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Central county Monitoring wells Adapt	Ronald L. Moore / Sarasota County	10-31-19	1420	Pace	10/31/19	1420	
Please use ADAPT							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ronald L. Moore

SIGNATURE of SAMPLER: Ronald L. Moore

DATE Signed: 10-31-19

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **MW-10R**	SAMPLE ID: **4510**	DATE: 10-31-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.375**	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 20.06	PURGE PUMP TYPE OR BAILER: **ESP**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (**30.2** feet – 20.6 feet) X **0.16** gallons/foot = 1.7 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): 21.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 22.0	PURGING INITIATED AT: 1140	PURGING ENDED AT: 1234	TOTAL VOLUME PURGED (gallons): 2.7

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)
1214	1.7	1.7	0.05	21.35	6.39	29.2	1696	0.02	0.86	Amber	None
1224	0.5	2.2	0.05	21.22	6.38	29.2	1643	0.02	1.73	Amber	None
1234	0.5	2.7	0.05	21.30	6.39	29.3	1641	0.02	2.15	Amber	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1235	SAMPLING ENDED AT: 1245
PUMP OR TUBING DEPTH IN WELL (feet): 22.0	TUBING MATERIAL CODE: **LDPE**	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 (including wet ice)			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			
D,E,F	3	CG	40 mL	HCl & wet ice	N/A		8260-vocs App. I	ESP	200
G,H	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I	ESP	
A	1	HDPE	250 mL	HNO3 & wet ice	N/A	<2	Metals – App. I	ESP	
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A	<2	Total Ammonia-N	ESP	
B	1	HDPE	1 L	Wet ice	N/A	N/A	TDS,NO3,Cl,SO4	ESP	

REMARKS: Heavy sheen in water.

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **MW-15**	SAMPLE ID: **23031**	DATE: 10-31-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.375**	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 24.32	PURGE PUMP TYPE OR BAILER: **ESP**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (**30.5** feet – 24.32 feet) X **0.16** gallons/foot = 1.0 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): 25.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 26.5	PURGING INITIATED AT: 1000	PURGING ENDED AT: 1030	TOTAL VOLUME PURGED (gallons): 1.6

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)
1020	1.0	1.0	0.05	25.52	6.59	28.1	3306	0.06	2.37	Amber	None
1025	0.3	1.3	0.05	25.61	6.58	28.0	3298	0.04	2.51	Amber	None
1030	0.3	1.6	0.05	25.69	6.58	27.9	3297	0.04	2.60	Amber	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1035	SAMPLING ENDED AT: 1045
PUMP OR TUBING DEPTH IN WELL (feet): 26.5	TUBING MATERIAL CODE: **LDPE**	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 (including wet ice)			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			
D,E,F	3	CG	40 mL	HCl & wet ice	N/A		8260-vocs App. I	ESP	200
G,H	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I	ESP	
A	1	HDPE	250 mL	HNO3 & wet ice	N/A		Metals – App. I	ESP	
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A		Total Ammonia-N	ESP	
B	1	HDPE	1 L	Wet ice	N/A	N/A	TDS,NO3,Cl,SO4	ESP	

REMARKS:
Heavy sheen on water.

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **MW-16**	SAMPLE ID: **23032**	DATE: 10-31-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.375**	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 24.45	PURGE PUMP TYPE OR BAILER: **ESP**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (**30.3** feet – 24.45 feet) X **0.16** gallons/foot = 1.0 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): 25.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 26.0	PURGING INITIATED AT: 0755	PURGING ENDED AT: 0825	TOTAL VOLUME PURGED (gallons): 1.6

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)
0815	1.0	1.0	0.05	25.18	6.41	27.6	2426	0.05	0.94	Amber	None
0820	0.3	1.3	0.05	25.07	6.41	27.7	2414	0.06	2.40	Amber	None
0825	0.3	1.6	0.05	25.10	6.40	27.8	2405	0.05	3.06	Amber	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0830	SAMPLING ENDED AT: 0845
PUMP OR TUBING DEPTH IN WELL (feet): 26.0	TUBING MATERIAL CODE: **LDPE**	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 (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
D,E,F	3	CG	40 mL	HCl & wet ice	N/A	\	8260-vocs App. I	ESP	200
G,H	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I	ESP	
A	1	HDPE	250 mL	HNO3 & wet ice	N/A	\	Metals – App. I	ESP	
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A	\	Total Ammonia-N	ESP	
B	1	HDPE	1 L	Wet ice	N/A	N/A	TDS,NO3,Cl,SO4	ESP	

REMARKS: Heavy sheen on water. Equipment Blank 2 was taken next to this well after well was sampled and after decon of submersible well pump.

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Sarasota County	Report To:	Heather Bryen	Attention:	
Address:	1255 T. Mabry Carlton Parkway	Copy To:		Company Name:	
Venice, FL 34293				Address:	
Email:	hbryen@scgov.net	Purchase Order #:		Pace Quote:	
Phone:	941-650-1112 Fax:	Project Name:	Central County Landfill Semiannual SW	Pace Project Manager:	martha.montero@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	833 L4

Regulatory Agency: | State / Location: FL

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Metals 6010/6020,Tot Hardness	UN-NH3, T-Nitrogen, T-Phos	BOD Nitrate	Chlorophyll A	VOC by 8260 Appendix 1	EDB and DBCP EPA 8011	LL Hg	LL Hg	Trip Blank 8260	Trip Blank 8011	TDS	Fecal Coliform MF	Residual Chlorine (Y/N)	Please Use Adapt
1	Pond 1 (28824)	WT		11/14/19	0900														X	X	X	X	X	X	X				X	X		4 sets Gloves and 1 mask
2	Pond 2 (28825)	WT		11/14/19	1030														X	X	X	X	X	X	X				X	X		4 sets Gloves and 1 mask
3	Field Blank	WT		11/14/19	0827														X	X	X	X	X	X	X				X	X		4 sets Gloves and 1 mask
4	-DUP - 2	WT		11/14/19	0900														X	X	X	X	X	X	X				X	X		4 sets Gloves and 1 mask
5	[redacted]	WT																														
6	Trip Blank 8260 X 4	WT		11/14/19																								X				→ Benchmark EnviroAnalytical
7	~~Trip Blank 8260 2~~ RLM	WT																										X				
8	Trip Blank 8011 X 4	WT		11/14/19																									X			
9	~~Trip Blank 8011 2~~ RLM	WT																											X			
10																																
11																																
12																																

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Empty Containers	Pace	10/4/19	1715	/ Sarasota County	10-4-19	1600	
	/ Sarasota County	11-14-19	1215				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ronald L. Moore

SIGNATURE of SAMPLER: [signature] DATE Signed: 11-14-19

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Sarasota County	Report To:	Heather Bryen	Attention:	
Address:	1255 T. Mabry Carlton Parkway	Copy To:		Company Name:	
	Venice, FL 34293			Address:	
Email:	hbryen@scgov.net	Purchase Order #:		Pace Quote:	
Phone:	941-650-1112 Fax:	Project Name:	Central County Landfill Semiannual SW	Pace Project Manager:	martha.montero@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	833 L4

Regulatory Agency

State/ Location: FL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Y/N	Analyses Test: TOC by 5310	Residual Chlorine (Y/N)	Please Use Adapt
13	Pond 1 (28824)	WT		11/14/19	0900														X		
14	Pond 2 (28825)	WT		11/14/19	1030														X		
15	Field Blank	WT		11/14/19	0827														X		
16	-DUP-2	WT		11/14/19	0900														X		
17	~~Blank Water~~ RLM	WT																			
18	Trip Blank 8260 RLM X 4	WT		11/14/19																	
19	~~Trip Blank 8260 2~~	WT																			
20	Trip Blank 8011 RLM X 4	WT		11/14/19																	
21	~~Trip Blank 8011 2~~	WT																			
22																					
23																					
24																					

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Empty Containers	Pace	10/4/19	1135	Sarasota County	10-4-19		
	Sarasota County	11-14-19	1215				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ronald L. Moore

SIGNATURE of SAMPLER:

DATE Signed: 11-14-19

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Benchmark EnviroAnalytical, Inc.
1711 Twelfth Street East
Palmetto, FL 34221
(941) 723-9986
(941) 723-6061 fax
www.Benchmarkea.com

Please Use Adapt

Client: **Sarasota County Environmental Services**
Public Utilities
1255 T. Mabry Carlton Parkway
Venice, FL 34292
(941) 650-9834
(941) 650-1112
(941) 480-3558 fax

Project Name: Central County Surface Water
Purchase Order Number: 180708

Laboratory Submission #:

Station ID:		Sample Matrix[2]	Sample Type[1]	**Analysis Requested:** Fecal Coliform; Preservative: Sodium Thiosulfate
Pond 1	28824	SW	Grab	Date & Time: 11-14-19 0900
Pond 2	28825	SW	Grab	Date & Time: 11-14-19 1030
DUP-2		SW	G	11-14-19 0900
Field Blank		SW	G	11-14-19 0827

1 "Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).
2 "Sample Matrix" is used to indicate whether the sample is being discharged to drinking water (DW), groundwater (GW), surface water (SW), soil, sediment (SDMNT), or sludge (SLDG).
3 "Container Type" is used to indicate whether the container is plastic (P) or glass (G).
4 **Sample must be refrigerated or stored in wet ice after collection. The maximum temperature during storage should be 4°C (39.2°F).** (8 hr. hold time)
Under "Preservative," list any preservatives that were added to the sample container.

Laboratory Sample Acceptability: pH <2 : ☐
BEAS Temperature:
BEA Temperature:

Instructions:
1. Each bottle has a label identifying sample ID, premeasured preservative contained in the bottle, sample type, client ID, and parameters for analysis.
2. The following information should be added to each bottle label after collection with permanent black ink: date and time of collection, sampler's name or initials, and any field number or ID.
3. All bottles not containing preservative may be rinsed with appropriate sample prior to collection.
4. The client is responsible for documentation of the sampling event. Please note special sampling events on the sample custody form

1	Collector – Relinquished by: Ronald L. Moore	Date: 11-14-19	Time: 1215	Received By:	Date:	Time:
2	Relinquished by:	Date:	Time:	Received By:	Date:	Time:
3	Relinquished by:	Date:	Time	Received By:	Date:	Time

DEP-SOP -001/01
FT 1100 Field Measurement of Hydrogen Ion Activity (pH)

Form FD 9000-7: Field Parameter Data Sheet for Surface Water

SURVEY/PROJECT: Central County 2019 2nd Semi Annual Surface Water SAMPLERS: RLM METER # YSI ProPlus HACH 2100Q

STATION NUMBER	STATION DESCRIPTION	PARAMETER	DATE	TIME	TOTAL DEPTH	SAMPLE DEPTH	WATER TEMP	DO	%SAT DO	COND	SALINITY	PH	TURBIDITY
		UNIT	yy/mm/dd	hr:min	feet	feet	Celsius	mg/L	%	µS/cm	ppt	su	NTU
		STORET CODE	73672		81903	68	10	299	301	94	480	400	82078
28824	Pond 1		19/11/14	0900	1.5	0.5	21.6	0.13	—	422	—	6.63	4.35
	DUP-2 Taken from Pond 1												
28825	Pond 2		19/11/14	1030	1.5	0.5	21.0	1.34	—	426	—	7.23	4.25

FIELD CONDITIONS FOR STATION# _____ AT TIME_____:

CLOUD COVER (%): _____ WIND DIRECTION: _____ TIDAL STAGE: _____

PREVIOUS RAINFALL: _____ WIND SPEED (MPH/KNOTS): _____ WAVE CONDITIONS: _____

Note: This Sheet is used for recording Sample Data – Calibration information must also be documented

Revision Date: February 1, 2004

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Sarasota County	Report To:	Mr. Cesar Rodriguez	Attention:	
Address:	1255 T. Mabry Carlton Parkway	Copy To:		Company Name:	
	Venice, FL 34292			Address:	
Email:	crodriqu@scgov.net	Purchase Order #:	200264	Pace Quote:	
Phone:	941-650-9834 Fax:	Project Name:	Surface Water Central County	Pace Project Manager:	matha.montero@pacelabs.com
Requested Due Date:		Project #:	re-sample	Pace Profile #:	

Regulatory Agency

State / Location: FL

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analyses Test: TSS	Residual Chlorine (Y/N)	Please Use Adapt
1	Pond 1 (at STW-1) 28824	WT	G	12/17/19	0945				1	1									X		STW-1 (2.75)
2	Pond 2 (at STW-2) 28825	WT	G	12/17/19	1000				1	1									X		STW-2 (1.65)
3	DUP-2	WT	G	12/17/19	0945				1	1									X		
4	Field Blank	WT	G	12/17/19	0930				1	1									X		
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
surface waters for Central County	Ronald L. Moore / Sarasota County	12/17/19	1200				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ronald L. Moore /Sarasota County

SIGNATURE of SAMPLER: Ronald L. Moore DATE Signed: 12-17-19

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

DEP-SOP -001/01
FT 1100 Field Measurement of Hydrogen Ion Activity (pH)

Form FD 9000-7: Field Parameter Data Sheet for Surface Water

SURVEY/PROJECT: Central County 2019 Second Semi Annual Surface Water Resample SAMPLERS: Ronald L. Moore (RLM) METER # YSI ProPlus HACH 2100Q

STATION NUMBER	STATION DESCRIPTION	PARAMETER	DATE	TIME	TOTAL DEPTH	SAMPLE DEPTH	WATER TEMP	DO	%SAT DO	COND	SALINITY	PH	TURBIDITY
		UNIT	yy/mm/dd	hr:min	feet	feet	Celsius	mg/L	%	µS/cm	ppt	su	NTU
		STORET CODE	73672		81903	68	10	299	301	94	480	400	82078
28824	Pond 1		19/12/17	0945	1.5	0.5	19.6	0.18	–	470	–	7.14	19.5
	DUP-2 taken from Pond 1												
28825	Pond 2		19/12/17	1000	1.5	0.5	21.4	1.97	–	501	–	7.57	2.55

FIELD CONDITIONS FOR STATION# _____ AT TIME_____:

CLOUD COVER (%): _____ WIND DIRECTION: _____ TIDAL STAGE: _____

PREVIOUS RAINFALL: _____ WIND SPEED (MPH/KNOTS): _____ WAVE CONDITIONS: _____

Note: This Sheet is used for recording Sample Data – Calibration information must also be documented

Revision Date: February 1, 2004

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

November 01, 2019

REVIEWED
By Cesar Rodriguez-Palacios at 4:04 pm, Dec 05, 2019

Mr. Cesar Rodriguez
Sarasota County
1255 T. Mabry Carlton Parkway
Venice, FL 34292

RE: Project: Central County Landfill Semian
Pace Project No.: 35507866

Dear Mr. Rodriguez:
Enclosed are the analytical results for sample(s) received by the laboratory on October 28, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Martha Montero
martha.montero@pacelabs.com
(386)672-5668
Project Manager

Enclosures

cc: Ms. Heather Bryen, Sarasota County

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

CERTIFICATIONS

Project: Central County Landfill Semian
Pace Project No.: 35507866

Ormond Beach Certification IDs

8 East Tower Circle, Ormond Beach, FL 32174
Alaska DEC- CS/UST/LUST
Alabama Certification #: 41320
Arizona Certification# AZ0819
Colorado Certification: FL NELAC Reciprocity
Connecticut Certification #: PH-0216
Delaware Certification: FL NELAC Reciprocity
Florida Certification #: E83079
Georgia Certification #: 955
Guam Certification: FL NELAC Reciprocity
Hawaii Certification: FL NELAC Reciprocity
Illinois Certification #: 200068
Indiana Certification: FL NELAC Reciprocity
Kansas Certification #: E-10383
Kentucky Certification #: 90050
Louisiana Certification #: FL NELAC Reciprocity
Louisiana Environmental Certificate #: 05007
Maryland Certification: #346
Michigan Certification #: 9911
Mississippi Certification: FL NELAC Reciprocity
Missouri Certification #: 236
Montana Certification #: Cert 0074
Nebraska Certification: NE-OS-28-14
New Hampshire Certification #: 2958
New Jersey Certification #: FL022
New York Certification #: 11608
North Carolina Environmental Certificate #: 667
North Carolina Certification #: 12710
North Dakota Certification #: R-216
Oklahoma Certification #: D9947
Pennsylvania Certification #: 68-00547
Puerto Rico Certification #: FL01264
South Carolina Certification: #96042001
Tennessee Certification #: TN02974
Texas Certification: FL NELAC Reciprocity
US Virgin Islands Certification: FL NELAC Reciprocity
Virginia Environmental Certification #: 460165
West Virginia Certification #: 9962C
Wisconsin Certification #: 399079670
Wyoming (EPA Region 8): FL NELAC Reciprocity

Tampa Certification IDs

110 South Bayview Blvd., Tampa, FL 34677
Florida Certification #:E84129

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

SAMPLE SUMMARY

Project: Central County Landfill Semian
Pace Project No.: 35507866

Lab ID	Sample ID	Matrix	Date Collected	Date Received
35507866001	**NAM-1 (29091)**	Water	10/28/19 09:15	10/28/19 16:15
35507866002	**NAM-2 (29092)**	Water	10/28/19 10:55	10/28/19 16:15
35507866003	**NAM-3 (29093)**	Water	10/28/19 12:50	10/28/19 16:15
35507866004	**NAM-4 (29094)**	Water	10/28/19 13:10	10/28/19 16:15
35507866005	**Equipment Blank**	Water	10/28/19 08:15	10/28/19 16:15
35507866006	**DUP**	Water	10/28/19 09:15	10/28/19 16:15

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

SAMPLE ANALYTE COUNT

Project: Central County Landfill Semian
Pace Project No.: 35507866

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
35507866001	**NAM-1 (29091)**	EPA 6010	ATC	2	PASI-O
		EPA 6020	AMS	1	PASI-O
		SM 2540C	LF	1	PASI-Tp
		EPA 350.1	MAJ	1	PASI-O
35507866002	**NAM-2 (29092)**	EPA 6010	ATC	2	PASI-O
		EPA 6020	AMS	1	PASI-O
		SM 2540C	LF	1	PASI-Tp
		EPA 350.1	MAJ	1	PASI-O
35507866003	**NAM-3 (29093)**	EPA 6010	ATC	2	PASI-O
		EPA 6020	AMS	1	PASI-O
		SM 2540C	LF	1	PASI-Tp
		EPA 350.1	MAJ	1	PASI-O
35507866004	**NAM-4 (29094)**	EPA 6010	ATC	2	PASI-O
		EPA 6020	AMS	1	PASI-O
		SM 2540C	LF	1	PASI-Tp
		EPA 350.1	MAJ	1	PASI-O
35507866005	**Equipment Blank**	EPA 6010	ATC	2	PASI-O
		EPA 6020	AMS	1	PASI-O
		SM 2540C	LF	1	PASI-Tp
		EPA 350.1	MAJ	1	PASI-O
35507866006	**DUP**	EPA 6010	ATC	2	PASI-O
		EPA 6020	AMS	1	PASI-O
		SM 2540C	LF	1	PASI-Tp
		EPA 350.1	MAJ	1	PASI-O

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(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35507866

Sample: NAM-1 (29091) **Lab ID: 35507866001** Collected: 10/28/19 09:15 Received: 10/28/19 16:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**7.05**	Std. Units			1		10/28/19 09:15		
Field Temperature	**26.5**	deg C			1		10/28/19 09:15		
Field Specific Conductance	**747**	umhos/cm			1		10/28/19 09:15		
Oxygen, Dissolved	**0.52**	mg/L			1		10/28/19 09:15	7782-44-7	
Turbidity	**2.74**	NTU			1		10/28/19 09:15		
Water Level(NGVD)	**17.63**	feet			1		10/28/19 09:15		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**2610**	ug/L	40.0	9.2	1	10/30/19 03:15	10/30/19 19:09	7439-89-6	
Manganese	**4.0 I**	ug/L	5.0	0.42	1	10/30/19 03:15	10/30/19 19:09	7439-96-5	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Arsenic	**3.8**	ug/L	1.0	0.50	1	10/30/19 03:15	10/31/19 13:16	7440-38-2	
2540C Total Diss. Solids Tampa	Analytical Method: SM 2540C								
Total Dissolved Solids	**433**	mg/L	5.0	5.0	1		10/29/19 14:13		
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.17**	mg/L	0.050	0.035	1		10/30/19 13:43	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
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ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35507866

Sample: NAM-2 (29092) **Lab ID: 35507866002** Collected: 10/28/19 10:55 Received: 10/28/19 16:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**7.0**	Std. Units			1		10/28/19 10:55		
Field Temperature	**27.1**	deg C			1		10/28/19 10:55		
Field Specific Conductance	**748**	umhos/cm			1		10/28/19 10:55		
Oxygen, Dissolved	**0.29**	mg/L			1		10/28/19 10:55	7782-44-7	
Turbidity	**0.69**	NTU			1		10/28/19 10:55		
Water Level(NGVD)	**17.46**	feet			1		10/28/19 10:55		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**2810**	ug/L	40.0	9.2	1	10/30/19 03:15	10/30/19 19:13	7439-89-6	
Manganese	**3.8 I**	ug/L	5.0	0.42	1	10/30/19 03:15	10/30/19 19:13	7439-96-5	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Arsenic	**12.1**	ug/L	1.0	0.50	1	10/30/19 03:15	10/31/19 13:17	7440-38-2	
2540C Total Diss. Solids Tampa	Analytical Method: SM 2540C								
Total Dissolved Solids	**433**	mg/L	5.0	5.0	1		10/29/19 14:13		
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.21**	mg/L	0.050	0.035	1		10/30/19 13:44	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35507866

Sample: NAM-3 (29093) **Lab ID: 35507866003** Collected: 10/28/19 12:50 Received: 10/28/19 16:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**6.86**	Std. Units			1		10/28/19 12:50		
Field Temperature	**26.1**	deg C			1		10/28/19 12:50		
Field Specific Conductance	**613**	umhos/cm			1		10/28/19 12:50		
Oxygen, Dissolved	**0.28**	mg/L			1		10/28/19 12:50	7782-44-7	
Turbidity	**2.82**	NTU			1		10/28/19 12:50		
Water Level(NGVD)	**18.24**	feet			1		10/28/19 12:50		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**7270**	ug/L	40.0	9.2	1	10/30/19 03:15	10/30/19 19:16	7439-89-6	
Manganese	**10.2**	ug/L	5.0	0.42	1	10/30/19 03:15	10/30/19 19:16	7439-96-5	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Arsenic	**4.6**	ug/L	1.0	0.50	1	10/30/19 03:15	10/31/19 13:19	7440-38-2	
2540C Total Diss. Solids Tampa	Analytical Method: SM 2540C								
Total Dissolved Solids	**343**	mg/L	5.0	5.0	1		10/29/19 14:13		
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.38**	mg/L	0.050	0.035	1		10/30/19 13:46	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Ormond Beach, FL 32174
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ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35507866

Sample: NAM-4 (29094) **Lab ID: 35507866004** Collected: 10/28/19 13:10 Received: 10/28/19 16:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**6.50**	Std. Units			1		10/28/19 13:10		
Field Temperature	**26.6**	deg C			1		10/28/19 13:10		
Field Specific Conductance	**565**	umhos/cm			1		10/28/19 13:10		
Oxygen, Dissolved	**0.31**	mg/L			1		10/28/19 13:10	7782-44-7	
Turbidity	**0.93**	NTU			1		10/28/19 13:10		
Water Level(NGVD)	**16.71**	feet			1		10/28/19 13:10		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**4140**	ug/L	40.0	9.2	1	10/30/19 03:15	10/30/19 19:26	7439-89-6	
Manganese	**4.9 I**	ug/L	5.0	0.42	1	10/30/19 03:15	10/30/19 19:26	7439-96-5	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Arsenic	**8.4**	ug/L	1.0	0.50	1	10/30/19 03:15	10/31/19 13:21	7440-38-2	
2540C Total Diss. Solids Tampa	Analytical Method: SM 2540C								
Total Dissolved Solids	**323**	mg/L	5.0	5.0	1		10/29/19 14:13		
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.035 U**	mg/L	0.050	0.035	1		10/30/19 13:47	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
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ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35507866

Sample: Equipment Blank **Lab ID: 35507866005** Collected: 10/28/19 08:15 Received: 10/28/19 16:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**9.2 U**	ug/L	40.0	9.2	1	10/30/19 03:15	10/30/19 19:30	7439-89-6	
Manganese	**0.42 U**	ug/L	5.0	0.42	1	10/30/19 03:15	10/30/19 19:30	7439-96-5	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Arsenic	**0.50 U**	ug/L	1.0	0.50	1	10/30/19 03:15	10/31/19 13:23	7440-38-2	
2540C Total Diss. Solids Tampa	Analytical Method: SM 2540C								
Total Dissolved Solids	**5.0 U**	mg/L	5.0	5.0	1		10/29/19 14:13		
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**3.5**	mg/L	0.050	0.035	1		10/30/19 13:49	7664-41-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35507866

Sample: DUP **Lab ID: 35507866006** Collected: 10/28/19 09:15 Received: 10/28/19 16:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**2630**	ug/L	40.0	9.2	1	10/30/19 03:15	10/31/19 05:13	7439-89-6	
Manganese	**4.0 I**	ug/L	5.0	0.42	1	10/30/19 03:15	10/31/19 05:13	7439-96-5	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Arsenic	**3.9**	ug/L	1.0	0.50	1	10/30/19 03:15	10/31/19 13:25	7440-38-2	
2540C Total Diss. Solids Tampa	Analytical Method: SM 2540C								
Total Dissolved Solids	**441**	mg/L	5.0	5.0	1		10/29/19 14:13		
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.16**	mg/L	0.050	0.035	1		10/30/19 13:51	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35507866

QC Batch: 582749 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 35507866001, 35507866002, 35507866003, 35507866004, 35507866005, 35507866006

METHOD BLANK: 3168222 Matrix: Water
Associated Lab Samples: 35507866001, 35507866002, 35507866003, 35507866004, 35507866005, 35507866006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Iron	ug/L	9.2 U	40.0	9.2	10/30/19 19:02	
Manganese	ug/L	0.42 U	5.0	0.42	10/30/19 19:02	

LABORATORY CONTROL SAMPLE: 3168223

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	2500	2510	100	80-120	
Manganese	ug/L	250	252	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3168224 3168225

Parameter	Units	35507921004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	<9.2	2500	2500	2570	2570	103	103	75-125	0	20	
Manganese	ug/L	8.0	250	250	265	264	103	103	75-125	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
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QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35507866

QC Batch: 582748 Analysis Method: EPA 6020
QC Batch Method: EPA 3010 Analysis Description: 6020 MET
Associated Lab Samples: 35507866001, 35507866002, 35507866003, 35507866004, 35507866005, 35507866006

METHOD BLANK: 3168218 Matrix: Water
Associated Lab Samples: 35507866001, 35507866002, 35507866003, 35507866004, 35507866005, 35507866006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	ug/L	0.50 U	1.0	0.50	10/31/19 13:12	

LABORATORY CONTROL SAMPLE: 3168219

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	50	50.8	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3168220 3168221

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	<0.50	50	50	55.9	56.3	111	112	75-125	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35507866

QC Batch: 582505 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Diss. Solids Tampa
Associated Lab Samples: 35507866001, 35507866002, 35507866003, 35507866004, 35507866005, 35507866006

METHOD BLANK: 3166702 Matrix: Water
Associated Lab Samples: 35507866001, 35507866002, 35507866003, 35507866004, 35507866005, 35507866006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	5.0 U	5.0	5.0	10/29/19 14:11	

LABORATORY CONTROL SAMPLE: 3166703

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	300	299	100	90-110	

SAMPLE DUPLICATE: 3166704

Parameter	Units	35507281001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	630	650	3	5	

SAMPLE DUPLICATE: 3166705

Parameter	Units	35507856002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	43.0	43.0	0	5	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Ormond Beach, FL 32174
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QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35507866

QC Batch: 582420 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 35507866001, 35507866002, 35507866003, 35507866004, 35507866005, 35507866006

METHOD BLANK: 3166431 Matrix: Water
Associated Lab Samples: 35507866001, 35507866002, 35507866003, 35507866004, 35507866005, 35507866006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	0.035 U	0.050	0.035	10/30/19 13:06	

LABORATORY CONTROL SAMPLE: 3166432

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	1	1.0	100	90-110	

MATRIX SPIKE SAMPLE: 3166434

Parameter	Units	35507804001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	0.035 U	1	1.0	103	90-110	

SAMPLE DUPLICATE: 3166433

Parameter	Units	35507804001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	0.035 U	0.035 U		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALIFIERS

Project: Central County Landfill Semian
Pace Project No.: 35507866

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-O	Pace Analytical Services - Ormond Beach
PASI-Tp	Pace Analytical Services - Tampa

ANALYTE QUALIFIERS

I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
U	Compound was analyzed for but not detected.

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Central County Landfill Semian
Pace Project No.: 35507866

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
35507866001	**NAM-1 (29091)**				
35507866002	**NAM-2 (29092)**				
35507866003	**NAM-3 (29093)**				
35507866004	**NAM-4 (29094)**				
35507866001	**NAM-1 (29091)**	EPA 3010	582749	EPA 6010	582755
35507866002	**NAM-2 (29092)**	EPA 3010	582749	EPA 6010	582755
35507866003	**NAM-3 (29093)**	EPA 3010	582749	EPA 6010	582755
35507866004	**NAM-4 (29094)**	EPA 3010	582749	EPA 6010	582755
35507866005	**Equipment Blank**	EPA 3010	582749	EPA 6010	582755
35507866006	**DUP**	EPA 3010	582749	EPA 6010	582755
35507866001	**NAM-1 (29091)**	EPA 3010	582748	EPA 6020	582754
35507866002	**NAM-2 (29092)**	EPA 3010	582748	EPA 6020	582754
35507866003	**NAM-3 (29093)**	EPA 3010	582748	EPA 6020	582754
35507866004	**NAM-4 (29094)**	EPA 3010	582748	EPA 6020	582754
35507866005	**Equipment Blank**	EPA 3010	582748	EPA 6020	582754
35507866006	**DUP**	EPA 3010	582748	EPA 6020	582754
35507866001	**NAM-1 (29091)**	SM 2540C	582505		
35507866002	**NAM-2 (29092)**	SM 2540C	582505		
35507866003	**NAM-3 (29093)**	SM 2540C	582505		
35507866004	**NAM-4 (29094)**	SM 2540C	582505		
35507866005	**Equipment Blank**	SM 2540C	582505		
35507866006	**DUP**	SM 2540C	582505		
35507866001	**NAM-1 (29091)**	EPA 350.1	582420		
35507866002	**NAM-2 (29092)**	EPA 350.1	582420		
35507866003	**NAM-3 (29093)**	EPA 350.1	582420		
35507866004	**NAM-4 (29094)**	EPA 350.1	582420		
35507866005	**Equipment Blank**	EPA 350.1	582420		
35507866006	**DUP**	EPA 350.1	582420		

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

WO# : 35507866

35507866

Section A – Required Client Information:		Section B – Required Project Information:		Section C – Invoice Information:	
Company:	Sarasota County	Report To:	Heather Bryen	Attention:	
Address:	1255 T. Mabry Carlton Parkway	Copy To:		Company Name:	
	Venice, FL 34293			Address:	
Email:	hbryen@scgov.net	Purchase Order #:		Pace Quote:	
Phone:	(941) 650-1112 Fax:	Project Name:	Central County Landfill Semiannual GW	Pace Project Manager:	martha.montero@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	833 L7

Regulatory Agency

State / Location: FL

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Total ammonia - N	Metals by 6010/6020 As Fe M	Total Dissolved Solids TDS	Residual Chlorine (Y/N)	Requested Analysis Filtered (Y/N)
1	NAM-1 (29091)	WT	G	10/28/19	0915	—	—		3	1	1	1							A	B	C		Metals: As, Fe, Mn
2	NAM-2 (29092)	WT	G	10/28/19	1055	—	—		3	1	1	1							A	B	C		Metals: As, Fe, Mn
3	NAM-3 (29093)	WT	G	10/28/19	1205	—	—		3	1	1	1							A	B	C		Metals: As, Fe, Mn
4	NAM-4 (29094)	WT	G	10/28/19	1310	—	—		3	1	1	1							A	B	C		Metals: As, Fe, Mn
5	Equipment Blank	WT	G	10/28/19	0815	—	—		3	1	1	1							A	B	C		Metals: As, Fe, Mn
6	DUP	WT	G	10/28/19	0915	—	—		3	1	1	1							A	B	C		Metals: As, Fe, Mn
7																							
8																							
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
PLEASE USE ADAPT	Sarasota County	10-28-19	1435	MC PACE	10/28/19	1433	TC03			
	MC PACE	10/28/19	1615	Drum Haigent	10/28/19	1615	0.5	4	N	4

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ronald L. Moore

SIGNATURE of SAMPLER: R. L. M.

DATE Signed: 10-28-19

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical Florida Laboratory	Document Name: Sample Condition Upon Receipt Form	Document Revised: May 30, 2018
	Document No.: F-FL-C-007 rev. 13	Issuing Authority: Pace Florida Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project # WO# : 35507866

Project Manager: PM: MIM **Due Date:** 11/11/19

Client: CLIENT: SARCOU

Date and Initials of person:
Examining contents: DS
Label:
Deliver: 10/28/19
pH:

Thermometer Used: T-203 Date: 10/28/19 Time: 1615 Initials: DS

State of Origin: FL ☐ For WV projects, all containers verified to ≤6 °C

Cooler #1 Temp.°C	0.6 (Visual)	-0.1 (Correction Factor)	0.5 (Actual)	☑ Samples on ice, cooling process has begun
Cooler #2 Temp.°C	(Visual)	(Correction Factor)	(Actual)	☐ Samples on ice, cooling process has begun
Cooler #3 Temp.°C	(Visual)	(Correction Factor)	(Actual)	☐ Samples on ice, cooling process has begun
Cooler #4 Temp.°C	(Visual)	(Correction Factor)	(Actual)	☐ Samples on ice, cooling process has begun
Cooler #5 Temp.°C	(Visual)	(Correction Factor)	(Actual)	☐ Samples on ice, cooling process has begun
Cooler #6 Temp.°C	(Visual)	(Correction Factor)	(Actual)	☐ Samples on ice, cooling process has begun

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Shipping Method: ☐ First Overnight ☐ Priority Overnight ☐ Standard Overnight ☐ Ground ☐ International Priority ☐ Other

Billing: ☐ Recipient ☐ Sender ☐ Third Party ☐ Credit Card ☐ Unknown

Tracking #

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals intact:** ☐ Yes ☑ No **Ice:** Wet Blue Dry None

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Samples shorted to lab (If Yes, complete) Shorted Date: Shorted Time: Qty:

		Comments:
Chain of Custody Present	☑ Yes ☐ No ☐ N/A	
Chain of Custody Filled Out	☑ Yes ☐ No ☐ N/A	
Relinquished Signature & Sampler Name COC	☑ Yes ☐ No ☐ N/A	
Samples Arrived within Hold Time	☑ Yes ☐ No ☐ N/A	
Rush TAT requested on COC	☐ Yes ☑ No ☐ N/A	
Sufficient Volume	☑ Yes ☐ No ☐ N/A	
Correct Containers Used	☑ Yes ☐ No ☐ N/A	
Containers Intact	☑ Yes ☐ No ☐ N/A	
Sample Labels match COC (sample IDs & date/time of collection)	☑ Yes ☐ No ☐ N/A	
All containers needing acid/base preservation have been checked.	☑ Yes ☐ No ☐ N/A	Preservation Information:
All Containers needing preservation are found to be in compliance with EPA recommendation: Exceptions: VOA, Coliform, TOC, O&G, Carbamates	☑ Yes ☐ No ☐ N/A	Preservative: Lot #/Trace #: Date: Time: Initials:
Headspace in VOA Vials? (>6mm):	☐ Yes ☐ No ☑ N/A	
Trip Blank Present:	☐ Yes ☐ No ☑ N/A	

Client Notification/ Resolution:
Person Contacted: Date/Time:

Comments/ Resolution (use back for additional comments):

Project Manager Review: Date:

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **NAM-1**	SAMPLE ID: **29091**	DATE: 10-28-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.25**	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 2.24	PURGE PUMP TYPE OR BAILER: **PP**

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (**14.5** feet − 2.24 feet) X **0.16** gallons/foot = 2.0 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): 3.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 3.5	PURGING INITIATED AT: 0845	PURGING ENDED AT: 0913	TOTAL VOLUME PURGED (gallons): 3.0 ✓

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)
0903	2.0	2.0	0.11	2.79	7.06	26.4	747	0.47	4.12	Clear	None
0908	0.5	2.5	0.11	2.82	7.06	26.4	748	0.51	3.97	Clear	None
0913	0.5	3.0	0.11	2.86	7.05	26.5	747	0.52	2.74	Clear	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0915 ✓	SAMPLING ENDED AT: 0925
PUMP OR TUBING DEPTH IN WELL (feet): 3.5	TUBING MATERIAL CODE: **S / HDPE**	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (**N (replaced)**)	DUPLICATE: (Y) ~~N~~ Rum	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
B	1	HDPE	250 mL	HNO3 & wet ice	N/A	\	Metals	APP	400
A	1	HDPE	250 mL	H2SO4 & wet ice	N/A	\	Total Ammonia-N	APP	400
C	1	HDPE	1 L	Wet ice	N/A	N/A	TDS	APP	400

REMARKS: Equipment Blank and DUP taken next to and at this well.

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **NAM-2**	SAMPLE ID: **29092**	DATE: 10-28-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.25**	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 2.56	PURGE PUMP TYPE OR BAILER: **PP**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (**14.5** feet – 2.56 feet) X **0.16** gallons/foot = 1.9 ✓ 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): 3.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 3.5	PURGING INITIATED AT: 1025	PURGING ENDED AT: 1052	TOTAL VOLUME PURGED (gallons): 2.9 ✓

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)
1042	1.9	1.9	0.11	2.70	6.99	27.2	746	0.24	1.24	Clear	None
1047	0.5	2.4	0.11	2.74	6.99	27.1	749	0.39	1.06	Clear	None
1052	0.5	2.9	0.11	2.76	7.00	27.1	748	0.29	0.69	Clear	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1055 ✓	SAMPLING ENDED AT: 1100
PUMP OR TUBING DEPTH IN WELL (feet): 3.5	TUBING MATERIAL CODE: **S / HDPE**	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 (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
B	1	HDPE	250 mL	HNO3 & wet ice	N/A	\	Metals	APP	400
A	1	HDPE	250 mL	H2SO4 & wet ice	N/A	\	Total Ammonia-N	APP	400
C	1	HDPE	1 L	Wet ice	N/A	N/A	TDS	APP	400

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **NAM-3**	SAMPLE ID: **29093**	DATE: 10-28-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.25**	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 2.38	PURGE PUMP TYPE OR BAILER: **PP**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (**14.5** feet − 2.38 feet) X **0.16** gallons/foot = 2.0 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): 3.2	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 3.2	PURGING INITIATED AT: 1135	PURGING ENDED AT: 1203	TOTAL VOLUME PURGED (gallons): 3.0

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)
1153	2.0	2.0	0.11	2.84	6.87	25.9	614	0.16	1.57	Clear	None
1158	0.5	2.5	0.11	2.84	6.86	26.0	613	0.30	2.61	Clear	None
1203	0.5	3.0	0.11	2.86	6.86	26.1	613	0.28	2.82	Clear	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1205	SAMPLING ENDED AT: 1210
PUMP OR TUBING DEPTH IN WELL (feet): 3.2	TUBING MATERIAL CODE: **S / HDPE**	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 (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
B	1	HDPE	250mL	HNO3 & wet ice	N/A	<2	Metals	APP	400
A	1	HDPE	250 mL	H2SO4 & wet ice	N/A	<2	Total Ammonia-N	APP	400
C	1	HDPE	1 L	Wet ice	N/A	N/A	TDS	APP	400

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **NAM-4**	SAMPLE ID: **29094**	DATE: 10-28-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.25**	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 5.95	PURGE PUMP TYPE OR BAILER: **PP**

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (**14.5** feet − 5.95 feet) X **0.16** gallons/foot = 1.4 ✓ 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): 6.9	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 6.9	PURGING INITIATED AT: 1245	PURGING ENDED AT: 1306	TOTAL VOLUME PURGED (gallons): 2.2 ✓

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) (umhos/cm) or µS/cm	DISSOLVED OXYGEN (circle units) (mg/L) or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1258	1.4	1.4	0.11	6.29	6.51	26.7	553	0.45	0.57	Clear	None
1302	0.4	1.8	0.11	6.30	6.50	26.6	565	0.46	0.67	Clear	None
1306	0.4	2.2	0.11	6.32	6.50	26.6	565	0.31	0.93	Clear	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1310	SAMPLING ENDED AT: 1315
PUMP OR TUBING DEPTH IN WELL (feet): 6.9	TUBING MATERIAL CODE: **S / HDPE**	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 (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
B	1	HDPE	250 mL	HNO3 & wet ice	N/A		Metals	APP	400
A	1	HDPE	250 mL	H2SO4 & wet ice	N/A		Total Ammonia-N	APP	400
C	1	HDPE	1 L	Wet ice	N/A	N/A	TDS	APP	400

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

November 08, 2019

REVIEWED
By Cesar Rodriguez-Palacios at 11:16 am, Dec 06, 2019

Mr. Cesar Rodriguez
Sarasota County
1255 T. Mabry Carlton Parkway
Venice, FL 34292

RE: Project: Central County Landfill Semian
Pace Project No.: 35508078

Dear Mr. Rodriguez:
Enclosed are the analytical results for sample(s) received by the laboratory on October 29, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Martha Montero
martha.montero@pacelabs.com
(386)672-5668
Project Manager

Enclosures

cc: Ms. Heather Bryen, Sarasota County

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

CERTIFICATIONS

Project: Central County Landfill Semian
Pace Project No.: 35508078

Ormond Beach Certification IDs

8 East Tower Circle, Ormond Beach, FL 32174
Alaska DEC- CS/UST/LUST
Alabama Certification #: 41320
Arizona Certification# AZ0819
Colorado Certification: FL NELAC Reciprocity
Connecticut Certification #: PH-0216
Delaware Certification: FL NELAC Reciprocity
Florida Certification #: E83079
Georgia Certification #: 955
Guam Certification: FL NELAC Reciprocity
Hawaii Certification: FL NELAC Reciprocity
Illinois Certification #: 200068
Indiana Certification: FL NELAC Reciprocity
Kansas Certification #: E-10383
Kentucky Certification #: 90050
Louisiana Certification #: FL NELAC Reciprocity
Louisiana Environmental Certificate #: 05007
Maryland Certification: #346
Michigan Certification #: 9911
Mississippi Certification: FL NELAC Reciprocity
Missouri Certification #: 236
Montana Certification #: Cert 0074
Nebraska Certification: NE-OS-28-14
New Hampshire Certification #: 2958
New Jersey Certification #: FL022
New York Certification #: 11608
North Carolina Environmental Certificate #: 667
North Carolina Certification #: 12710
North Dakota Certification #: R-216
Oklahoma Certification #: D9947
Pennsylvania Certification #: 68-00547
Puerto Rico Certification #: FL01264
South Carolina Certification: #96042001
Tennessee Certification #: TN02974
Texas Certification: FL NELAC Reciprocity
US Virgin Islands Certification: FL NELAC Reciprocity
Virginia Environmental Certification #: 460165
West Virginia Certification #: 9962C
Wisconsin Certification #: 399079670
Wyoming (EPA Region 8): FL NELAC Reciprocity

Pace Analytical Services, LLC
8 East Tower Circle
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(386)672-5668

SAMPLE SUMMARY

Project: Central County Landfill Semian
Pace Project No.: 35508078

Lab ID	Sample ID	Matrix	Date Collected	Date Received
35508078001	**MW-1R (20585)**	Water	10/29/19 08:50	10/29/19 15:45
35508078002	**MW-19A (27140)**	Water	10/29/19 12:05	10/29/19 15:45
35508078003	**MW-20A (27141)**	Water	10/29/19 10:25	10/29/19 15:45
35508078004	**MW-19A DUP -1**	Water	10/29/19 12:05	10/29/19 15:45
35508078005	**Equipment Blank 1**	Water	10/29/19 07:50	10/29/19 15:45
35508078006	**Trip Blank 8260 1**	Water	10/29/19 07:50	10/29/19 15:45
35508078007	**Trip Blank 8011 1**	Water	10/29/19 07:50	10/29/19 15:45

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: Central County Landfill Semian
Pace Project No.: 35508078

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
35508078001	**MW-1R (20585)**	EPA 8011	TSW	2	PASI-O
		EPA 6010	ATC	15	PASI-O
		EPA 6020	AMS	3	PASI-O
		EPA 7470	NMP	1	PASI-O
		EPA 8260	VAA	48	PASI-O
		SM 2540C	MRS	1	PASI-O
		EPA 300.0	JDM	2	PASI-O
		EPA 350.1	MAJ	1	PASI-O
		EPA 353.2	CLL	1	PASI-O
35508078002	**MW-19A (27140)**	EPA 8011	TSW	2	PASI-O
		EPA 6010	ATC	15	PASI-O
		EPA 6020	AMS	3	PASI-O
		EPA 7470	NMP	1	PASI-O
		EPA 8260	VAA	48	PASI-O
		SM 2540C	MRS	1	PASI-O
		EPA 300.0	JDM	2	PASI-O
		EPA 350.1	MAJ	1	PASI-O
		EPA 353.2	CLL	1	PASI-O
35508078003	**MW-20A (27141)**	EPA 8011	TSW	2	PASI-O
		EPA 6010	ATC	15	PASI-O
		EPA 6020	AMS	3	PASI-O
		EPA 7470	NMP	1	PASI-O
		EPA 8260	VAA	48	PASI-O
		SM 2540C	MRS	1	PASI-O
		EPA 300.0	JDM	2	PASI-O
		EPA 350.1	MAJ	1	PASI-O
		EPA 353.2	CLL	1	PASI-O
35508078004	**MW-19A DUP -1**	EPA 8011	TSW	2	PASI-O
		EPA 6010	ATC	15	PASI-O
		EPA 6020	AMS	3	PASI-O
		EPA 7470	NMP	1	PASI-O
		EPA 8260	VAA	48	PASI-O
		SM 2540C	MRS	1	PASI-O
		EPA 300.0	JDM	2	PASI-O
		EPA 350.1	MAJ	1	PASI-O
		EPA 353.2	CLL	1	PASI-O
35508078005	**Equipment Blank 1**	EPA 8011	TSW	2	PASI-O

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SAMPLE ANALYTE COUNT

Project: Central County Landfill Semian
Pace Project No.: 35508078

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6010	ATC	15	PASI-O
		EPA 6020	AMS	3	PASI-O
		EPA 7470	NMP	1	PASI-O
		EPA 8260	VAA	48	PASI-O
		SM 2540C	MRS	1	PASI-O
		EPA 300.0	JDM	2	PASI-O
		EPA 350.1	MAJ	1	PASI-O
		EPA 353.2	CLL	1	PASI-O
35508078006	**Trip Blank 8260 1**	EPA 8260	VAA	48	PASI-O
35508078007	**Trip Blank 8011 1**	EPA 8011	TSW	2	PASI-O

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508078

Sample: MW-1R (20585) **Lab ID: 35508078001** Collected: 10/29/19 08:50 Received: 10/29/19 15:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**6.59**	Std. Units			1		10/29/19 08:50		
Field Temperature	**26.3**	deg C			1		10/29/19 08:50		
Field Specific Conductance	**310**	umhos/cm			1		10/29/19 08:50		
Oxygen, Dissolved	**0.42**	mg/L			1		10/29/19 08:50	7782-44-7	
Turbidity	**1.24**	NTU			1		10/29/19 08:50		
Water Level(NGVD)	**21.07**	feet			1		10/29/19 08:50		
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromo-3-chloropropane	**0.0067 U**	ug/L	0.021	0.0067	1	10/30/19 13:42	11/02/19 05:09	96-12-8	
1,2-Dibromoethane (EDB)	**0.0079 U**	ug/L	0.010	0.0079	1	10/30/19 13:42	11/02/19 05:09	106-93-4	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Barium	**32.1**	ug/L	10.0	0.84	1	10/30/19 06:11	10/31/19 08:08	7440-39-3	
Beryllium	**1.6 U**	ug/L	4.0	1.6	1	10/30/19 06:11	10/31/19 08:08	7440-41-7	
Cadmium	**0.33 U**	ug/L	1.0	0.33	1	10/30/19 06:11	10/31/19 08:08	7440-43-9	
Chromium	**1.7 U**	ug/L	5.0	1.7	1	10/30/19 06:11	10/31/19 08:08	7440-47-3	
Cobalt	**0.96 U**	ug/L	10.0	0.96	1	10/30/19 06:11	10/31/19 08:08	7440-48-4	
Copper	**2.6 U**	ug/L	5.0	2.6	1	10/30/19 06:11	10/31/19 08:08	7440-50-8	
Iron	**460**	ug/L	40.0	9.2	1	10/30/19 06:11	10/31/19 08:08	7439-89-6	
Lead	**4.6 U**	ug/L	10.0	4.6	1	10/30/19 06:11	10/31/19 08:08	7439-92-1	
Manganese	**6.9**	ug/L	5.0	0.42	1	10/30/19 06:11	10/31/19 08:08	7439-96-5	
Nickel	**2.1 U**	ug/L	5.0	2.1	1	10/30/19 06:11	10/31/19 08:08	7440-02-0	
Selenium	**8.5 U**	ug/L	15.0	8.5	1	10/30/19 06:11	10/31/19 08:08	7782-49-2	
Silver	**1.0 U**	ug/L	5.0	1.0	1	10/30/19 06:11	10/31/19 08:08	7440-22-4	
Sodium	**6.8**	mg/L	2.0	0.27	1	10/30/19 06:11	10/31/19 08:08	7440-23-5	
Vanadium	**3.2 I**	ug/L	10.0	1.0	1	10/30/19 06:11	10/31/19 08:08	7440-62-2	
Zinc	**11.0 U**	ug/L	20.0	11.0	1	10/30/19 06:11	10/31/19 08:08	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Antimony	**0.50 U**	ug/L	1.0	0.50	1	10/30/19 06:11	10/31/19 14:24	7440-36-0	
Arsenic	**1.1**	ug/L	1.0	0.50	1	10/30/19 06:11	10/31/19 14:24	7440-38-2	
Thallium	**0.11 U**	ug/L	1.0	0.11	1	10/30/19 06:11	10/31/19 14:24	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	**0.10 U**	ug/L	0.20	0.10	1	11/05/19 11:11	11/06/19 13:21	7439-97-6	
8260 MSV	Analytical Method: EPA 8260								
Acetone	**5.3 U**	ug/L	20.0	5.3	1		11/07/19 19:23	67-64-1	
Acrylonitrile	**3.7 U**	ug/L	10.0	3.7	1		11/07/19 19:23	107-13-1	
Benzene	**0.30 U**	ug/L	1.0	0.30	1		11/07/19 19:23	71-43-2	
Bromochloromethane	**0.37 U**	ug/L	1.0	0.37	1		11/07/19 19:23	74-97-5	
Bromodichloromethane	**0.19 U**	ug/L	0.60	0.19	1		11/07/19 19:23	75-27-4	
Bromoform	**2.6 U**	ug/L	3.0	2.6	1		11/07/19 19:23	75-25-2	
Bromomethane	**4.0 U**	ug/L	5.0	4.0	1		11/07/19 19:23	74-83-9	J(v2)
2-Butanone (MEK)	**7.5 U**	ug/L	10.0	7.5	1		11/07/19 19:23	78-93-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508078

Sample: MW-1R (20585) **Lab ID: 35508078001** Collected: 10/29/19 08:50 Received: 10/29/19 15:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Carbon disulfide	**0.45 U**	ug/L	10.0	0.45	1		11/07/19 19:23	75-15-0	
Carbon tetrachloride	**1.1 U**	ug/L	3.0	1.1	1		11/07/19 19:23	56-23-5	
Chlorobenzene	**0.35 U**	ug/L	1.0	0.35	1		11/07/19 19:23	108-90-7	
Chloroethane	**3.7 U**	ug/L	10.0	3.7	1		11/07/19 19:23	75-00-3	
Chloroform	**0.32 U**	ug/L	1.0	0.32	1		11/07/19 19:23	67-66-3	
Chloromethane	**0.97 U**	ug/L	1.0	0.97	1		11/07/19 19:23	74-87-3	J(v2)
Dibromochloromethane	**0.45 U**	ug/L	2.0	0.45	1		11/07/19 19:23	124-48-1	
Dibromomethane	**0.68 U**	ug/L	2.0	0.68	1		11/07/19 19:23	74-95-3	
1,2-Dichlorobenzene	**0.29 U**	ug/L	1.0	0.29	1		11/07/19 19:23	95-50-1	
1,4-Dichlorobenzene	**0.28 U**	ug/L	1.0	0.28	1		11/07/19 19:23	106-46-7	
trans-1,4-Dichloro-2-butene	**2.5 U**	ug/L	10.0	2.5	1		11/07/19 19:23	110-57-6	J(v2)
1,1-Dichloroethane	**0.34 U**	ug/L	1.0	0.34	1		11/07/19 19:23	75-34-3	
1,2-Dichloroethane	**0.27 U**	ug/L	1.0	0.27	1		11/07/19 19:23	107-06-2	
1,1-Dichloroethene	**0.27 U**	ug/L	1.0	0.27	1		11/07/19 19:23	75-35-4	J(v2)
cis-1,2-Dichloroethene	**0.27 U**	ug/L	1.0	0.27	1		11/07/19 19:23	156-59-2	
trans-1,2-Dichloroethene	**0.23 U**	ug/L	1.0	0.23	1		11/07/19 19:23	156-60-5	
1,2-Dichloropropane	**0.23 U**	ug/L	1.0	0.23	1		11/07/19 19:23	78-87-5	
cis-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/07/19 19:23	10061-01-5	
trans-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/07/19 19:23	10061-02-6	
Ethylbenzene	**0.30 U**	ug/L	1.0	0.30	1		11/07/19 19:23	100-41-4	
2-Hexanone	**0.85 U**	ug/L	10.0	0.85	1		11/07/19 19:23	591-78-6	
Iodomethane	**9.3 U**	ug/L	10.0	9.3	1		11/07/19 19:23	74-88-4	J(v3)
Methylene Chloride	**2.0 U**	ug/L	5.0	2.0	1		11/07/19 19:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	**0.32 U**	ug/L	10.0	0.32	1		11/07/19 19:23	108-10-1	
Styrene	**0.26 U**	ug/L	1.0	0.26	1		11/07/19 19:23	100-42-5	
1,1,1,2-Tetrachloroethane	**0.32 U**	ug/L	1.0	0.32	1		11/07/19 19:23	630-20-6	
1,1,2,2-Tetrachloroethane	**0.20 U**	ug/L	0.50	0.20	1		11/07/19 19:23	79-34-5	
Tetrachloroethene	**0.38 U**	ug/L	1.0	0.38	1		11/07/19 19:23	127-18-4	
Toluene	**0.33 U**	ug/L	1.0	0.33	1		11/07/19 19:23	108-88-3	
1,1,1-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/07/19 19:23	71-55-6	
1,1,2-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/07/19 19:23	79-00-5	
Trichloroethene	**0.36 U**	ug/L	1.0	0.36	1		11/07/19 19:23	79-01-6	
Trichlorofluoromethane	**0.35 U**	ug/L	1.0	0.35	1		11/07/19 19:23	75-69-4	
1,2,3-Trichloropropane	**1.1 U**	ug/L	2.0	1.1	1		11/07/19 19:23	96-18-4	
Vinyl acetate	**0.19 U**	ug/L	10.0	0.19	1		11/07/19 19:23	108-05-4	
Vinyl chloride	**0.39 U**	ug/L	1.0	0.39	1		11/07/19 19:23	75-01-4	J(v2)
Xylene (Total)	**2.1 U**	ug/L	5.0	2.1	1		11/07/19 19:23	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	70-130		1		11/07/19 19:23	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	70-130		1		11/07/19 19:23	17060-07-0	
Toluene-d8 (S)	103	%	70-130		1		11/07/19 19:23	2037-26-5	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**228**	mg/L	5.0	5.0	1		10/30/19 12:27		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508078

Sample: MW-1R (20585) **Lab ID: 35508078001** Collected: 10/29/19 08:50 Received: 10/29/19 15:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**9.4**	mg/L	5.0	2.5	1		11/05/19 20:31	16887-00-6	
Sulfate	**2.9 I**	mg/L	5.0	2.5	1		11/05/19 20:31	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.035 U**	mg/L	0.050	0.035	1		10/31/19 11:25	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.12**	mg/L	0.050	0.025	1		10/30/19 05:04	14797-55-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508078

Sample: MW-19A (27140) **Lab ID: 35508078002** Collected: 10/29/19 12:05 Received: 10/29/19 15:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**6.72**	Std. Units			1		10/29/19 12:05		
Field Temperature	**29.2**	deg C			1		10/29/19 12:05		
Field Specific Conductance	**908**	umhos/cm			1		10/29/19 12:05		
Oxygen, Dissolved	**0.35**	mg/L			1		10/29/19 12:05	7782-44-7	
Turbidity	**0.55**	NTU			1		10/29/19 12:05		
Water Level(NGVD)	**19.44**	feet			1		10/29/19 12:05		
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromo-3-chloropropane	**0.0065 U**	ug/L	0.020	0.0065	1	10/30/19 13:42	11/02/19 05:24	96-12-8	
1,2-Dibromoethane (EDB)	**0.0077 U**	ug/L	0.010	0.0077	1	10/30/19 13:42	11/02/19 05:24	106-93-4	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Barium	**72.7**	ug/L	10.0	0.84	1	10/30/19 06:11	10/31/19 08:12	7440-39-3	
Beryllium	**1.6 U**	ug/L	4.0	1.6	1	10/30/19 06:11	10/31/19 08:12	7440-41-7	
Cadmium	**0.33 U**	ug/L	1.0	0.33	1	10/30/19 06:11	10/31/19 08:12	7440-43-9	
Chromium	**1.7 U**	ug/L	5.0	1.7	1	10/30/19 06:11	10/31/19 08:12	7440-47-3	
Cobalt	**0.96 U**	ug/L	10.0	0.96	1	10/30/19 06:11	10/31/19 08:12	7440-48-4	
Copper	**2.6 U**	ug/L	5.0	2.6	1	10/30/19 06:11	10/31/19 08:12	7440-50-8	
Iron	**5520**	ug/L	40.0	9.2	1	10/30/19 06:11	10/31/19 08:12	7439-89-6	
Lead	**4.6 U**	ug/L	10.0	4.6	1	10/30/19 06:11	10/31/19 08:12	7439-92-1	
Manganese	**16.2**	ug/L	5.0	0.42	1	10/30/19 06:11	10/31/19 08:12	7439-96-5	
Nickel	**2.1 U**	ug/L	5.0	2.1	1	10/30/19 06:11	10/31/19 08:12	7440-02-0	
Selenium	**8.5 U**	ug/L	15.0	8.5	1	10/30/19 06:11	10/31/19 08:12	7782-49-2	
Silver	**1.0 U**	ug/L	5.0	1.0	1	10/30/19 06:11	10/31/19 08:12	7440-22-4	
Sodium	**7.4**	mg/L	2.0	0.27	1	10/30/19 06:11	10/31/19 08:12	7440-23-5	
Vanadium	**2.8 I**	ug/L	10.0	1.0	1	10/30/19 06:11	10/31/19 08:12	7440-62-2	
Zinc	**11.0 U**	ug/L	20.0	11.0	1	10/30/19 06:11	10/31/19 08:12	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Antimony	**0.50 U**	ug/L	1.0	0.50	1	10/30/19 06:11	10/31/19 14:26	7440-36-0	
Arsenic	**10.4**	ug/L	1.0	0.50	1	10/30/19 06:11	10/31/19 14:26	7440-38-2	
Thallium	**0.11 U**	ug/L	1.0	0.11	1	10/30/19 06:11	10/31/19 14:26	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	**0.10 U**	ug/L	0.20	0.10	1	11/05/19 11:11	11/06/19 13:23	7439-97-6	
8260 MSV	Analytical Method: EPA 8260								
Acetone	**5.3 U**	ug/L	20.0	5.3	1		11/07/19 19:48	67-64-1	
Acrylonitrile	**3.7 U**	ug/L	10.0	3.7	1		11/07/19 19:48	107-13-1	
Benzene	**0.30 U**	ug/L	1.0	0.30	1		11/07/19 19:48	71-43-2	
Bromochloromethane	**0.37 U**	ug/L	1.0	0.37	1		11/07/19 19:48	74-97-5	
Bromodichloromethane	**0.19 U**	ug/L	0.60	0.19	1		11/07/19 19:48	75-27-4	
Bromoform	**2.6 U**	ug/L	3.0	2.6	1		11/07/19 19:48	75-25-2	
Bromomethane	**4.0 U**	ug/L	5.0	4.0	1		11/07/19 19:48	74-83-9	J(v2)
2-Butanone (MEK)	**7.5 U**	ug/L	10.0	7.5	1		11/07/19 19:48	78-93-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508078

Sample: MW-19A (27140) **Lab ID: 35508078002** Collected: 10/29/19 12:05 Received: 10/29/19 15:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Carbon disulfide	**0.45 U**	ug/L	10.0	0.45	1		11/07/19 19:48	75-15-0	
Carbon tetrachloride	**1.1 U**	ug/L	3.0	1.1	1		11/07/19 19:48	56-23-5	
Chlorobenzene	**0.35 U**	ug/L	1.0	0.35	1		11/07/19 19:48	108-90-7	
Chloroethane	**3.7 U**	ug/L	10.0	3.7	1		11/07/19 19:48	75-00-3	
Chloroform	**0.32 U**	ug/L	1.0	0.32	1		11/07/19 19:48	67-66-3	
Chloromethane	**0.97 U**	ug/L	1.0	0.97	1		11/07/19 19:48	74-87-3	J(v2)
Dibromochloromethane	**0.45 U**	ug/L	2.0	0.45	1		11/07/19 19:48	124-48-1	
Dibromomethane	**0.68 U**	ug/L	2.0	0.68	1		11/07/19 19:48	74-95-3	
1,2-Dichlorobenzene	**0.29 U**	ug/L	1.0	0.29	1		11/07/19 19:48	95-50-1	
1,4-Dichlorobenzene	**0.28 U**	ug/L	1.0	0.28	1		11/07/19 19:48	106-46-7	
trans-1,4-Dichloro-2-butene	**2.5 U**	ug/L	10.0	2.5	1		11/07/19 19:48	110-57-6	J(v2)
1,1-Dichloroethane	**0.34 U**	ug/L	1.0	0.34	1		11/07/19 19:48	75-34-3	
1,2-Dichloroethane	**0.27 U**	ug/L	1.0	0.27	1		11/07/19 19:48	107-06-2	
1,1-Dichloroethene	**0.27 U**	ug/L	1.0	0.27	1		11/07/19 19:48	75-35-4	J(v2)
cis-1,2-Dichloroethene	**0.27 U**	ug/L	1.0	0.27	1		11/07/19 19:48	156-59-2	
trans-1,2-Dichloroethene	**0.23 U**	ug/L	1.0	0.23	1		11/07/19 19:48	156-60-5	
1,2-Dichloropropane	**0.23 U**	ug/L	1.0	0.23	1		11/07/19 19:48	78-87-5	
cis-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/07/19 19:48	10061-01-5	
trans-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/07/19 19:48	10061-02-6	
Ethylbenzene	**0.30 U**	ug/L	1.0	0.30	1		11/07/19 19:48	100-41-4	
2-Hexanone	**0.85 U**	ug/L	10.0	0.85	1		11/07/19 19:48	591-78-6	
Iodomethane	**9.3 U**	ug/L	10.0	9.3	1		11/07/19 19:48	74-88-4	J(v3)
Methylene Chloride	**2.0 U**	ug/L	5.0	2.0	1		11/07/19 19:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	**0.32 U**	ug/L	10.0	0.32	1		11/07/19 19:48	108-10-1	
Styrene	**0.26 U**	ug/L	1.0	0.26	1		11/07/19 19:48	100-42-5	
1,1,1,2-Tetrachloroethane	**0.32 U**	ug/L	1.0	0.32	1		11/07/19 19:48	630-20-6	
1,1,2,2-Tetrachloroethane	**0.20 U**	ug/L	0.50	0.20	1		11/07/19 19:48	79-34-5	
Tetrachloroethene	**0.38 U**	ug/L	1.0	0.38	1		11/07/19 19:48	127-18-4	
Toluene	**0.33 U**	ug/L	1.0	0.33	1		11/07/19 19:48	108-88-3	
1,1,1-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/07/19 19:48	71-55-6	
1,1,2-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/07/19 19:48	79-00-5	
Trichloroethene	**0.36 U**	ug/L	1.0	0.36	1		11/07/19 19:48	79-01-6	
Trichlorofluoromethane	**0.35 U**	ug/L	1.0	0.35	1		11/07/19 19:48	75-69-4	
1,2,3-Trichloropropane	**1.1 U**	ug/L	2.0	1.1	1		11/07/19 19:48	96-18-4	
Vinyl acetate	**0.19 U**	ug/L	10.0	0.19	1		11/07/19 19:48	108-05-4	
Vinyl chloride	**0.39 U**	ug/L	1.0	0.39	1		11/07/19 19:48	75-01-4	J(v2)
Xylene (Total)	**2.1 U**	ug/L	5.0	2.1	1		11/07/19 19:48	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		11/07/19 19:48	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	70-130		1		11/07/19 19:48	17060-07-0	
Toluene-d8 (S)	104	%	70-130		1		11/07/19 19:48	2037-26-5	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**551**	mg/L	5.0	5.0	1		10/30/19 12:31		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508078

Sample: MW-19A (27140) **Lab ID: 35508078002** Collected: 10/29/19 12:05 Received: 10/29/19 15:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**15.0**	mg/L	10.0	5.0	2		11/05/19 20:54	16887-00-6	
Sulfate	**25.3**	mg/L	10.0	5.0	2		11/05/19 20:54	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.96**	mg/L	0.050	0.035	1		11/01/19 11:29	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.025 U**	mg/L	0.050	0.025	1		10/30/19 06:02	14797-55-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508078

Sample: MW-20A (27141) **Lab ID: 35508078003** Collected: 10/29/19 10:25 Received: 10/29/19 15:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**6.53**	Std. Units			1		10/29/19 10:25		
Field Temperature	**28.2**	deg C			1		10/29/19 10:25		
Field Specific Conductance	**543**	umhos/cm			1		10/29/19 10:25		
Oxygen, Dissolved	**0.17**	mg/L			1		10/29/19 10:25	7782-44-7	
Turbidity	**0.81**	NTU			1		10/29/19 10:25		
Water Level(NGVD)	**18.45**	feet			1		10/29/19 10:25		
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromo-3-chloropropane	**0.0066 U**	ug/L	0.021	0.0066	1	10/30/19 13:42	11/02/19 05:39	96-12-8	
1,2-Dibromoethane (EDB)	**0.0077 U**	ug/L	0.010	0.0077	1	10/30/19 13:42	11/02/19 05:39	106-93-4	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Barium	**33.8**	ug/L	10.0	0.84	1	10/30/19 06:11	10/31/19 08:15	7440-39-3	
Beryllium	**1.6 U**	ug/L	4.0	1.6	1	10/30/19 06:11	10/31/19 08:15	7440-41-7	
Cadmium	**0.33 U**	ug/L	1.0	0.33	1	10/30/19 06:11	10/31/19 08:15	7440-43-9	
Chromium	**1.7 U**	ug/L	5.0	1.7	1	10/30/19 06:11	10/31/19 08:15	7440-47-3	
Cobalt	**0.96 U**	ug/L	10.0	0.96	1	10/30/19 06:11	10/31/19 08:15	7440-48-4	
Copper	**2.6 U**	ug/L	5.0	2.6	1	10/30/19 06:11	10/31/19 08:15	7440-50-8	
Iron	**6800**	ug/L	40.0	9.2	1	10/30/19 06:11	10/31/19 08:15	7439-89-6	
Lead	**4.6 U**	ug/L	10.0	4.6	1	10/30/19 06:11	10/31/19 08:15	7439-92-1	
Manganese	**8.3**	ug/L	5.0	0.42	1	10/30/19 06:11	10/31/19 08:15	7439-96-5	
Nickel	**2.1 U**	ug/L	5.0	2.1	1	10/30/19 06:11	10/31/19 08:15	7440-02-0	
Selenium	**8.5 U**	ug/L	15.0	8.5	1	10/30/19 06:11	10/31/19 08:15	7782-49-2	
Silver	**1.0 U**	ug/L	5.0	1.0	1	10/30/19 06:11	10/31/19 08:15	7440-22-4	
Sodium	**3.0**	mg/L	2.0	0.27	1	10/30/19 06:11	10/31/19 08:15	7440-23-5	
Vanadium	**4.1 I**	ug/L	10.0	1.0	1	10/30/19 06:11	10/31/19 08:15	7440-62-2	
Zinc	**11.0 U**	ug/L	20.0	11.0	1	10/30/19 06:11	10/31/19 08:15	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Antimony	**0.50 U**	ug/L	1.0	0.50	1	10/30/19 06:11	10/31/19 14:28	7440-36-0	
Arsenic	**7.4**	ug/L	1.0	0.50	1	10/30/19 06:11	10/31/19 14:28	7440-38-2	
Thallium	**0.11 U**	ug/L	1.0	0.11	1	10/30/19 06:11	10/31/19 14:28	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	**0.10 U**	ug/L	0.20	0.10	1	11/05/19 11:11	11/06/19 13:30	7439-97-6	
8260 MSV	Analytical Method: EPA 8260								
Acetone	**5.3 U**	ug/L	20.0	5.3	1		11/07/19 20:13	67-64-1	
Acrylonitrile	**3.7 U**	ug/L	10.0	3.7	1		11/07/19 20:13	107-13-1	
Benzene	**0.30 U**	ug/L	1.0	0.30	1		11/07/19 20:13	71-43-2	
Bromochloromethane	**0.37 U**	ug/L	1.0	0.37	1		11/07/19 20:13	74-97-5	
Bromodichloromethane	**0.19 U**	ug/L	0.60	0.19	1		11/07/19 20:13	75-27-4	
Bromoform	**2.6 U**	ug/L	3.0	2.6	1		11/07/19 20:13	75-25-2	
Bromomethane	**4.0 U**	ug/L	5.0	4.0	1		11/07/19 20:13	74-83-9	J(v2)
2-Butanone (MEK)	**7.5 U**	ug/L	10.0	7.5	1		11/07/19 20:13	78-93-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508078

Sample: MW-20A (27141) **Lab ID: 35508078003** Collected: 10/29/19 10:25 Received: 10/29/19 15:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Carbon disulfide	**0.45 U**	ug/L	10.0	0.45	1		11/07/19 20:13	75-15-0	
Carbon tetrachloride	**1.1 U**	ug/L	3.0	1.1	1		11/07/19 20:13	56-23-5	
Chlorobenzene	**0.35 U**	ug/L	1.0	0.35	1		11/07/19 20:13	108-90-7	
Chloroethane	**3.7 U**	ug/L	10.0	3.7	1		11/07/19 20:13	75-00-3	
Chloroform	**0.32 U**	ug/L	1.0	0.32	1		11/07/19 20:13	67-66-3	
Chloromethane	**0.97 U**	ug/L	1.0	0.97	1		11/07/19 20:13	74-87-3	J(v2)
Dibromochloromethane	**0.45 U**	ug/L	2.0	0.45	1		11/07/19 20:13	124-48-1	
Dibromomethane	**0.68 U**	ug/L	2.0	0.68	1		11/07/19 20:13	74-95-3	
1,2-Dichlorobenzene	**0.29 U**	ug/L	1.0	0.29	1		11/07/19 20:13	95-50-1	
1,4-Dichlorobenzene	**0.28 U**	ug/L	1.0	0.28	1		11/07/19 20:13	106-46-7	
trans-1,4-Dichloro-2-butene	**2.5 U**	ug/L	10.0	2.5	1		11/07/19 20:13	110-57-6	J(v2)
1,1-Dichloroethane	**0.34 U**	ug/L	1.0	0.34	1		11/07/19 20:13	75-34-3	
1,2-Dichloroethane	**0.27 U**	ug/L	1.0	0.27	1		11/07/19 20:13	107-06-2	
1,1-Dichloroethene	**0.27 U**	ug/L	1.0	0.27	1		11/07/19 20:13	75-35-4	J(v2)
cis-1,2-Dichloroethene	**0.27 U**	ug/L	1.0	0.27	1		11/07/19 20:13	156-59-2	
trans-1,2-Dichloroethene	**0.23 U**	ug/L	1.0	0.23	1		11/07/19 20:13	156-60-5	
1,2-Dichloropropane	**0.23 U**	ug/L	1.0	0.23	1		11/07/19 20:13	78-87-5	
cis-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/07/19 20:13	10061-01-5	
trans-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/07/19 20:13	10061-02-6	
Ethylbenzene	**0.30 U**	ug/L	1.0	0.30	1		11/07/19 20:13	100-41-4	
2-Hexanone	**0.85 U**	ug/L	10.0	0.85	1		11/07/19 20:13	591-78-6	
Iodomethane	**9.3 U**	ug/L	10.0	9.3	1		11/07/19 20:13	74-88-4	J(v3)
Methylene Chloride	**2.0 U**	ug/L	5.0	2.0	1		11/07/19 20:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	**0.32 U**	ug/L	10.0	0.32	1		11/07/19 20:13	108-10-1	
Styrene	**0.26 U**	ug/L	1.0	0.26	1		11/07/19 20:13	100-42-5	
1,1,1,2-Tetrachloroethane	**0.32 U**	ug/L	1.0	0.32	1		11/07/19 20:13	630-20-6	
1,1,2,2-Tetrachloroethane	**0.20 U**	ug/L	0.50	0.20	1		11/07/19 20:13	79-34-5	
Tetrachloroethene	**0.38 U**	ug/L	1.0	0.38	1		11/07/19 20:13	127-18-4	
Toluene	**0.33 U**	ug/L	1.0	0.33	1		11/07/19 20:13	108-88-3	
1,1,1-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/07/19 20:13	71-55-6	
1,1,2-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/07/19 20:13	79-00-5	
Trichloroethene	**0.36 U**	ug/L	1.0	0.36	1		11/07/19 20:13	79-01-6	
Trichlorofluoromethane	**0.35 U**	ug/L	1.0	0.35	1		11/07/19 20:13	75-69-4	
1,2,3-Trichloropropane	**1.1 U**	ug/L	2.0	1.1	1		11/07/19 20:13	96-18-4	
Vinyl acetate	**0.19 U**	ug/L	10.0	0.19	1		11/07/19 20:13	108-05-4	
Vinyl chloride	**0.39 U**	ug/L	1.0	0.39	1		11/07/19 20:13	75-01-4	J(v2)
Xylene (Total)	**2.1 U**	ug/L	5.0	2.1	1		11/07/19 20:13	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	70-130		1		11/07/19 20:13	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	70-130		1		11/07/19 20:13	17060-07-0	
Toluene-d8 (S)	103	%	70-130		1		11/07/19 20:13	2037-26-5	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**299**	mg/L	5.0	5.0	1		10/30/19 12:30		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508078

Sample: MW-20A (27141) **Lab ID: 35508078003** Collected: 10/29/19 10:25 Received: 10/29/19 15:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.8 I**	mg/L	5.0	2.5	1		11/05/19 21:16	16887-00-6	
Sulfate	**2.5 U**	mg/L	5.0	2.5	1		11/05/19 21:16	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.95**	mg/L	0.050	0.035	1		11/01/19 11:30	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.025 U**	mg/L	0.050	0.025	1		10/30/19 05:43	14797-55-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508078

Sample: MW-19A DUP -1 **Lab ID: 35508078004** Collected: 10/29/19 12:05 Received: 10/29/19 15:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromo-3-chloropropane	**0.0067 U**	ug/L	0.021	0.0067	1	10/30/19 13:42	11/02/19 05:54	96-12-8	
1,2-Dibromoethane (EDB)	**0.0078 U**	ug/L	0.010	0.0078	1	10/30/19 13:42	11/02/19 05:54	106-93-4	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Barium	**73.5**	ug/L	10.0	0.84	1	10/30/19 06:11	10/31/19 08:19	7440-39-3	
Beryllium	**1.6 U**	ug/L	4.0	1.6	1	10/30/19 06:11	10/31/19 08:19	7440-41-7	
Cadmium	**0.33 U**	ug/L	1.0	0.33	1	10/30/19 06:11	10/31/19 08:19	7440-43-9	
Chromium	**1.7 U**	ug/L	5.0	1.7	1	10/30/19 06:11	10/31/19 08:19	7440-47-3	
Cobalt	**0.96 U**	ug/L	10.0	0.96	1	10/30/19 06:11	10/31/19 08:19	7440-48-4	
Copper	**2.6 U**	ug/L	5.0	2.6	1	10/30/19 06:11	10/31/19 08:19	7440-50-8	
Iron	**5590**	ug/L	40.0	9.2	1	10/30/19 06:11	10/31/19 08:19	7439-89-6	
Lead	**4.6 U**	ug/L	10.0	4.6	1	10/30/19 06:11	10/31/19 08:19	7439-92-1	
Manganese	**16.3**	ug/L	5.0	0.42	1	10/30/19 06:11	10/31/19 08:19	7439-96-5	
Nickel	**2.1 U**	ug/L	5.0	2.1	1	10/30/19 06:11	10/31/19 08:19	7440-02-0	
Selenium	**8.5 U**	ug/L	15.0	8.5	1	10/30/19 06:11	10/31/19 08:19	7782-49-2	
Silver	**1.0 U**	ug/L	5.0	1.0	1	10/30/19 06:11	10/31/19 08:19	7440-22-4	
Sodium	**7.5**	mg/L	2.0	0.27	1	10/30/19 06:11	10/31/19 08:19	7440-23-5	
Vanadium	**2.8 I**	ug/L	10.0	1.0	1	10/30/19 06:11	10/31/19 08:19	7440-62-2	
Zinc	**11.0 U**	ug/L	20.0	11.0	1	10/30/19 06:11	10/31/19 08:19	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Antimony	**0.50 U**	ug/L	1.0	0.50	1	10/30/19 06:11	10/31/19 14:30	7440-36-0	
Arsenic	**10.4**	ug/L	1.0	0.50	1	10/30/19 06:11	10/31/19 14:30	7440-38-2	
Thallium	**0.11 U**	ug/L	1.0	0.11	1	10/30/19 06:11	10/31/19 14:30	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	**0.10 U**	ug/L	0.20	0.10	1	11/05/19 11:11	11/06/19 13:32	7439-97-6	
8260 MSV	Analytical Method: EPA 8260								
Acetone	**5.3 U**	ug/L	20.0	5.3	1		11/07/19 20:37	67-64-1	
Acrylonitrile	**3.7 U**	ug/L	10.0	3.7	1		11/07/19 20:37	107-13-1	
Benzene	**0.30 U**	ug/L	1.0	0.30	1		11/07/19 20:37	71-43-2	
Bromochloromethane	**0.37 U**	ug/L	1.0	0.37	1		11/07/19 20:37	74-97-5	
Bromodichloromethane	**0.19 U**	ug/L	0.60	0.19	1		11/07/19 20:37	75-27-4	
Bromoform	**2.6 U**	ug/L	3.0	2.6	1		11/07/19 20:37	75-25-2	
Bromomethane	**4.0 U**	ug/L	5.0	4.0	1		11/07/19 20:37	74-83-9	J(v2)
2-Butanone (MEK)	**7.5 U**	ug/L	10.0	7.5	1		11/07/19 20:37	78-93-3	
Carbon disulfide	**0.45 U**	ug/L	10.0	0.45	1		11/07/19 20:37	75-15-0	
Carbon tetrachloride	**1.1 U**	ug/L	3.0	1.1	1		11/07/19 20:37	56-23-5	
Chlorobenzene	**0.35 U**	ug/L	1.0	0.35	1		11/07/19 20:37	108-90-7	
Chloroethane	**3.7 U**	ug/L	10.0	3.7	1		11/07/19 20:37	75-00-3	
Chloroform	**0.32 U**	ug/L	1.0	0.32	1		11/07/19 20:37	67-66-3	
Chloromethane	**0.97 U**	ug/L	1.0	0.97	1		11/07/19 20:37	74-87-3	J(v2)
Dibromochloromethane	**0.45 U**	ug/L	2.0	0.45	1		11/07/19 20:37	124-48-1	
Dibromomethane	**0.68 U**	ug/L	2.0	0.68	1		11/07/19 20:37	74-95-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508078

Sample: MW-19A DUP -1 **Lab ID: 35508078004** Collected: 10/29/19 12:05 Received: 10/29/19 15:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,2-Dichlorobenzene	**0.29 U**	ug/L	1.0	0.29	1		11/07/19 20:37	95-50-1	
1,4-Dichlorobenzene	**0.28 U**	ug/L	1.0	0.28	1		11/07/19 20:37	106-46-7	
trans-1,4-Dichloro-2-butene	**2.5 U**	ug/L	10.0	2.5	1		11/07/19 20:37	110-57-6	J(v2)
1,1-Dichloroethane	**0.34 U**	ug/L	1.0	0.34	1		11/07/19 20:37	75-34-3	
1,2-Dichloroethane	**0.27 U**	ug/L	1.0	0.27	1		11/07/19 20:37	107-06-2	
1,1-Dichloroethene	**0.27 U**	ug/L	1.0	0.27	1		11/07/19 20:37	75-35-4	J(v2)
cis-1,2-Dichloroethene	**0.27 U**	ug/L	1.0	0.27	1		11/07/19 20:37	156-59-2	
trans-1,2-Dichloroethene	**0.23 U**	ug/L	1.0	0.23	1		11/07/19 20:37	156-60-5	
1,2-Dichloropropane	**0.23 U**	ug/L	1.0	0.23	1		11/07/19 20:37	78-87-5	
cis-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/07/19 20:37	10061-01-5	
trans-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/07/19 20:37	10061-02-6	
Ethylbenzene	**0.30 U**	ug/L	1.0	0.30	1		11/07/19 20:37	100-41-4	
2-Hexanone	**0.85 U**	ug/L	10.0	0.85	1		11/07/19 20:37	591-78-6	
Iodomethane	**9.3 U**	ug/L	10.0	9.3	1		11/07/19 20:37	74-88-4	J(v3)
Methylene Chloride	**2.0 U**	ug/L	5.0	2.0	1		11/07/19 20:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	**0.32 U**	ug/L	10.0	0.32	1		11/07/19 20:37	108-10-1	
Styrene	**0.26 U**	ug/L	1.0	0.26	1		11/07/19 20:37	100-42-5	
1,1,1,2-Tetrachloroethane	**0.32 U**	ug/L	1.0	0.32	1		11/07/19 20:37	630-20-6	
1,1,2,2-Tetrachloroethane	**0.20 U**	ug/L	0.50	0.20	1		11/07/19 20:37	79-34-5	
Tetrachloroethene	**0.38 U**	ug/L	1.0	0.38	1		11/07/19 20:37	127-18-4	
Toluene	**0.33 U**	ug/L	1.0	0.33	1		11/07/19 20:37	108-88-3	
1,1,1-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/07/19 20:37	71-55-6	
1,1,2-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/07/19 20:37	79-00-5	
Trichloroethene	**0.36 U**	ug/L	1.0	0.36	1		11/07/19 20:37	79-01-6	
Trichlorofluoromethane	**0.35 U**	ug/L	1.0	0.35	1		11/07/19 20:37	75-69-4	
1,2,3-Trichloropropane	**1.1 U**	ug/L	2.0	1.1	1		11/07/19 20:37	96-18-4	
Vinyl acetate	**0.19 U**	ug/L	10.0	0.19	1		11/07/19 20:37	108-05-4	
Vinyl chloride	**0.39 U**	ug/L	1.0	0.39	1		11/07/19 20:37	75-01-4	J(v2)
Xylene (Total)	**2.1 U**	ug/L	5.0	2.1	1		11/07/19 20:37	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		11/07/19 20:37	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	70-130		1		11/07/19 20:37	17060-07-0	
Toluene-d8 (S)	104	%	70-130		1		11/07/19 20:37	2037-26-5	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**553**	mg/L	5.0	5.0	1		10/30/19 12:31		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**15.1**	mg/L	10.0	5.0	2		11/05/19 21:39	16887-00-6	
Sulfate	**25.0**	mg/L	10.0	5.0	2		11/05/19 21:39	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.97**	mg/L	0.050	0.035	1		11/01/19 11:37	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508078

Sample: MW-19A DUP -1 **Lab ID: 35508078004** Collected: 10/29/19 12:05 Received: 10/29/19 15:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.025 U**	mg/L	0.050	0.025	1		10/30/19 06:03	14797-55-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508078

Sample: Equipment Blank 1 **Lab ID: 35508078005** Collected: 10/29/19 07:50 Received: 10/29/19 15:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromo-3-chloropropane	**0.0067 U**	ug/L	0.021	0.0067	1	10/30/19 13:42	11/02/19 06:09	96-12-8	
1,2-Dibromoethane (EDB)	**0.0078 U**	ug/L	0.010	0.0078	1	10/30/19 13:42	11/02/19 06:09	106-93-4	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Barium	**0.84 U**	ug/L	10.0	0.84	1	10/30/19 06:11	10/31/19 08:32	7440-39-3	
Beryllium	**1.6 U**	ug/L	4.0	1.6	1	10/30/19 06:11	10/31/19 08:32	7440-41-7	
Cadmium	**0.33 U**	ug/L	1.0	0.33	1	10/30/19 06:11	10/31/19 08:32	7440-43-9	
Chromium	**1.7 U**	ug/L	5.0	1.7	1	10/30/19 06:11	10/31/19 08:32	7440-47-3	
Cobalt	**0.96 U**	ug/L	10.0	0.96	1	10/30/19 06:11	10/31/19 08:32	7440-48-4	
Copper	**2.6 U**	ug/L	5.0	2.6	1	10/30/19 06:11	10/31/19 08:32	7440-50-8	
Iron	**9.2 U**	ug/L	40.0	9.2	1	10/30/19 06:11	10/31/19 08:32	7439-89-6	
Lead	**4.6 U**	ug/L	10.0	4.6	1	10/30/19 06:11	10/31/19 08:32	7439-92-1	
Manganese	**0.42 U**	ug/L	5.0	0.42	1	10/30/19 06:11	10/31/19 08:32	7439-96-5	
Nickel	**2.1 U**	ug/L	5.0	2.1	1	10/30/19 06:11	10/31/19 08:32	7440-02-0	
Selenium	**8.5 U**	ug/L	15.0	8.5	1	10/30/19 06:11	10/31/19 08:32	7782-49-2	
Silver	**1.0 U**	ug/L	5.0	1.0	1	10/30/19 06:11	10/31/19 08:32	7440-22-4	
Sodium	**0.27 U**	mg/L	2.0	0.27	1	10/30/19 06:11	10/31/19 08:32	7440-23-5	
Vanadium	**1.0 U**	ug/L	10.0	1.0	1	10/30/19 06:11	10/31/19 08:32	7440-62-2	
Zinc	**11.0 U**	ug/L	20.0	11.0	1	10/30/19 06:11	10/31/19 08:32	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Antimony	**0.50 U**	ug/L	1.0	0.50	1	10/30/19 06:11	10/31/19 14:31	7440-36-0	
Arsenic	**0.50 U**	ug/L	1.0	0.50	1	10/30/19 06:11	10/31/19 14:31	7440-38-2	
Thallium	**0.11 U**	ug/L	1.0	0.11	1	10/30/19 06:11	10/31/19 14:31	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	**0.10 U**	ug/L	0.20	0.10	1	11/05/19 11:11	11/06/19 13:34	7439-97-6	
8260 MSV	Analytical Method: EPA 8260								
Acetone	**7.5 I**	ug/L	20.0	5.3	1		11/07/19 14:26	67-64-1	
Acrylonitrile	**3.7 U**	ug/L	10.0	3.7	1		11/07/19 14:26	107-13-1	
Benzene	**0.30 U**	ug/L	1.0	0.30	1		11/07/19 14:26	71-43-2	
Bromochloromethane	**0.37 U**	ug/L	1.0	0.37	1		11/07/19 14:26	74-97-5	
Bromodichloromethane	**0.19 U**	ug/L	0.60	0.19	1		11/07/19 14:26	75-27-4	
Bromoform	**2.6 U**	ug/L	3.0	2.6	1		11/07/19 14:26	75-25-2	
Bromomethane	**4.0 U**	ug/L	5.0	4.0	1		11/07/19 14:26	74-83-9	J(v2)
2-Butanone (MEK)	**7.5 U**	ug/L	10.0	7.5	1		11/07/19 14:26	78-93-3	
Carbon disulfide	**0.45 U**	ug/L	10.0	0.45	1		11/07/19 14:26	75-15-0	
Carbon tetrachloride	**1.1 U**	ug/L	3.0	1.1	1		11/07/19 14:26	56-23-5	
Chlorobenzene	**0.35 U**	ug/L	1.0	0.35	1		11/07/19 14:26	108-90-7	
Chloroethane	**3.7 U**	ug/L	10.0	3.7	1		11/07/19 14:26	75-00-3	
Chloroform	**0.32 U**	ug/L	1.0	0.32	1		11/07/19 14:26	67-66-3	
Chloromethane	**0.97 U**	ug/L	1.0	0.97	1		11/07/19 14:26	74-87-3	J(v2)
Dibromochloromethane	**0.45 U**	ug/L	2.0	0.45	1		11/07/19 14:26	124-48-1	
Dibromomethane	**0.68 U**	ug/L	2.0	0.68	1		11/07/19 14:26	74-95-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508078

Sample: Equipment Blank 1 **Lab ID: 35508078005** Collected: 10/29/19 07:50 Received: 10/29/19 15:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,2-Dichlorobenzene	**0.29 U**	ug/L	1.0	0.29	1		11/07/19 14:26	95-50-1	
1,4-Dichlorobenzene	**0.28 U**	ug/L	1.0	0.28	1		11/07/19 14:26	106-46-7	
trans-1,4-Dichloro-2-butene	**2.5 U**	ug/L	10.0	2.5	1		11/07/19 14:26	110-57-6	J(v2)
1,1-Dichloroethane	**0.34 U**	ug/L	1.0	0.34	1		11/07/19 14:26	75-34-3	
1,2-Dichloroethane	**0.27 U**	ug/L	1.0	0.27	1		11/07/19 14:26	107-06-2	
1,1-Dichloroethene	**0.27 U**	ug/L	1.0	0.27	1		11/07/19 14:26	75-35-4	J(v2)
cis-1,2-Dichloroethene	**0.27 U**	ug/L	1.0	0.27	1		11/07/19 14:26	156-59-2	
trans-1,2-Dichloroethene	**0.23 U**	ug/L	1.0	0.23	1		11/07/19 14:26	156-60-5	
1,2-Dichloropropane	**0.23 U**	ug/L	1.0	0.23	1		11/07/19 14:26	78-87-5	
cis-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/07/19 14:26	10061-01-5	
trans-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/07/19 14:26	10061-02-6	
Ethylbenzene	**0.30 U**	ug/L	1.0	0.30	1		11/07/19 14:26	100-41-4	
2-Hexanone	**0.85 U**	ug/L	10.0	0.85	1		11/07/19 14:26	591-78-6	
Iodomethane	**9.3 U**	ug/L	10.0	9.3	1		11/07/19 14:26	74-88-4	J(v3)
Methylene Chloride	**2.0 U**	ug/L	5.0	2.0	1		11/07/19 14:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	**0.32 U**	ug/L	10.0	0.32	1		11/07/19 14:26	108-10-1	
Styrene	**0.26 U**	ug/L	1.0	0.26	1		11/07/19 14:26	100-42-5	
1,1,1,2-Tetrachloroethane	**0.32 U**	ug/L	1.0	0.32	1		11/07/19 14:26	630-20-6	
1,1,2,2-Tetrachloroethane	**0.20 U**	ug/L	0.50	0.20	1		11/07/19 14:26	79-34-5	
Tetrachloroethene	**0.38 U**	ug/L	1.0	0.38	1		11/07/19 14:26	127-18-4	
Toluene	**0.33 U**	ug/L	1.0	0.33	1		11/07/19 14:26	108-88-3	
1,1,1-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/07/19 14:26	71-55-6	
1,1,2-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/07/19 14:26	79-00-5	
Trichloroethene	**0.36 U**	ug/L	1.0	0.36	1		11/07/19 14:26	79-01-6	
Trichlorofluoromethane	**0.35 U**	ug/L	1.0	0.35	1		11/07/19 14:26	75-69-4	
1,2,3-Trichloropropane	**1.1 U**	ug/L	2.0	1.1	1		11/07/19 14:26	96-18-4	
Vinyl acetate	**0.19 U**	ug/L	10.0	0.19	1		11/07/19 14:26	108-05-4	
Vinyl chloride	**0.39 U**	ug/L	1.0	0.39	1		11/07/19 14:26	75-01-4	J(v2)
Xylene (Total)	**2.1 U**	ug/L	5.0	2.1	1		11/07/19 14:26	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	70-130		1		11/07/19 14:26	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	70-130		1		11/07/19 14:26	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		11/07/19 14:26	2037-26-5	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**5.0 U**	mg/L	5.0	5.0	1		10/30/19 12:26		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.5 U**	mg/L	5.0	2.5	1		11/05/19 22:01	16887-00-6	
Sulfate	**2.5 U**	mg/L	5.0	2.5	1		11/05/19 22:01	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.035 U**	mg/L	0.050	0.035	1		11/01/19 11:56	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508078

Sample: Equipment Blank 1 **Lab ID: 35508078005** Collected: 10/29/19 07:50 Received: 10/29/19 15:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.025 U**	mg/L	0.050	0.025	1		10/30/19 05:02	14797-55-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508078

Sample: Trip Blank 8260 1 **Lab ID: 35508078006** Collected: 10/29/19 07:50 Received: 10/29/19 15:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Acetone	**6.2 I**	ug/L	20.0	5.3	1		11/07/19 14:51	67-64-1	
Acrylonitrile	**3.7 U**	ug/L	10.0	3.7	1		11/07/19 14:51	107-13-1	
Benzene	**0.30 U**	ug/L	1.0	0.30	1		11/07/19 14:51	71-43-2	
Bromochloromethane	**0.37 U**	ug/L	1.0	0.37	1		11/07/19 14:51	74-97-5	
Bromodichloromethane	**0.19 U**	ug/L	0.60	0.19	1		11/07/19 14:51	75-27-4	
Bromoform	**2.6 U**	ug/L	3.0	2.6	1		11/07/19 14:51	75-25-2	
Bromomethane	**4.0 U**	ug/L	5.0	4.0	1		11/07/19 14:51	74-83-9	J(v2)
2-Butanone (MEK)	**7.5 U**	ug/L	10.0	7.5	1		11/07/19 14:51	78-93-3	
Carbon disulfide	**0.45 U**	ug/L	10.0	0.45	1		11/07/19 14:51	75-15-0	
Carbon tetrachloride	**1.1 U**	ug/L	3.0	1.1	1		11/07/19 14:51	56-23-5	
Chlorobenzene	**0.35 U**	ug/L	1.0	0.35	1		11/07/19 14:51	108-90-7	
Chloroethane	**3.7 U**	ug/L	10.0	3.7	1		11/07/19 14:51	75-00-3	
Chloroform	**0.32 U**	ug/L	1.0	0.32	1		11/07/19 14:51	67-66-3	
Chloromethane	**0.97 U**	ug/L	1.0	0.97	1		11/07/19 14:51	74-87-3	J(v2)
Dibromochloromethane	**0.45 U**	ug/L	2.0	0.45	1		11/07/19 14:51	124-48-1	
Dibromomethane	**0.68 U**	ug/L	2.0	0.68	1		11/07/19 14:51	74-95-3	
1,2-Dichlorobenzene	**0.29 U**	ug/L	1.0	0.29	1		11/07/19 14:51	95-50-1	
1,4-Dichlorobenzene	**0.28 U**	ug/L	1.0	0.28	1		11/07/19 14:51	106-46-7	
trans-1,4-Dichloro-2-butene	**2.5 U**	ug/L	10.0	2.5	1		11/07/19 14:51	110-57-6	J(v2)
1,1-Dichloroethane	**0.34 U**	ug/L	1.0	0.34	1		11/07/19 14:51	75-34-3	
1,2-Dichloroethane	**0.27 U**	ug/L	1.0	0.27	1		11/07/19 14:51	107-06-2	
1,1-Dichloroethene	**0.27 U**	ug/L	1.0	0.27	1		11/07/19 14:51	75-35-4	J(v2)
cis-1,2-Dichloroethene	**0.27 U**	ug/L	1.0	0.27	1		11/07/19 14:51	156-59-2	
trans-1,2-Dichloroethene	**0.23 U**	ug/L	1.0	0.23	1		11/07/19 14:51	156-60-5	
1,2-Dichloropropane	**0.23 U**	ug/L	1.0	0.23	1		11/07/19 14:51	78-87-5	
cis-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/07/19 14:51	10061-01-5	
trans-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/07/19 14:51	10061-02-6	
Ethylbenzene	**0.30 U**	ug/L	1.0	0.30	1		11/07/19 14:51	100-41-4	
2-Hexanone	**0.85 U**	ug/L	10.0	0.85	1		11/07/19 14:51	591-78-6	
Iodomethane	**9.3 U**	ug/L	10.0	9.3	1		11/07/19 14:51	74-88-4	J(v3)
Methylene Chloride	**2.0 U**	ug/L	5.0	2.0	1		11/07/19 14:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	**0.32 U**	ug/L	10.0	0.32	1		11/07/19 14:51	108-10-1	
Styrene	**0.26 U**	ug/L	1.0	0.26	1		11/07/19 14:51	100-42-5	
1,1,1,2-Tetrachloroethane	**0.32 U**	ug/L	1.0	0.32	1		11/07/19 14:51	630-20-6	
1,1,2,2-Tetrachloroethane	**0.20 U**	ug/L	0.50	0.20	1		11/07/19 14:51	79-34-5	
Tetrachloroethene	**0.38 U**	ug/L	1.0	0.38	1		11/07/19 14:51	127-18-4	
Toluene	**0.33 U**	ug/L	1.0	0.33	1		11/07/19 14:51	108-88-3	
1,1,1-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/07/19 14:51	71-55-6	
1,1,2-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/07/19 14:51	79-00-5	
Trichloroethene	**0.36 U**	ug/L	1.0	0.36	1		11/07/19 14:51	79-01-6	
Trichlorofluoromethane	**0.35 U**	ug/L	1.0	0.35	1		11/07/19 14:51	75-69-4	
1,2,3-Trichloropropane	**1.1 U**	ug/L	2.0	1.1	1		11/07/19 14:51	96-18-4	
Vinyl acetate	**0.19 U**	ug/L	10.0	0.19	1		11/07/19 14:51	108-05-4	
Vinyl chloride	**0.39 U**	ug/L	1.0	0.39	1		11/07/19 14:51	75-01-4	J(v2)
Xylene (Total)	**2.1 U**	ug/L	5.0	2.1	1		11/07/19 14:51	1330-20-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508078

Sample: Trip Blank 8260 1 **Lab ID: 35508078006** Collected: 10/29/19 07:50 Received: 10/29/19 15:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Surrogates									
4-Bromofluorobenzene (S)	96	%	70-130		1		11/07/19 14:51	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	70-130		1		11/07/19 14:51	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		11/07/19 14:51	2037-26-5	

Pace Analytical Services, LLC
8 East Tower Circle
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ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508078

Sample: Trip Blank 8011 1 **Lab ID: 35508078007** Collected: 10/29/19 07:50 Received: 10/29/19 15:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromo-3-chloropropane	**0.0065 U**	ug/L	0.020	0.0065	1	10/30/19 13:42	11/02/19 06:24	96-12-8	
1,2-Dibromoethane (EDB)	**0.0076 U**	ug/L	0.010	0.0076	1	10/30/19 13:42	11/02/19 06:24	106-93-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508078

QC Batch: 584407 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 35508078001, 35508078002, 35508078003, 35508078004, 35508078005

METHOD BLANK: 3177061 Matrix: Water
Associated Lab Samples: 35508078001, 35508078002, 35508078003, 35508078004, 35508078005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	0.10 U	0.20	0.10	11/06/19 13:02	

LABORATORY CONTROL SAMPLE: 3177062

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2	2.0	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3177063 3177064

Parameter	Units	35508004006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	0.10 U	2	2	2.1	2.0	105	100	75-125	4	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
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QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508078

QC Batch: 582768 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 35508078001, 35508078002, 35508078003, 35508078004, 35508078005

METHOD BLANK: 3168282 Matrix: Water
Associated Lab Samples: 35508078001, 35508078002, 35508078003, 35508078004, 35508078005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Barium	ug/L	0.84 U	10.0	0.84	10/31/19 07:01	
Beryllium	ug/L	1.6 U	4.0	1.6	10/31/19 07:01	
Cadmium	ug/L	0.33 U	1.0	0.33	10/31/19 07:01	
Chromium	ug/L	1.7 U	5.0	1.7	10/31/19 07:01	
Cobalt	ug/L	0.96 U	10.0	0.96	10/31/19 07:01	
Copper	ug/L	2.6 U	5.0	2.6	10/31/19 07:01	
Iron	ug/L	9.2 U	40.0	9.2	10/31/19 07:01	
Lead	ug/L	4.6 U	10.0	4.6	10/31/19 07:01	
Manganese	ug/L	0.42 U	5.0	0.42	10/31/19 07:01	
Nickel	ug/L	2.1 U	5.0	2.1	10/31/19 07:01	
Selenium	ug/L	8.5 U	15.0	8.5	10/31/19 07:01	
Silver	ug/L	1.0 U	5.0	1.0	10/31/19 07:01	
Sodium	mg/L	0.27 U	2.0	0.27	10/31/19 07:01	
Vanadium	ug/L	1.0 U	10.0	1.0	10/31/19 07:01	
Zinc	ug/L	11.0 U	20.0	11.0	10/31/19 07:01	

LABORATORY CONTROL SAMPLE: 3168283

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	250	258	103	80-120	
Beryllium	ug/L	25	24.9	100	80-120	
Cadmium	ug/L	25	25.9	104	80-120	
Chromium	ug/L	250	259	103	80-120	
Cobalt	ug/L	250	265	106	80-120	
Copper	ug/L	250	252	101	80-120	
Iron	ug/L	2500	2570	103	80-120	
Lead	ug/L	250	261	104	80-120	
Manganese	ug/L	250	260	104	80-120	
Nickel	ug/L	250	260	104	80-120	
Selenium	ug/L	250	256	102	80-120	
Silver	ug/L	25	25.6	103	80-120	
Sodium	mg/L	12.5	12.5	100	80-120	
Vanadium	ug/L	250	258	103	80-120	
Zinc	ug/L	1250	1310	105	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508078

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3168284 3168285

Parameter	Units	35508004002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	ug/L	1.0 I	250	250	260	259	104	103	75-125	1	20	
Beryllium	ug/L	1.6 U	25	25	25.3	25.1	101	101	75-125	1	20	
Cadmium	ug/L	0.33 U	25	25	25.7	25.8	102	102	75-125	0	20	
Chromium	ug/L	1.7 U	250	250	262	261	104	104	75-125	0	20	
Cobalt	ug/L	0.96 U	250	250	269	267	108	107	75-125	1	20	
Copper	ug/L	2.6 U	250	250	259	258	104	103	75-125	0	20	
Iron	ug/L	13.2 I	2500	2500	2620	2610	104	104	75-125	1	20	
Lead	ug/L	4.6 U	250	250	261	260	104	104	75-125	0	20	
Manganese	ug/L	2.4 I	250	250	265	264	105	105	75-125	0	20	
Nickel	ug/L	2.1 U	250	250	263	262	105	104	75-125	1	20	
Selenium	ug/L	8.5 U	250	250	253	252	101	100	75-125	0	20	
Silver	ug/L	1.0 U	25	25	25.8	25.8	103	103	75-125	0	20	
Sodium	mg/L	8.2	12.5	12.5	21.1	21.3	104	105	75-125	1	20	
Vanadium	ug/L	2.4 I	250	250	264	263	105	104	75-125	0	20	
Zinc	ug/L	11.0 U	1250	1250	1300	1290	104	103	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508078

QC Batch: 582769 Analysis Method: EPA 6020
QC Batch Method: EPA 3010 Analysis Description: 6020 MET
Associated Lab Samples: 35508078001, 35508078002, 35508078003, 35508078004, 35508078005

METHOD BLANK: 3168286 Matrix: Water
Associated Lab Samples: 35508078001, 35508078002, 35508078003, 35508078004, 35508078005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	0.50 U	1.0	0.50	10/31/19 14:04	
Arsenic	ug/L	0.50 U	1.0	0.50	10/31/19 14:04	
Thallium	ug/L	0.11 U	1.0	0.11	10/31/19 14:04	

LABORATORY CONTROL SAMPLE: 3168287

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	50	53.7	107	80-120	
Arsenic	ug/L	50	49.7	99	80-120	
Thallium	ug/L	50	53.1	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3168288 3168289

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	0.50 U	50	50	52.0	52.1	104	104	75-125	0	20	
Arsenic	ug/L	0.50 U	50	50	48.5	48.4	97	97	75-125	0	20	
Thallium	ug/L	0.11 U	50	50	52.6	53.1	105	106	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508078

QC Batch: 585170 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 35508078001, 35508078002, 35508078003, 35508078004, 35508078005, 35508078006

METHOD BLANK: 3181733 Matrix: Water
Associated Lab Samples: 35508078001, 35508078002, 35508078003, 35508078004, 35508078005, 35508078006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	0.32 U	1.0	0.32	11/07/19 11:08	
1,1,1-Trichloroethane	ug/L	0.30 U	1.0	0.30	11/07/19 11:08	
1,1,2,2-Tetrachloroethane	ug/L	0.20 U	0.50	0.20	11/07/19 11:08	
1,1,2-Trichloroethane	ug/L	0.30 U	1.0	0.30	11/07/19 11:08	
1,1-Dichloroethane	ug/L	0.34 U	1.0	0.34	11/07/19 11:08	
1,1-Dichloroethene	ug/L	0.27 U	1.0	0.27	11/07/19 11:08	J(v2)
1,2,3-Trichloropropane	ug/L	1.1 U	2.0	1.1	11/07/19 11:08	
1,2-Dichlorobenzene	ug/L	0.29 U	1.0	0.29	11/07/19 11:08	
1,2-Dichloroethane	ug/L	0.27 U	1.0	0.27	11/07/19 11:08	
1,2-Dichloropropane	ug/L	0.23 U	1.0	0.23	11/07/19 11:08	
1,4-Dichlorobenzene	ug/L	0.28 U	1.0	0.28	11/07/19 11:08	
2-Butanone (MEK)	ug/L	7.5 U	10.0	7.5	11/07/19 11:08	
2-Hexanone	ug/L	0.85 U	10.0	0.85	11/07/19 11:08	
4-Methyl-2-pentanone (MIBK)	ug/L	0.32 U	10.0	0.32	11/07/19 11:08	
Acetone	ug/L	5.3 U	20.0	5.3	11/07/19 11:08	
Acrylonitrile	ug/L	3.7 U	10.0	3.7	11/07/19 11:08	
Benzene	ug/L	0.30 U	1.0	0.30	11/07/19 11:08	
Bromochloromethane	ug/L	0.37 U	1.0	0.37	11/07/19 11:08	
Bromodichloromethane	ug/L	0.19 U	0.60	0.19	11/07/19 11:08	
Bromoform	ug/L	2.6 U	3.0	2.6	11/07/19 11:08	
Bromomethane	ug/L	4.0 U	5.0	4.0	11/07/19 11:08	J(v2)
Carbon disulfide	ug/L	0.45 U	10.0	0.45	11/07/19 11:08	
Carbon tetrachloride	ug/L	1.1 U	3.0	1.1	11/07/19 11:08	
Chlorobenzene	ug/L	0.35 U	1.0	0.35	11/07/19 11:08	
Chloroethane	ug/L	3.7 U	10.0	3.7	11/07/19 11:08	
Chloroform	ug/L	0.32 U	1.0	0.32	11/07/19 11:08	
Chloromethane	ug/L	0.97 U	1.0	0.97	11/07/19 11:08	J(v2)
cis-1,2-Dichloroethene	ug/L	0.27 U	1.0	0.27	11/07/19 11:08	
cis-1,3-Dichloropropene	ug/L	0.17 U	0.50	0.17	11/07/19 11:08	
Dibromochloromethane	ug/L	0.45 U	2.0	0.45	11/07/19 11:08	
Dibromomethane	ug/L	0.68 U	2.0	0.68	11/07/19 11:08	
Ethylbenzene	ug/L	0.30 U	1.0	0.30	11/07/19 11:08	
Iodomethane	ug/L	9.3 U	10.0	9.3	11/07/19 11:08	J(v3)
Methylene Chloride	ug/L	2.0 U	5.0	2.0	11/07/19 11:08	
Styrene	ug/L	0.26 U	1.0	0.26	11/07/19 11:08	
Tetrachloroethene	ug/L	0.38 U	1.0	0.38	11/07/19 11:08	
Toluene	ug/L	0.33 U	1.0	0.33	11/07/19 11:08	
trans-1,2-Dichloroethene	ug/L	0.23 U	1.0	0.23	11/07/19 11:08	
trans-1,3-Dichloropropene	ug/L	0.17 U	0.50	0.17	11/07/19 11:08	
trans-1,4-Dichloro-2-butene	ug/L	2.5 U	10.0	2.5	11/07/19 11:08	J(v2)
Trichloroethene	ug/L	0.36 U	1.0	0.36	11/07/19 11:08	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508078

METHOD BLANK: 3181733 Matrix: Water
Associated Lab Samples: 35508078001, 35508078002, 35508078003, 35508078004, 35508078005, 35508078006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Trichlorofluoromethane	ug/L	0.35 U	1.0	0.35	11/07/19 11:08	
Vinyl acetate	ug/L	0.19 U	10.0	0.19	11/07/19 11:08	
Vinyl chloride	ug/L	0.39 U	1.0	0.39	11/07/19 11:08	J(v2)
Xylene (Total)	ug/L	2.1 U	5.0	2.1	11/07/19 11:08	
1,2-Dichloroethane-d4 (S)	%	103	70-130		11/07/19 11:08	
4-Bromofluorobenzene (S)	%	97	70-130		11/07/19 11:08	
Toluene-d8 (S)	%	100	70-130		11/07/19 11:08	

LABORATORY CONTROL SAMPLE: 3181734

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	19.2	96	70-130	
1,1,1-Trichloroethane	ug/L	20	18.2	91	70-130	
1,1,2,2-Tetrachloroethane	ug/L	20	19.0	95	68-125	
1,1,2-Trichloroethane	ug/L	20	19.1	96	70-130	
1,1-Dichloroethane	ug/L	20	18.4	92	70-130	
1,1-Dichloroethene	ug/L	20	15.4	77	66-133	J(v3)
1,2,3-Trichloropropane	ug/L	20	20.5	102	62-127	
1,2-Dichlorobenzene	ug/L	20	19.4	97	70-130	
1,2-Dichloroethane	ug/L	20	18.0	90	70-130	
1,2-Dichloropropane	ug/L	20	18.3	92	70-130	
1,4-Dichlorobenzene	ug/L	20	18.9	95	70-130	
2-Butanone (MEK)	ug/L	40	38.5	96	47-143	
2-Hexanone	ug/L	40	38.1	95	48-145	
4-Methyl-2-pentanone (MIBK)	ug/L	40	41.4	104	57-132	
Acetone	ug/L	40	49.3	123	46-148	
Acrylonitrile	ug/L	200	190	95	60-143	
Benzene	ug/L	20	18.8	94	70-130	
Bromochloromethane	ug/L	20	19.3	96	70-130	
Bromodichloromethane	ug/L	20	19.1	95	70-130	
Bromoform	ug/L	20	22.7	113	49-126	
Bromomethane	ug/L	20	12.2	61	10-165	J(v3)
Carbon disulfide	ug/L	20	22.0	110	60-141	
Carbon tetrachloride	ug/L	20	17.9	90	63-126	
Chlorobenzene	ug/L	20	18.5	92	70-130	
Chloroethane	ug/L	20	19.1	95	71-142	
Chloroform	ug/L	20	18.9	94	70-130	
Chloromethane	ug/L	20	14.4	72	40-140	J(v3)
cis-1,2-Dichloroethene	ug/L	20	17.6	88	70-130	
cis-1,3-Dichloropropene	ug/L	20	19.0	95	70-130	
Dibromochloromethane	ug/L	20	19.7	98	62-118	
Dibromomethane	ug/L	20	17.5	88	70-130	
Ethylbenzene	ug/L	20	19.3	97	70-130	
Iodomethane	ug/L	40	11.6	29	10-164	J(v3)

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508078

LABORATORY CONTROL SAMPLE: 3181734

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	20	21.3	107	65-136	
Styrene	ug/L	20	20.9	105	70-130	
Tetrachloroethene	ug/L	20	19.5	98	64-134	
Toluene	ug/L	20	19.0	95	70-130	
trans-1,2-Dichloroethene	ug/L	20	17.2	86	68-127	
trans-1,3-Dichloropropene	ug/L	20	18.9	95	65-121	
trans-1,4-Dichloro-2-butene	ug/L	20	14.8	74	42-129	J(v3)
Trichloroethene	ug/L	20	17.0	85	70-130	
Trichlorofluoromethane	ug/L	20	17.2	86	65-135	
Vinyl acetate	ug/L	20	22.7	113	60-144	
Vinyl chloride	ug/L	20	15.6	78	68-131	J(v3)
Xylene (Total)	ug/L	60	61.4	102	70-130	
1,2-Dichloroethane-d4 (S)	%			99	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	
Toluene-d8 (S)	%			99	70-130	

MATRIX SPIKE SAMPLE: 3181736

Parameter	Units	35507993004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	0.32 U	20	20.1	100	70-130	
1,1,1-Trichloroethane	ug/L	0.30 U	20	20.8	104	70-130	
1,1,2,2-Tetrachloroethane	ug/L	0.20 U	20	18.9	95	68-125	
1,1,2-Trichloroethane	ug/L	0.30 U	20	19.9	99	70-130	
1,1-Dichloroethane	ug/L	0.34 U	20	20.9	105	70-130	
1,1-Dichloroethene	ug/L	0.27 U	20	17.7	88	66-133	J(v3)
1,2,3-Trichloropropane	ug/L	1.1 U	20	20.4	102	62-127	
1,2-Dichlorobenzene	ug/L	0.29 U	20	18.7	94	70-130	
1,2-Dichloroethane	ug/L	0.27 U	20	19.0	94	70-130	
1,2-Dichloropropane	ug/L	0.23 U	20	19.1	96	70-130	
1,4-Dichlorobenzene	ug/L	0.28 U	20	18.5	93	70-130	
2-Butanone (MEK)	ug/L	7.5 U	40	33.9	85	47-143	
2-Hexanone	ug/L	0.85 U	40	34.6	86	48-145	
4-Methyl-2-pentanone (MIBK)	ug/L	0.32 U	40	36.4	91	57-132	
Acetone	ug/L	5.3 U	40	42.1	102	46-148	
Acrylonitrile	ug/L	3.7 U	200	193	96	60-143	
Benzene	ug/L	0.30 U	20	19.8	99	70-130	
Bromochloromethane	ug/L	0.37 U	20	23.2	116	70-130	
Bromodichloromethane	ug/L	0.19 U	20	20.1	101	70-130	
Bromoform	ug/L	2.6 U	20	23.2	116	49-126	
Bromomethane	ug/L	4.0 U	20	15.3	76	10-165	J(v3)
Carbon disulfide	ug/L	0.45 U	20	24.0	120	60-141	
Carbon tetrachloride	ug/L	1.1 U	20	20.9	104	63-126	
Chlorobenzene	ug/L	0.35 U	20	19.4	97	70-130	
Chloroethane	ug/L	3.7 U	20	20.8	104	71-142	
Chloroform	ug/L	0.32 U	20	20.6	103	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508078

MATRIX SPIKE SAMPLE: 3181736

Parameter	Units	35507993004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloromethane	ug/L	0.97 U	20	14.7	73	40-140	J(v3)
cis-1,2-Dichloroethene	ug/L	0.27 U	20	18.3	91	70-130	
cis-1,3-Dichloropropene	ug/L	0.17 U	20	18.0	90	70-130	
Dibromochloromethane	ug/L	0.45 U	20	20.0	100	62-118	
Dibromomethane	ug/L	0.68 U	20	19.3	96	70-130	
Ethylbenzene	ug/L	0.30 U	20	20.4	102	70-130	
Iodomethane	ug/L	9.3 U	40	10.2	21	10-164	J(v3)
Methylene Chloride	ug/L	2.0 U	20	17.8	89	65-136	
Styrene	ug/L	0.26 U	20	21.4	107	70-130	
Tetrachloroethene	ug/L	0.38 U	20	18.1	90	64-134	
Toluene	ug/L	0.33 U	20	19.6	98	70-130	
trans-1,2-Dichloroethene	ug/L	0.23 U	20	18.4	92	68-127	
trans-1,3-Dichloropropene	ug/L	0.17 U	20	19.4	97	65-121	
trans-1,4-Dichloro-2-butene	ug/L	2.5 U	20	12.8	64	42-129	J(v3)
Trichloroethene	ug/L	0.36 U	20	18.2	91	70-130	
Trichlorofluoromethane	ug/L	0.35 U	20	19.7	99	65-135	
Vinyl acetate	ug/L	0.19 U	20	17.6	88	60-144	
Vinyl chloride	ug/L	0.39 U	20	17.6	88	68-131	J(v3)
Xylene (Total)	ug/L	2.1 U	60	63.8	106	70-130	
1,2-Dichloroethane-d4 (S)	%				100	70-130	
4-Bromofluorobenzene (S)	%				102	70-130	
Toluene-d8 (S)	%				99	70-130	

SAMPLE DUPLICATE: 3181735

Parameter	Units	35508004003 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	0.32 U	0.32 U		40	
1,1,1-Trichloroethane	ug/L	0.30 U	0.30 U		40	
1,1,2,2-Tetrachloroethane	ug/L	0.20 U	0.20 U		40	
1,1,2-Trichloroethane	ug/L	0.30 U	0.30 U		40	
1,1-Dichloroethane	ug/L	0.34 U	0.34 U		40	
1,1-Dichloroethene	ug/L	0.27 U	0.27 U		40	J(v2)
1,2,3-Trichloropropane	ug/L	1.1 U	1.1 U		40	
1,2-Dichlorobenzene	ug/L	0.29 U	0.29 U		40	
1,2-Dichloroethane	ug/L	0.27 U	0.27 U		40	
1,2-Dichloropropane	ug/L	0.23 U	0.23 U		40	
1,4-Dichlorobenzene	ug/L	0.28 U	0.28 U		40	
2-Butanone (MEK)	ug/L	7.5 U	7.5 U		40	
2-Hexanone	ug/L	0.85 U	0.85 U		40	
4-Methyl-2-pentanone (MIBK)	ug/L	0.32 U	0.32 U		40	
Acetone	ug/L	5.3 U	5.3 U		40	
Acrylonitrile	ug/L	3.7 U	3.7 U		40	
Benzene	ug/L	0.30 U	0.30 U		40	
Bromochloromethane	ug/L	0.37 U	0.37 U		40	
Bromodichloromethane	ug/L	0.19 U	0.19 U		40	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508078

SAMPLE DUPLICATE: 3181735

Parameter	Units	35508004003 Result	Dup Result	RPD	Max RPD	Qualifiers
Bromoform	ug/L	2.6 U	2.6 U		40	
Bromomethane	ug/L	4.0 U	4.0 U		40	J(v2)
Carbon disulfide	ug/L	0.45 U	0.45 U		40	
Carbon tetrachloride	ug/L	1.1 U	1.1 U		40	
Chlorobenzene	ug/L	0.35 U	0.35 U		40	
Chloroethane	ug/L	3.7 U	3.7 U		40	
Chloroform	ug/L	0.32 U	0.32 U		40	
Chloromethane	ug/L	0.97 U	0.97 U		40	J(v2)
cis-1,2-Dichloroethene	ug/L	0.27 U	0.27 U		40	
cis-1,3-Dichloropropene	ug/L	0.17 U	0.17 U		40	
Dibromochloromethane	ug/L	0.45 U	0.45 U		40	
Dibromomethane	ug/L	0.68 U	0.68 U		40	
Ethylbenzene	ug/L	0.30 U	0.30 U		40	
Iodomethane	ug/L	9.3 U	9.3 U		40	J(v3)
Methylene Chloride	ug/L	2.0 U	2.0 U		40	
Styrene	ug/L	0.26 U	0.26 U		40	
Tetrachloroethene	ug/L	0.38 U	0.38 U		40	
Toluene	ug/L	0.33 U	0.33 U		40	
trans-1,2-Dichloroethene	ug/L	0.23 U	0.23 U		40	
trans-1,3-Dichloropropene	ug/L	0.17 U	0.17 U		40	
trans-1,4-Dichloro-2-butene	ug/L	2.5 U	2.5 U		40	J(v2)
Trichloroethene	ug/L	0.36 U	0.36 U		40	
Trichlorofluoromethane	ug/L	0.35 U	0.35 U		40	
Vinyl acetate	ug/L	0.19 U	0.19 U		40	
Vinyl chloride	ug/L	0.39 U	0.39 U		40	J(v2)
Xylene (Total)	ug/L	2.1 U	2.1 U		40	
1,2-Dichloroethane-d4 (S)	%	107	108		40	
4-Bromofluorobenzene (S)	%	96	93		40	
Toluene-d8 (S)	%	100	101		40	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508078

QC Batch: 582677 Analysis Method: EPA 8011
QC Batch Method: EPA 8011 Analysis Description: 8011 EDB DBCP
Associated Lab Samples: 35508078001, 35508078002, 35508078003, 35508078004, 35508078005, 35508078007

METHOD BLANK: 3167789 Matrix: Water
Associated Lab Samples: 35508078001, 35508078002, 35508078003, 35508078004, 35508078005, 35508078007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.0064 U	0.020	0.0064	11/02/19 00:08	
1,2-Dibromoethane (EDB)	ug/L	0.0075 U	0.010	0.0075	11/02/19 00:08	

LABORATORY CONTROL SAMPLE: 3167790

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.29	117	60-140	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.29	118	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3167791 3167792

Parameter	Units	35507959008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.0066 U	0.44	0.44	0.48	0.50	111	115	60-140	4	40	
1,2-Dibromoethane (EDB)	ug/L	0.0077 U	0.44	0.44	0.46	0.48	105	109	60-140	4	40	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508078

QC Batch: 582926 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 35508078001, 35508078002, 35508078003, 35508078004, 35508078005

METHOD BLANK: 3168938 Matrix: Water
Associated Lab Samples: 35508078001, 35508078002, 35508078003, 35508078004, 35508078005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	5.0 U	5.0	5.0	10/30/19 12:25	

LABORATORY CONTROL SAMPLE: 3168939

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	300	300	100	90-110	

SAMPLE DUPLICATE: 3168940

Parameter	Units	35508256004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	423	423	0	5	

SAMPLE DUPLICATE: 3168941

Parameter	Units	35508249002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	71.0	69.0	3	5	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508078

QC Batch: 584435 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 35508078001, 35508078002, 35508078003, 35508078004, 35508078005

METHOD BLANK: 3177170 Matrix: Water
Associated Lab Samples: 35508078001, 35508078002, 35508078003, 35508078004, 35508078005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	2.5 U	5.0	2.5	11/05/19 13:25	
Sulfate	mg/L	2.5 U	5.0	2.5	11/05/19 13:25	

LABORATORY CONTROL SAMPLE: 3177171

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.1	96	90-110	
Sulfate	mg/L	50	47.8	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3177415 3177416

Parameter	Units	35508004003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.6 I	50	50	50.1	50.1	93	93	90-110	0	20	
Sulfate	mg/L	2.5 I	50	50	48.5	48.6	92	92	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3177417 3177418

Parameter	Units	35508073006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	ND	50	50	51.0	51.0	94	94	90-110	0	20	
Sulfate	mg/L	ND	50	50	49.2	49.2	93	93	90-110	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508078

QC Batch: 582802 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 35508078001

METHOD BLANK: 3168427 Matrix: Water
Associated Lab Samples: 35508078001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	0.035 U	0.050	0.035	10/31/19 09:44	

LABORATORY CONTROL SAMPLE: 3168428

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	1	1.1	107	90-110	

MATRIX SPIKE SAMPLE: 3168430

Parameter	Units	35508064003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	2.8	1	3.9	106	90-110	

SAMPLE DUPLICATE: 3168429

Parameter	Units	35508064003 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	2.8	2.8	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508078

QC Batch: 582913 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 35508078002, 35508078003, 35508078004, 35508078005

METHOD BLANK: 3168883 Matrix: Water
Associated Lab Samples: 35508078002, 35508078003, 35508078004, 35508078005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	0.035 U	0.050	0.035	11/01/19 10:33	

LABORATORY CONTROL SAMPLE: 3168884

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	1	1.0	103	90-110	

MATRIX SPIKE SAMPLE: 3168886

Parameter	Units	35507452002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	0.035 U	1	1.0	101	90-110	

SAMPLE DUPLICATE: 3168885

Parameter	Units	35507452002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	0.035 U	0.035 U		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508078

QC Batch: 582758 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 35508078001, 35508078005

METHOD BLANK: 3168233 Matrix: Water
Associated Lab Samples: 35508078001, 35508078005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.050	0.025	10/30/19 04:53	

SAMPLE DUPLICATE: 3168235

Parameter	Units	20124206001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.069	0.070	1	20	Q

SAMPLE DUPLICATE: 3168237

Parameter	Units	35508054006 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.088	0.089	1	20	

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REPORT OF LABORATORY ANALYSIS

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(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508078

QC Batch: 582759 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 35508078002, 35508078003, 35508078004

METHOD BLANK: 3168239 Matrix: Water
Associated Lab Samples: 35508078002, 35508078003, 35508078004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.050	0.025	10/30/19 05:32	

SAMPLE DUPLICATE: 3168241

Parameter	Units	35508104002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.025 U		20	

SAMPLE DUPLICATE: 3168243

Parameter	Units	35508182005 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.025 U		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALIFIERS

Project: Central County Landfill Semian
Pace Project No.: 35508078

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-O	Pace Analytical Services - Ormond Beach

ANALYTE QUALIFIERS

I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
U	Compound was analyzed for but not detected.
J(v2)	The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.
J(v3)	The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have a low bias.
Q	Sample held beyond the accepted holding time.

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Central County Landfill Semian
Pace Project No.: 35508078

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
35508078001	**MW-1R (20585)**				
35508078002	**MW-19A (27140)**				
35508078003	**MW-20A (27141)**				
35508078001	**MW-1R (20585)**	EPA 8011	582677	EPA 8011	583051
35508078002	**MW-19A (27140)**	EPA 8011	582677	EPA 8011	583051
35508078003	**MW-20A (27141)**	EPA 8011	582677	EPA 8011	583051
35508078004	**MW-19A DUP -1**	EPA 8011	582677	EPA 8011	583051
35508078005	**Equipment Blank 1**	EPA 8011	582677	EPA 8011	583051
35508078007	**Trip Blank 8011 1**	EPA 8011	582677	EPA 8011	583051
35508078001	**MW-1R (20585)**	EPA 3010	582768	EPA 6010	582776
35508078002	**MW-19A (27140)**	EPA 3010	582768	EPA 6010	582776
35508078003	**MW-20A (27141)**	EPA 3010	582768	EPA 6010	582776
35508078004	**MW-19A DUP -1**	EPA 3010	582768	EPA 6010	582776
35508078005	**Equipment Blank 1**	EPA 3010	582768	EPA 6010	582776
35508078001	**MW-1R (20585)**	EPA 3010	582769	EPA 6020	582777
35508078002	**MW-19A (27140)**	EPA 3010	582769	EPA 6020	582777
35508078003	**MW-20A (27141)**	EPA 3010	582769	EPA 6020	582777
35508078004	**MW-19A DUP -1**	EPA 3010	582769	EPA 6020	582777
35508078005	**Equipment Blank 1**	EPA 3010	582769	EPA 6020	582777
35508078001	**MW-1R (20585)**	EPA 7470	584407	EPA 7470	584487
35508078002	**MW-19A (27140)**	EPA 7470	584407	EPA 7470	584487
35508078003	**MW-20A (27141)**	EPA 7470	584407	EPA 7470	584487
35508078004	**MW-19A DUP -1**	EPA 7470	584407	EPA 7470	584487
35508078005	**Equipment Blank 1**	EPA 7470	584407	EPA 7470	584487
35508078001	**MW-1R (20585)**	EPA 8260	585170		
35508078002	**MW-19A (27140)**	EPA 8260	585170		
35508078003	**MW-20A (27141)**	EPA 8260	585170		
35508078004	**MW-19A DUP -1**	EPA 8260	585170		
35508078005	**Equipment Blank 1**	EPA 8260	585170		
35508078006	**Trip Blank 8260 1**	EPA 8260	585170		
35508078001	**MW-1R (20585)**	SM 2540C	582926		
35508078002	**MW-19A (27140)**	SM 2540C	582926		
35508078003	**MW-20A (27141)**	SM 2540C	582926		
35508078004	**MW-19A DUP -1**	SM 2540C	582926		
35508078005	**Equipment Blank 1**	SM 2540C	582926		
35508078001	**MW-1R (20585)**	EPA 300.0	584435		
35508078002	**MW-19A (27140)**	EPA 300.0	584435		
35508078003	**MW-20A (27141)**	EPA 300.0	584435		
35508078004	**MW-19A DUP -1**	EPA 300.0	584435		
35508078005	**Equipment Blank 1**	EPA 300.0	584435		
35508078001	**MW-1R (20585)**	EPA 350.1	582802		
35508078002	**MW-19A (27140)**	EPA 350.1	582913		
35508078003	**MW-20A (27141)**	EPA 350.1	582913		
35508078004	**MW-19A DUP -1**	EPA 350.1	582913		

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Central County Landfill Semian
Pace Project No.: 35508078

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
35508078005	**Equipment Blank 1**	EPA 350.1	582913		
35508078001	**MW-1R (20585)**	EPA 353.2	582758		
35508078002	**MW-19A (27140)**	EPA 353.2	582759		
35508078003	**MW-20A (27141)**	EPA 353.2	582759		
35508078004	**MW-19A DUP -1**	EPA 353.2	582759		
35508078005	**Equipment Blank 1**	EPA 353.2	582758		

Pace Analytical

CHAIN-OF-CUSTODY

The Chain-of-Custody is a LEGAL

WO# : 35508078

35508078

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Sarasota County	Report To:	Heather Bryen	Attention:	
Address:	1255 T. Mabry Carlton Parkway	Copy To:		Company Name:	
	Venice, FL 34293			Address:	
Email:	hbryen@scgov.net	Purchase Order #:		Pace Quote:	
Phone:	941-650-1112 Fax:	Project Name:	Central County Landfill Semiannual GW	Pace Project Manager:	martha.montero@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	833 #1

Regulatory Agency
State / Location
FL

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Y/N	Analyses Test: metals by 6010/6020/7470	TDS NO3 Cl SO4	NH3 Total Ammonia-N	Voc by 8260 Appendix 1	EDB and DBCP EPA 8011	Trip Blank 8260	Trip Blank 8011	Residual Chlorine (Y/N)	
1	MW-1R (20585)	WT	G	10/29/19	0850				8	3	1	1	3						A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
2	~~MW-8A~~ RLM ~~(21453)~~	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
3	~~MW-9~~ RLM ~~(4509)~~	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
4	~~MW-10R~~ RLM ~~(4510)~~	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
5	~~MW-15~~ RLM ~~(23031)~~	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
6	~~MW-16~~ RLM ~~(23032)~~	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
7	~~MW-17~~ RLM ~~(23033)~~	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
8	~~MW-18R~~ RLM ~~(29095)~~	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
9	MW-19A (27140)	WT	G	10/29/19	1205				8	3	1	1	3						A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
10	MW-20A (27141)	WT	G	10/29/19	1025				8	3	1	1	3						A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
11	DUP-1	WT	G	10/29/19	1205				8	3	1	1	3						A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
12	Equipment Blank 1	WT	G	10/29/19	0750				8	3	1	1	3						A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Central county Monitoring wells Adapt	/ Sarasota County	10/29/19	1405		10/29/19	1720	TM3			
PLEASE USE ADAPT		10/29/19	1534		10/29/19	1545	3.9	Y	a	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ronald L. Moore

SIGNATURE of SAMPLER: DATE Signed: 10-29-19

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 2 Of 2

Section A — Required Client Information:

Company:	Sarasota County
Address:	1255 T. Mabry Carlton Parkway
	Venice, FL 34293
Email:	hbryen@scgov.net
Phone:	941-650-1112 Fax:
Requested Due Date:	

Section B — Required Project Information:

Report To:	Heather Bryen
Copy To:	
Purchase Order #:	
Project Name:	Central County Landfill Semiannual GW
Project #:	

Section C — Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	martha.montero@pacelabs.com,
Pace Profile #:	833 #1

Regulatory Agency:

State / Location: FL

SAMPLE ID — One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	metals by 6010/6020/7470	TDS NO3 Cl SO4	NH3 Total Ammonia-N	Voc by 8260 Appendix 1	EDB and DBCP EPA 8011	Trip Blank 8260	Trip Blank 8011	Residual Chlorine (Y/N)	
	Requested Analysis Filtered (Y/N)																											
13	~~Equipment Blank 2~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~					Metals:Fe,Hg,Na,Mn
14	~~Equipment Blank 3~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~					Metals:Fe,Hg,Na,Mn
15	~~Trip Blank~~ 8260 1	WT		10-29-19					2				2												2			
16	~~Trip Blank 8260 2~~ RLM	WT							~~2~~				~~2~~											~~2~~				
17	~~Trip Blank 8260 3~~ RLM	WT							~~2~~				~~2~~											~~2~~				
18	Trip Blank 8011 1	WT		10-29-19					2	2															2			
19	~~Trip Blank 8011 2~~ RLM	WT							~~2~~	~~2~~															~~2~~			
20	~~Trip Blank 8011 3~~ RLM	WT							~~2~~	~~2~~															~~2~~			
21																												
22																												
23																												
24																												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Central county Monitoring wells Adapt	R. M. / Sarasota County	10-29-19	1405		10/29/19	1420
Please use ADAPT		10/29/19	1545			

SAMPLE CONDITIONS

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ronald L. Moore

SIGNATURE of SAMPLER: R. M.

DATE Signed: 10-29-19

Pace Analytical Florida Laboratory	Document Name: Sample Condition Upon Receipt Form	Document Revised: May 30, 2018
	Document No.: F-FL-C-007 rev. 13	Issuing Authority: Pace Florida Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project # WO#: 35508078 ✔

Project Manager: PM: MIM **Due Date:** 11/12/19

Client: CLIENT: SARCOU

Date and Initials of person:
Examining contents: MVL
Label: 10/29/19
Deliver: ✔
pH: _____

Thermometer Used: T-203 Date: 10/29/19 Time: 1545 Initials: MVL

State of Origin: FL ☐ For WV projects, all containers verified to ≤6 °C

Cooler #1 Temp.°C	4-0 **(Visual)**	-0.1 **(Correction Factor)**	3.9 **(Actual)**	☒	Samples on ice, cooling process has begun
Cooler #2 Temp.°C	_____ **(Visual)**	_____ **(Correction Factor)**	_____ **(Actual)**	☐	Samples on ice, cooling process has begun
Cooler #3 Temp.°C	_____ **(Visual)**	_____ **(Correction Factor)**	_____ **(Actual)**	☐	Samples on ice, cooling process has begun
Cooler #4 Temp.°C	_____ **(Visual)**	_____ **(Correction Factor)**	_____ **(Actual)**	☐	Samples on ice, cooling process has begun
Cooler #5 Temp.°C	_____ **(Visual)**	_____ **(Correction Factor)**	_____ **(Actual)**	☐	Samples on ice, cooling process has begun
Cooler #6 Temp.°C	_____ **(Visual)**	_____ **(Correction Factor)**	_____ **(Actual)**	☐	Samples on ice, cooling process has begun

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace ☐ Other_____

Shipping Method: ☐ First Overnight ☐ Priority Overnight ☐ Standard Overnight ☐ Ground ☐ International Priority ☐ Other_____

Billing: ☐ Recipient ☐ Sender ☐ Third Party ☐ Credit Card ☐ Unknown

Tracking # _____

Custody Seal on Cooler/Box Present: ☐ Yes ☒ No **Seals intact:** ☐ Yes ☐ No **Ice:** (Wet) Blue Dry None

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other_____

Samples shorted to lab (If Yes, complete) Shorted Date:_____ Shorted Time:_____ Qty:_____

		Comments:
Chain of Custody Present	☒Yes ☐ No ☐N/A	
Chain of Custody Filled Out	☒Yes ☐ No ☐N/A	
Relinquished Signature & Sampler Name COC	☒Yes ☐ No ☐N/A	
Samples Arrived within Hold Time	☒Yes ☐ No ☐N/A	
Rush TAT requested on COC	☐Yes ☒ No ☐N/A	
Sufficient Volume	☒Yes ☐ No ☐N/A	
Correct Containers Used	☒Yes ☐ No ☐N/A	
Containers Intact	☒Yes ☐ No ☐N/A	
Sample Labels match COC (sample IDs & date/time of collection)	☒Yes ☐ No ☐N/A	
All containers needing acid/base preservation have been checked.	☒Yes ☐ No ☐N/A	Preservation Information:
All Containers needing preservation are found to be in compliance with EPA recommendation: Exceptions: VOA, Coliform, TOC, O&G, Carbamates	☒Yes ☐ No ☐N/A	Preservative:_____ Lot #/Trace #:_____ Date:_____ Time:_____ Initials:_____
Headspace in VOA Vials? (>6mm):	☐Yes ☒No ☐N/A	
Trip Blank Present:	☒Yes ☐No ☐N/A	Both 8260 & soil

Client Notification/ Resolution:
Person Contacted:_____ Date/Time:_____

Comments/ Resolution (use back for additional comments):_____

Project Manager Review:_____ Date:_____

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **MW-1R**	SAMPLE ID: **20585**	DATE: 10-29-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.25**	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 3.36	PURGE PUMP TYPE OR BAILER: **PP**

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (**15.7** feet – 3.36 feet) X **0.16** gallons/foot = 2.0 ✓ 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): 4.3	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 4.3	PURGING INITIATED AT: 0810	PURGING ENDED AT: 0849	TOTAL VOLUME PURGED (gallons): 3.0 ✓

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)
0835	2.0	2.0	0.08	3.90	6.58	26.2	299	0.52	1.53	lt Amber	None
0842	0.5	2.5	0.08	3.92	6.58	26.3	308	0.43	1.52	lt Amber	None
0849	0.5	3.0	0.08	3.95	6.59	26.3	310	0.42	1.24	lt Amber	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0850	SAMPLING ENDED AT: 0900

PUMP OR TUBING DEPTH IN WELL (feet): 4.3	TUBING MATERIAL CODE: **S / HDPE**	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 (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
D,E,F	3	CG	40 mL	HCl & wet ice	N/A	\	8260-vocs App. I	APP	300
G,H	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I	APP	|
A	1	HDPE	250 mL	HNO3 & wet ice	N/A	\	Metals – App. I	APP	|
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A	\	Total Ammonia-N	APP	|
B	1	HDPE	1 L	Wet ice	N/A	N/A	TDS,NO3,Cl,SO4	APP	|

REMARKS: Equipment Blank 1 was filled next to this well.

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **MW-19A**	SAMPLE ID: **27140**	DATE: 10-29-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.25**	WELL SCREEN INTERVAL DEPTH: 12 feet to 22 feet	STATIC DEPTH TO WATER (feet): 8.08	PURGE PUMP TYPE OR BAILER: **PP**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (**22.5** feet − 8.08 feet) X **0.16** gallons/foot = 2.3 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): 9.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10.0	PURGING INITIATED AT: 1120	PURGING ENDED AT: 1205	TOTAL VOLUME PURGED (gallons): 3.5

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)
1149	2.3	2.3	0.08	9.13	6.72	29.3	894	0.45	0.76	Clear	None
1157	0.6	2.9	0.08	9.16	6.72	29.3	905	0.40	0.53	Clear	None
1205	0.6	3.5	0.08	9.18	6.72	29.2	908	0.35	0.55	Clear	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1205 ✓	SAMPLING ENDED AT: 1225
PUMP OR TUBING DEPTH IN WELL (feet): 10.0	TUBING MATERIAL CODE: **S / HDPE**	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (**N (replaced)**)	DUPLICATE: (Y) N RLM	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
D,E,F	3	CG	40 mL	HCl & wet ice	N/A	\	8260-vocs App. I	APP	300
G,H	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I	APP	|
A	1	HDPE	250 mL	HNO3 & wet ice	N/A	\	Metals – App. I	APP	|
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A	\	Total Ammonia-N	APP	|
B	1	HDPE	1 L	Wet ice	N/A	N/A	TDS,NO3,Cl,SO4	APP	|

REMARKS: DUP-1 was filled from this well.

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **MW-20A**	SAMPLE ID: **27141**	DATE: 10-29-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.25**	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 8.93	PURGE PUMP TYPE OR BAILER: **PP**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (**22.5** feet – 8.93 feet) X **0.16** gallons/foot = 2.2 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): 10.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 11.2	PURGING INITIATED AT: 0940	PURGING ENDED AT: 1022	TOTAL VOLUME PURGED (gallons): 3.4 ✓

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)
1008	2.2	2.2	0.08	10.38	6.51	28.2	535	0.18	1.09	Clear	None
1015	0.6	2.8	0.08	10.49	6.52	28.2	543	0.15	0.93	Clear	None
1022	0.6	3.4	0.08	10.64	6.53	28.2	543	0.17	0.81	Clear	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1025	SAMPLING ENDED AT: 1035

PUMP OR TUBING DEPTH IN WELL (feet): 11.2	TUBING MATERIAL CODE: **S / HDPE**	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 (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
D,E,F	3	CG	40 mL	HCl & wet ice	N/A	\	8260-vocs App. I	APP	300
G,H	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I	APP	|
A	1	HDPE	250 mL	HNO3 & wet ice	N/A	<2	Metals – App. I	APP	|
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A	<2	Total Ammonia-N	APP	|
B	1	HDPE	1 L	Wet ice	N/A	N/A	TDS,NO3,Cl,SO4	APP	|

REMARKS: Slight odor in air while sampling. (Downwind from Active Face of Landfill)

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

November 12, 2019

REVIEWED
By Cesar Rodriguez-Palacios at 11:50 am, Dec 10, 2019

Mr. Cesar Rodriguez
Sarasota County
1255 T. Mabry Carlton Parkway
Venice, FL 34292

RE: Project: Central County Landfill Semian
Pace Project No.: 35508386

Dear Mr. Rodriguez:
Enclosed are the analytical results for sample(s) received by the laboratory on October 30, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Martha Montero
martha.montero@pacelabs.com
(386)672-5668
Project Manager

Enclosures

cc: Ms. Heather Bryen, Sarasota County

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

CERTIFICATIONS

Project: Central County Landfill Semian
Pace Project No.: 35508386

Ormond Beach Certification IDs

8 East Tower Circle, Ormond Beach, FL 32174
Alaska DEC- CS/UST/LUST
Alabama Certification #: 41320
Arizona Certification# AZ0819
Colorado Certification: FL NELAC Reciprocity
Connecticut Certification #: PH-0216
Delaware Certification: FL NELAC Reciprocity
Florida Certification #: E83079
Georgia Certification #: 955
Guam Certification: FL NELAC Reciprocity
Hawaii Certification: FL NELAC Reciprocity
Illinois Certification #: 200068
Indiana Certification: FL NELAC Reciprocity
Kansas Certification #: E-10383
Kentucky Certification #: 90050
Louisiana Certification #: FL NELAC Reciprocity
Louisiana Environmental Certificate #: 05007
Maryland Certification: #346
Michigan Certification #: 9911
Mississippi Certification: FL NELAC Reciprocity
Missouri Certification #: 236
Montana Certification #: Cert 0074
Nebraska Certification: NE-OS-28-14
New Hampshire Certification #: 2958
New Jersey Certification #: FL022
New York Certification #: 11608
North Carolina Environmental Certificate #: 667
North Carolina Certification #: 12710
North Dakota Certification #: R-216
Oklahoma Certification #: D9947
Pennsylvania Certification #: 68-00547
Puerto Rico Certification #: FL01264
South Carolina Certification: #96042001
Tennessee Certification #: TN02974
Texas Certification: FL NELAC Reciprocity
US Virgin Islands Certification: FL NELAC Reciprocity
Virginia Environmental Certification #: 460165
West Virginia Certification #: 9962C
Wisconsin Certification #: 399079670
Wyoming (EPA Region 8): FL NELAC Reciprocity

Pace Analytical Services, LLC
8 East Tower Circle
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(386)672-5668

SAMPLE SUMMARY

Project: Central County Landfill Semian
Pace Project No.: 35508386

Lab ID	Sample ID	Matrix	Date Collected	Date Received
35508386001	**MW-8A (21453)**	Water	10/30/19 11:05	10/30/19 16:10
35508386002	**MW-9 (4509)**	Water	10/30/19 08:25	10/30/19 16:10
35508386003	**MW-17 (23033)**	Water	10/30/19 12:45	10/30/19 16:10
35508386004	**MW-18R (29095)**	Water	10/30/19 10:00	10/30/19 16:10
35508386005	**Trip Blank 8260 2**	Water	10/30/19 08:25	10/30/19 16:10
35508386006	**Trip Blank 8011 2**	Water	10/30/19 08:25	10/30/19 16:10

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

SAMPLE ANALYTE COUNT

Project: Central County Landfill Semian
Pace Project No.: 35508386

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
35508386001	**MW-8A (21453)**	EPA 8011	TSW	2	PASI-O
		EPA 6010	ATC	15	PASI-O
		EPA 6020	AMS	3	PASI-O
		EPA 7470	NMP	1	PASI-O
		EPA 8260	VAA	48	PASI-O
		SM 2540C	MRS	1	PASI-O
		EPA 300.0	JDM	2	PASI-O
		EPA 350.1	MAJ	1	PASI-O
		EPA 353.2	CLL	1	PASI-O
35508386002	**MW-9 (4509)**	EPA 8011	TSW	2	PASI-O
		EPA 6010	ATC	15	PASI-O
		EPA 6020	AMS	3	PASI-O
		EPA 7470	NMP	1	PASI-O
		EPA 8260	VAA	48	PASI-O
		SM 2540C	MRS	1	PASI-O
		EPA 300.0	JDM	2	PASI-O
		EPA 350.1	MAJ	1	PASI-O
		EPA 353.2	CLL	1	PASI-O
35508386003	**MW-17 (23033)**	EPA 8011	TSW	2	PASI-O
		EPA 6010	ATC, KPP	15	PASI-O
		EPA 6020	AMS	3	PASI-O
		EPA 7470	NMP	1	PASI-O
		EPA 8260	VAA	48	PASI-O
		SM 2540C	MRS	1	PASI-O
		EPA 300.0	JDM	2	PASI-O
		EPA 350.1	MAJ	1	PASI-O
		EPA 353.2	CLL	1	PASI-O
35508386004	**MW-18R (29095)**	EPA 8011	TSW	2	PASI-O
		EPA 6010	ATC	15	PASI-O
		EPA 6020	AMS	3	PASI-O
		EPA 7470	NMP	1	PASI-O
		EPA 8260	VAA	48	PASI-O
		SM 2540C	MRS	1	PASI-O
		EPA 300.0	JDM	2	PASI-O
		EPA 350.1	MAJ	1	PASI-O
		EPA 353.2	CLL	1	PASI-O
35508386005	**Trip Blank 8260 2**	EPA 8260	VAA	48	PASI-O

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

SAMPLE ANALYTE COUNT

Project: Central County Landfill Semian
Pace Project No.: 35508386

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
35508386006	**Trip Blank 8011 2**	EPA 8011	TSW	2	PASI-O

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508386

Sample: MW-8A (21453) **Lab ID: 35508386001** Collected: 10/30/19 11:05 Received: 10/30/19 16:10 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**6.39**	Std. Units			1		10/30/19 11:05		
Field Temperature	**28.0**	deg C			1		10/30/19 11:05		
Field Specific Conductance	**1164**	umhos/cm			1		10/30/19 11:05		
Oxygen, Dissolved	**0.31**	mg/L			1		10/30/19 11:05	7782-44-7	
Turbidity	**1.28**	NTU			1		10/30/19 11:05		
Water Level(NGVD)	**19.78**	feet			1		10/30/19 11:05		
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromo-3-chloropropane	**0.0065 U**	ug/L	0.020	0.0065	1	10/31/19 13:57	11/05/19 15:38	96-12-8	
1,2-Dibromoethane (EDB)	**0.0076 U**	ug/L	0.010	0.0076	1	10/31/19 13:57	11/05/19 15:38	106-93-4	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Barium	**46.6**	ug/L	10.0	0.84	1	10/31/19 15:44	11/02/19 05:35	7440-39-3	
Beryllium	**1.6 U**	ug/L	4.0	1.6	1	10/31/19 15:44	11/02/19 05:35	7440-41-7	
Cadmium	**0.33 U**	ug/L	1.0	0.33	1	10/31/19 15:44	11/02/19 05:35	7440-43-9	
Chromium	**1.7 U**	ug/L	5.0	1.7	1	10/31/19 15:44	11/02/19 05:35	7440-47-3	
Cobalt	**0.96 U**	ug/L	10.0	0.96	1	10/31/19 15:44	11/02/19 05:35	7440-48-4	
Copper	**2.6 U**	ug/L	5.0	2.6	1	10/31/19 15:44	11/02/19 05:35	7440-50-8	
Iron	**8180**	ug/L	40.0	9.2	1	10/31/19 15:44	11/02/19 05:35	7439-89-6	
Lead	**4.6 U**	ug/L	10.0	4.6	1	10/31/19 15:44	11/02/19 05:35	7439-92-1	
Manganese	**39.0**	ug/L	5.0	0.42	1	10/31/19 15:44	11/02/19 05:35	7439-96-5	
Nickel	**2.1 U**	ug/L	5.0	2.1	1	10/31/19 15:44	11/02/19 05:35	7440-02-0	
Selenium	**8.5 U**	ug/L	15.0	8.5	1	10/31/19 15:44	11/02/19 05:35	7782-49-2	
Silver	**1.0 U**	ug/L	5.0	1.0	1	10/31/19 15:44	11/02/19 05:35	7440-22-4	
Sodium	**16.7**	mg/L	2.0	0.27	1	10/31/19 15:44	11/02/19 05:35	7440-23-5	
Vanadium	**1.0 I**	ug/L	10.0	1.0	1	10/31/19 15:44	11/02/19 05:35	7440-62-2	
Zinc	**11.0 U**	ug/L	20.0	11.0	1	10/31/19 15:44	11/02/19 05:35	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Antimony	**0.50 U**	ug/L	1.0	0.50	1	10/31/19 15:44	11/01/19 13:25	7440-36-0	
Arsenic	**10.7**	ug/L	1.0	0.50	1	10/31/19 15:44	11/01/19 13:25	7440-38-2	
Thallium	**0.11 U**	ug/L	1.0	0.11	1	10/31/19 15:44	11/01/19 13:25	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	**0.10 U**	ug/L	0.20	0.10	1	11/05/19 11:11	11/06/19 13:57	7439-97-6	
8260 MSV	Analytical Method: EPA 8260								
Acetone	**5.3 U**	ug/L	20.0	5.3	1		11/08/19 16:04	67-64-1	
Acrylonitrile	**3.7 U**	ug/L	10.0	3.7	1		11/08/19 16:04	107-13-1	
Benzene	**0.30 U**	ug/L	1.0	0.30	1		11/08/19 16:04	71-43-2	
Bromochloromethane	**0.37 U**	ug/L	1.0	0.37	1		11/08/19 16:04	74-97-5	
Bromodichloromethane	**0.19 U**	ug/L	0.60	0.19	1		11/08/19 16:04	75-27-4	
Bromoform	**2.6 U**	ug/L	3.0	2.6	1		11/08/19 16:04	75-25-2	
Bromomethane	**4.0 U**	ug/L	5.0	4.0	1		11/08/19 16:04	74-83-9	
2-Butanone (MEK)	**7.5 U**	ug/L	10.0	7.5	1		11/08/19 16:04	78-93-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508386

Sample: MW-8A (21453) **Lab ID: 35508386001** Collected: 10/30/19 11:05 Received: 10/30/19 16:10 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Carbon disulfide	**0.45 U**	ug/L	10.0	0.45	1		11/08/19 16:04	75-15-0	J(v2)
Carbon tetrachloride	**1.1 U**	ug/L	3.0	1.1	1		11/08/19 16:04	56-23-5	
Chlorobenzene	**0.35 U**	ug/L	1.0	0.35	1		11/08/19 16:04	108-90-7	
Chloroethane	**3.7 U**	ug/L	10.0	3.7	1		11/08/19 16:04	75-00-3	
Chloroform	**0.32 U**	ug/L	1.0	0.32	1		11/08/19 16:04	67-66-3	
Chloromethane	**0.97 U**	ug/L	1.0	0.97	1		11/08/19 16:04	74-87-3	
Dibromochloromethane	**0.45 U**	ug/L	2.0	0.45	1		11/08/19 16:04	124-48-1	
Dibromomethane	**0.68 U**	ug/L	2.0	0.68	1		11/08/19 16:04	74-95-3	
1,2-Dichlorobenzene	**0.29 U**	ug/L	1.0	0.29	1		11/08/19 16:04	95-50-1	
1,4-Dichlorobenzene	**0.28 U**	ug/L	1.0	0.28	1		11/08/19 16:04	106-46-7	
trans-1,4-Dichloro-2-butene	**2.5 U**	ug/L	10.0	2.5	1		11/08/19 16:04	110-57-6	
1,1-Dichloroethane	**0.34 U**	ug/L	1.0	0.34	1		11/08/19 16:04	75-34-3	
1,2-Dichloroethane	**0.27 U**	ug/L	1.0	0.27	1		11/08/19 16:04	107-06-2	
1,1-Dichloroethene	**0.27 U**	ug/L	1.0	0.27	1		11/08/19 16:04	75-35-4	J(v2)
cis-1,2-Dichloroethene	**0.27 U**	ug/L	1.0	0.27	1		11/08/19 16:04	156-59-2	
trans-1,2-Dichloroethene	**0.23 U**	ug/L	1.0	0.23	1		11/08/19 16:04	156-60-5	
1,2-Dichloropropane	**0.23 U**	ug/L	1.0	0.23	1		11/08/19 16:04	78-87-5	
cis-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/08/19 16:04	10061-01-5	
trans-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/08/19 16:04	10061-02-6	
Ethylbenzene	**0.30 U**	ug/L	1.0	0.30	1		11/08/19 16:04	100-41-4	
2-Hexanone	**0.85 U**	ug/L	10.0	0.85	1		11/08/19 16:04	591-78-6	
Iodomethane	**9.3 U**	ug/L	10.0	9.3	1		11/08/19 16:04	74-88-4	
Methylene Chloride	**2.0 U**	ug/L	5.0	2.0	1		11/08/19 16:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	**0.32 U**	ug/L	10.0	0.32	1		11/08/19 16:04	108-10-1	
Styrene	**0.26 U**	ug/L	1.0	0.26	1		11/08/19 16:04	100-42-5	
1,1,1,2-Tetrachloroethane	**0.32 U**	ug/L	1.0	0.32	1		11/08/19 16:04	630-20-6	
1,1,2,2-Tetrachloroethane	**0.20 U**	ug/L	0.50	0.20	1		11/08/19 16:04	79-34-5	
Tetrachloroethene	**0.38 U**	ug/L	1.0	0.38	1		11/08/19 16:04	127-18-4	
Toluene	**0.33 U**	ug/L	1.0	0.33	1		11/08/19 16:04	108-88-3	
1,1,1-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/08/19 16:04	71-55-6	
1,1,2-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/08/19 16:04	79-00-5	
Trichloroethene	**0.36 U**	ug/L	1.0	0.36	1		11/08/19 16:04	79-01-6	J(v2)
Trichlorofluoromethane	**0.35 U**	ug/L	1.0	0.35	1		11/08/19 16:04	75-69-4	
1,2,3-Trichloropropane	**1.1 U**	ug/L	2.0	1.1	1		11/08/19 16:04	96-18-4	J(v2)
Vinyl acetate	**0.19 U**	ug/L	10.0	0.19	1		11/08/19 16:04	108-05-4	J(v2)
Vinyl chloride	**0.39 U**	ug/L	1.0	0.39	1		11/08/19 16:04	75-01-4	
Xylene (Total)	**2.1 U**	ug/L	5.0	2.1	1		11/08/19 16:04	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	92	%	70-130		1		11/08/19 16:04	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	70-130		1		11/08/19 16:04	17060-07-0	
Toluene-d8 (S)	100	%	70-130		1		11/08/19 16:04	2037-26-5	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**580**	mg/L	10.0	10.0	1		10/31/19 15:41		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508386

Sample: MW-8A (21453) **Lab ID: 35508386001** Collected: 10/30/19 11:05 Received: 10/30/19 16:10 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**6.6**	mg/L	5.0	2.5	1		11/06/19 06:00	16887-00-6	
Sulfate	**2.5 U**	mg/L	5.0	2.5	1		11/06/19 06:00	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**14.3**	mg/L	0.050	0.035	1		11/05/19 11:05	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.025 U**	mg/L	0.050	0.025	1		10/31/19 05:02	14797-55-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508386

Sample: MW-9 (4509) **Lab ID: 35508386002** Collected: 10/30/19 08:25 Received: 10/30/19 16:10 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**6.57**	Std. Units			1		10/30/19 08:25		
Field Temperature	**29.6**	deg C			1		10/30/19 08:25		
Field Specific Conductance	**1633**	umhos/cm			1		10/30/19 08:25		
Oxygen, Dissolved	**0.32**	mg/L			1		10/30/19 08:25	7782-44-7	
Turbidity	**1.54**	NTU			1		10/30/19 08:25		
Water Level(NGVD)	**19.88**	feet			1		10/30/19 08:25		
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromo-3-chloropropane	**0.0067 U**	ug/L	0.021	0.0067	1	10/31/19 13:57	11/05/19 16:08	96-12-8	
1,2-Dibromoethane (EDB)	**0.0078 U**	ug/L	0.010	0.0078	1	10/31/19 13:57	11/05/19 16:08	106-93-4	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Barium	**92.0**	ug/L	10.0	0.84	1	10/31/19 15:44	11/02/19 05:38	7440-39-3	
Beryllium	**1.6 U**	ug/L	4.0	1.6	1	10/31/19 15:44	11/02/19 05:38	7440-41-7	
Cadmium	**0.33 U**	ug/L	1.0	0.33	1	10/31/19 15:44	11/02/19 05:38	7440-43-9	
Chromium	**1.7 U**	ug/L	5.0	1.7	1	10/31/19 15:44	11/02/19 05:38	7440-47-3	
Cobalt	**0.96 U**	ug/L	10.0	0.96	1	10/31/19 15:44	11/02/19 05:38	7440-48-4	
Copper	**2.6 U**	ug/L	5.0	2.6	1	10/31/19 15:44	11/02/19 05:38	7440-50-8	
Iron	**27900**	ug/L	40.0	9.2	1	10/31/19 15:44	11/02/19 05:38	7439-89-6	
Lead	**4.6 U**	ug/L	10.0	4.6	1	10/31/19 15:44	11/02/19 05:38	7439-92-1	
Manganese	**32.9**	ug/L	5.0	0.42	1	10/31/19 15:44	11/02/19 05:38	7439-96-5	
Nickel	**2.1 U**	ug/L	5.0	2.1	1	10/31/19 15:44	11/02/19 05:38	7440-02-0	
Selenium	**8.5 U**	ug/L	15.0	8.5	1	10/31/19 15:44	11/02/19 05:38	7782-49-2	
Silver	**1.0 U**	ug/L	5.0	1.0	1	10/31/19 15:44	11/02/19 05:38	7440-22-4	
Sodium	**24.9**	mg/L	2.0	0.27	1	10/31/19 15:44	11/02/19 05:38	7440-23-5	
Vanadium	**1.0 U**	ug/L	10.0	1.0	1	10/31/19 15:44	11/02/19 05:38	7440-62-2	
Zinc	**13.8 I**	ug/L	20.0	11.0	1	10/31/19 15:44	11/02/19 05:38	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Antimony	**0.50 U**	ug/L	1.0	0.50	1	10/31/19 15:44	11/01/19 13:33	7440-36-0	
Arsenic	**12.9**	ug/L	1.0	0.50	1	10/31/19 15:44	11/01/19 13:33	7440-38-2	
Thallium	**0.11 U**	ug/L	1.0	0.11	1	10/31/19 15:44	11/01/19 13:33	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	**0.10 U**	ug/L	0.20	0.10	1	11/05/19 11:11	11/06/19 14:00	7439-97-6	
8260 MSV	Analytical Method: EPA 8260								
Acetone	**5.3 U**	ug/L	20.0	5.3	1		11/08/19 16:58	67-64-1	
Acrylonitrile	**3.7 U**	ug/L	10.0	3.7	1		11/08/19 16:58	107-13-1	
Benzene	**0.30 U**	ug/L	1.0	0.30	1		11/08/19 16:58	71-43-2	
Bromochloromethane	**0.37 U**	ug/L	1.0	0.37	1		11/08/19 16:58	74-97-5	
Bromodichloromethane	**0.19 U**	ug/L	0.60	0.19	1		11/08/19 16:58	75-27-4	
Bromoform	**2.6 U**	ug/L	3.0	2.6	1		11/08/19 16:58	75-25-2	
Bromomethane	**4.0 U**	ug/L	5.0	4.0	1		11/08/19 16:58	74-83-9	
2-Butanone (MEK)	**7.5 U**	ug/L	10.0	7.5	1		11/08/19 16:58	78-93-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508386

Sample: MW-9 (4509) **Lab ID: 35508386002** Collected: 10/30/19 08:25 Received: 10/30/19 16:10 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Carbon disulfide	**0.45 U**	ug/L	10.0	0.45	1		11/08/19 16:58	75-15-0	J(v2)
Carbon tetrachloride	**1.1 U**	ug/L	3.0	1.1	1		11/08/19 16:58	56-23-5	
Chlorobenzene	**0.35 U**	ug/L	1.0	0.35	1		11/08/19 16:58	108-90-7	
Chloroethane	**3.7 U**	ug/L	10.0	3.7	1		11/08/19 16:58	75-00-3	
Chloroform	**0.32 U**	ug/L	1.0	0.32	1		11/08/19 16:58	67-66-3	
Chloromethane	**0.97 U**	ug/L	1.0	0.97	1		11/08/19 16:58	74-87-3	
Dibromochloromethane	**0.45 U**	ug/L	2.0	0.45	1		11/08/19 16:58	124-48-1	
Dibromomethane	**0.68 U**	ug/L	2.0	0.68	1		11/08/19 16:58	74-95-3	
1,2-Dichlorobenzene	**0.29 U**	ug/L	1.0	0.29	1		11/08/19 16:58	95-50-1	
1,4-Dichlorobenzene	**0.28 U**	ug/L	1.0	0.28	1		11/08/19 16:58	106-46-7	
trans-1,4-Dichloro-2-butene	**2.5 U**	ug/L	10.0	2.5	1		11/08/19 16:58	110-57-6	
1,1-Dichloroethane	**0.34 U**	ug/L	1.0	0.34	1		11/08/19 16:58	75-34-3	
1,2-Dichloroethane	**0.27 U**	ug/L	1.0	0.27	1		11/08/19 16:58	107-06-2	
1,1-Dichloroethene	**0.27 U**	ug/L	1.0	0.27	1		11/08/19 16:58	75-35-4	J(v2)
cis-1,2-Dichloroethene	**0.27 U**	ug/L	1.0	0.27	1		11/08/19 16:58	156-59-2	
trans-1,2-Dichloroethene	**0.23 U**	ug/L	1.0	0.23	1		11/08/19 16:58	156-60-5	
1,2-Dichloropropane	**0.23 U**	ug/L	1.0	0.23	1		11/08/19 16:58	78-87-5	
cis-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/08/19 16:58	10061-01-5	
trans-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/08/19 16:58	10061-02-6	
Ethylbenzene	**0.30 U**	ug/L	1.0	0.30	1		11/08/19 16:58	100-41-4	
2-Hexanone	**0.85 U**	ug/L	10.0	0.85	1		11/08/19 16:58	591-78-6	
Iodomethane	**9.3 U**	ug/L	10.0	9.3	1		11/08/19 16:58	74-88-4	
Methylene Chloride	**2.0 U**	ug/L	5.0	2.0	1		11/08/19 16:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	**0.32 U**	ug/L	10.0	0.32	1		11/08/19 16:58	108-10-1	
Styrene	**0.26 U**	ug/L	1.0	0.26	1		11/08/19 16:58	100-42-5	
1,1,1,2-Tetrachloroethane	**0.32 U**	ug/L	1.0	0.32	1		11/08/19 16:58	630-20-6	
1,1,2,2-Tetrachloroethane	**0.20 U**	ug/L	0.50	0.20	1		11/08/19 16:58	79-34-5	
Tetrachloroethene	**0.38 U**	ug/L	1.0	0.38	1		11/08/19 16:58	127-18-4	
Toluene	**0.33 U**	ug/L	1.0	0.33	1		11/08/19 16:58	108-88-3	
1,1,1-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/08/19 16:58	71-55-6	
1,1,2-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/08/19 16:58	79-00-5	
Trichloroethene	**0.36 U**	ug/L	1.0	0.36	1		11/08/19 16:58	79-01-6	J(v2)
Trichlorofluoromethane	**0.35 U**	ug/L	1.0	0.35	1		11/08/19 16:58	75-69-4	
1,2,3-Trichloropropane	**1.1 U**	ug/L	2.0	1.1	1		11/08/19 16:58	96-18-4	J(v2)
Vinyl acetate	**0.19 U**	ug/L	10.0	0.19	1		11/08/19 16:58	108-05-4	J(v2)
Vinyl chloride	**0.39 U**	ug/L	1.0	0.39	1		11/08/19 16:58	75-01-4	
Xylene (Total)	**2.1 U**	ug/L	5.0	2.1	1		11/08/19 16:58	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	92	%	70-130		1		11/08/19 16:58	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	70-130		1		11/08/19 16:58	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		11/08/19 16:58	2037-26-5	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**810**	mg/L	10.0	10.0	1		10/31/19 15:40		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508386

Sample: MW-9 (4509) **Lab ID: 35508386002** Collected: 10/30/19 08:25 Received: 10/30/19 16:10 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**17.1**	mg/L	5.0	2.5	1		11/06/19 06:22	16887-00-6	
Sulfate	**4.2 I**	mg/L	5.0	2.5	1		11/06/19 06:22	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**11.2**	mg/L	0.050	0.035	1		11/05/19 11:06	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.025 U**	mg/L	0.050	0.025	1		10/31/19 04:38	14797-55-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
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ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508386

Sample: MW-17 (23033) **Lab ID: 35508386003** Collected: 10/30/19 12:45 Received: 10/30/19 16:10 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**6.31**	Std. Units			1		10/30/19 12:45		
Field Temperature	**29.2**	deg C			1		10/30/19 12:45		
Field Specific Conductance	**1808**	umhos/cm			1		10/30/19 12:45		
Oxygen, Dissolved	**0.41**	mg/L			1		10/30/19 12:45	7782-44-7	
Turbidity	**16.49**	NTU			1		10/30/19 12:45		
Water Level(NGVD)	**18.47**	feet			1		10/30/19 12:45		
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromo-3-chloropropane	**0.0065 U**	ug/L	0.020	0.0065	1	10/31/19 13:57	11/05/19 16:23	96-12-8	
1,2-Dibromoethane (EDB)	**0.0077 U**	ug/L	0.010	0.0077	1	10/31/19 13:57	11/05/19 16:23	106-93-4	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Barium	**95.2**	ug/L	10.0	0.84	1	10/31/19 15:44	11/02/19 05:42	7440-39-3	
Beryllium	**1.6 U**	ug/L	4.0	1.6	1	10/31/19 15:44	11/02/19 05:42	7440-41-7	
Cadmium	**0.33 U**	ug/L	1.0	0.33	1	10/31/19 15:44	11/02/19 05:42	7440-43-9	
Chromium	**4.8 I**	ug/L	5.0	1.7	1	10/31/19 15:44	11/02/19 05:42	7440-47-3	
Cobalt	**0.96 U**	ug/L	10.0	0.96	1	10/31/19 15:44	11/02/19 05:42	7440-48-4	
Copper	**2.6 U**	ug/L	5.0	2.6	1	10/31/19 15:44	11/02/19 05:42	7440-50-8	
Iron	**77300**	ug/L	400	92.0	10	10/31/19 15:44	11/03/19 17:34	7439-89-6	
Lead	**4.6 U**	ug/L	10.0	4.6	1	10/31/19 15:44	11/02/19 05:42	7439-92-1	
Manganese	**9.0**	ug/L	5.0	0.42	1	10/31/19 15:44	11/02/19 05:42	7439-96-5	
Nickel	**2.1 U**	ug/L	5.0	2.1	1	10/31/19 15:44	11/02/19 05:42	7440-02-0	
Selenium	**8.5 U**	ug/L	15.0	8.5	1	10/31/19 15:44	11/02/19 05:42	7782-49-2	
Silver	**1.0 U**	ug/L	5.0	1.0	1	10/31/19 15:44	11/02/19 05:42	7440-22-4	
Sodium	**60.7**	mg/L	2.0	0.27	1	10/31/19 15:44	11/02/19 05:42	7440-23-5	
Vanadium	**3.6 I**	ug/L	10.0	1.0	1	10/31/19 15:44	11/02/19 05:42	7440-62-2	
Zinc	**11.0 U**	ug/L	20.0	11.0	1	10/31/19 15:44	11/02/19 05:42	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Antimony	**2.5 U**	ug/L	5.0	2.5	5	10/31/19 15:44	11/01/19 13:35	7440-36-0	D3
Arsenic	**56.3**	ug/L	5.0	2.5	5	10/31/19 15:44	11/01/19 13:35	7440-38-2	D3
Thallium	**0.53 U**	ug/L	5.0	0.53	5	10/31/19 15:44	11/01/19 13:35	7440-28-0	D3
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	**0.10 U**	ug/L	0.20	0.10	1	11/05/19 11:11	11/06/19 14:02	7439-97-6	
8260 MSV	Analytical Method: EPA 8260								
Acetone	**5.3 U**	ug/L	20.0	5.3	1		11/08/19 17:24	67-64-1	
Acrylonitrile	**3.7 U**	ug/L	10.0	3.7	1		11/08/19 17:24	107-13-1	
Benzene	**0.30 U**	ug/L	1.0	0.30	1		11/08/19 17:24	71-43-2	
Bromochloromethane	**0.37 U**	ug/L	1.0	0.37	1		11/08/19 17:24	74-97-5	
Bromodichloromethane	**0.19 U**	ug/L	0.60	0.19	1		11/08/19 17:24	75-27-4	
Bromoform	**2.6 U**	ug/L	3.0	2.6	1		11/08/19 17:24	75-25-2	
Bromomethane	**4.0 U**	ug/L	5.0	4.0	1		11/08/19 17:24	74-83-9	
2-Butanone (MEK)	**7.5 U**	ug/L	10.0	7.5	1		11/08/19 17:24	78-93-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508386

Sample: MW-17 (23033) **Lab ID: 35508386003** Collected: 10/30/19 12:45 Received: 10/30/19 16:10 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Carbon disulfide	**0.45 U**	ug/L	10.0	0.45	1		11/08/19 17:24	75-15-0	J(v2)
Carbon tetrachloride	**1.1 U**	ug/L	3.0	1.1	1		11/08/19 17:24	56-23-5	
Chlorobenzene	**0.35 U**	ug/L	1.0	0.35	1		11/08/19 17:24	108-90-7	
Chloroethane	**3.7 U**	ug/L	10.0	3.7	1		11/08/19 17:24	75-00-3	
Chloroform	**0.32 U**	ug/L	1.0	0.32	1		11/08/19 17:24	67-66-3	
Chloromethane	**0.97 U**	ug/L	1.0	0.97	1		11/08/19 17:24	74-87-3	
Dibromochloromethane	**0.45 U**	ug/L	2.0	0.45	1		11/08/19 17:24	124-48-1	
Dibromomethane	**0.68 U**	ug/L	2.0	0.68	1		11/08/19 17:24	74-95-3	
1,2-Dichlorobenzene	**0.29 U**	ug/L	1.0	0.29	1		11/08/19 17:24	95-50-1	
1,4-Dichlorobenzene	**0.28 U**	ug/L	1.0	0.28	1		11/08/19 17:24	106-46-7	
trans-1,4-Dichloro-2-butene	**2.5 U**	ug/L	10.0	2.5	1		11/08/19 17:24	110-57-6	
1,1-Dichloroethane	**0.34 U**	ug/L	1.0	0.34	1		11/08/19 17:24	75-34-3	
1,2-Dichloroethane	**0.27 U**	ug/L	1.0	0.27	1		11/08/19 17:24	107-06-2	
1,1-Dichloroethene	**0.27 U**	ug/L	1.0	0.27	1		11/08/19 17:24	75-35-4	J(v2)
cis-1,2-Dichloroethene	**0.27 U**	ug/L	1.0	0.27	1		11/08/19 17:24	156-59-2	
trans-1,2-Dichloroethene	**0.23 U**	ug/L	1.0	0.23	1		11/08/19 17:24	156-60-5	
1,2-Dichloropropane	**0.23 U**	ug/L	1.0	0.23	1		11/08/19 17:24	78-87-5	
cis-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/08/19 17:24	10061-01-5	
trans-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/08/19 17:24	10061-02-6	
Ethylbenzene	**0.30 U**	ug/L	1.0	0.30	1		11/08/19 17:24	100-41-4	
2-Hexanone	**0.85 U**	ug/L	10.0	0.85	1		11/08/19 17:24	591-78-6	
Iodomethane	**9.3 U**	ug/L	10.0	9.3	1		11/08/19 17:24	74-88-4	
Methylene Chloride	**2.0 U**	ug/L	5.0	2.0	1		11/08/19 17:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	**0.32 U**	ug/L	10.0	0.32	1		11/08/19 17:24	108-10-1	
Styrene	**0.26 U**	ug/L	1.0	0.26	1		11/08/19 17:24	100-42-5	
1,1,1,2-Tetrachloroethane	**0.32 U**	ug/L	1.0	0.32	1		11/08/19 17:24	630-20-6	
1,1,2,2-Tetrachloroethane	**0.20 U**	ug/L	0.50	0.20	1		11/08/19 17:24	79-34-5	
Tetrachloroethene	**0.38 U**	ug/L	1.0	0.38	1		11/08/19 17:24	127-18-4	
Toluene	**0.33 U**	ug/L	1.0	0.33	1		11/08/19 17:24	108-88-3	
1,1,1-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/08/19 17:24	71-55-6	
1,1,2-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/08/19 17:24	79-00-5	
Trichloroethene	**0.36 U**	ug/L	1.0	0.36	1		11/08/19 17:24	79-01-6	J(v2)
Trichlorofluoromethane	**0.35 U**	ug/L	1.0	0.35	1		11/08/19 17:24	75-69-4	
1,2,3-Trichloropropane	**1.1 U**	ug/L	2.0	1.1	1		11/08/19 17:24	96-18-4	J(v2)
Vinyl acetate	**0.19 U**	ug/L	10.0	0.19	1		11/08/19 17:24	108-05-4	J(v2)
Vinyl chloride	**0.39 U**	ug/L	1.0	0.39	1		11/08/19 17:24	75-01-4	
Xylene (Total)	**2.1 U**	ug/L	5.0	2.1	1		11/08/19 17:24	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	91	%	70-130		1		11/08/19 17:24	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	70-130		1		11/08/19 17:24	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		11/08/19 17:24	2037-26-5	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**950**	mg/L	10.0	10.0	1		10/31/19 15:41		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508386

Sample: MW-17 (23033) **Lab ID: 35508386003** Collected: 10/30/19 12:45 Received: 10/30/19 16:10 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**88.0**	mg/L	5.0	2.5	1		11/06/19 06:44	16887-00-6	
Sulfate	**2.5 U**	mg/L	5.0	2.5	1		11/06/19 06:44	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**36.3**	mg/L	0.50	0.35	10		11/05/19 12:06	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.025 U**	mg/L	0.050	0.025	1		10/31/19 05:05	14797-55-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508386

Sample: MW-18R (29095) **Lab ID: 35508386004** Collected: 10/30/19 10:00 Received: 10/30/19 16:10 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**6.20**	Std. Units			1		10/30/19 10:00		
Field Temperature	**29.3**	deg C			1		10/30/19 10:00		
Field Specific Conductance	**575**	umhos/cm			1		10/30/19 10:00		
Oxygen, Dissolved	**0.30**	mg/L			1		10/30/19 10:00	7782-44-7	
Turbidity	**1.75**	NTU			1		10/30/19 10:00		
Water Level(NGVD)	**18.66**	feet			1		10/30/19 10:00		
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromo-3-chloropropane	**0.0064 U**	ug/L	0.020	0.0064	1	10/31/19 13:57	11/05/19 16:38	96-12-8	
1,2-Dibromoethane (EDB)	**0.0075 U**	ug/L	0.010	0.0075	1	10/31/19 13:57	11/05/19 16:38	106-93-4	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Barium	**17.5**	ug/L	10.0	0.84	1	10/31/19 15:44	11/02/19 05:45	7440-39-3	
Beryllium	**1.6 U**	ug/L	4.0	1.6	1	10/31/19 15:44	11/02/19 05:45	7440-41-7	
Cadmium	**0.33 U**	ug/L	1.0	0.33	1	10/31/19 15:44	11/02/19 05:45	7440-43-9	
Chromium	**1.7 U**	ug/L	5.0	1.7	1	10/31/19 15:44	11/02/19 05:45	7440-47-3	
Cobalt	**0.96 U**	ug/L	10.0	0.96	1	10/31/19 15:44	11/02/19 05:45	7440-48-4	
Copper	**2.6 U**	ug/L	5.0	2.6	1	10/31/19 15:44	11/02/19 05:45	7440-50-8	
Iron	**5800**	ug/L	40.0	9.2	1	10/31/19 15:44	11/02/19 05:45	7439-89-6	
Lead	**4.6 U**	ug/L	10.0	4.6	1	10/31/19 15:44	11/02/19 05:45	7439-92-1	
Manganese	**13.3**	ug/L	5.0	0.42	1	10/31/19 15:44	11/02/19 05:45	7439-96-5	
Nickel	**2.1 U**	ug/L	5.0	2.1	1	10/31/19 15:44	11/02/19 05:45	7440-02-0	
Selenium	**8.5 U**	ug/L	15.0	8.5	1	10/31/19 15:44	11/02/19 05:45	7782-49-2	
Silver	**1.0 U**	ug/L	5.0	1.0	1	10/31/19 15:44	11/02/19 05:45	7440-22-4	
Sodium	**5.0**	mg/L	2.0	0.27	1	10/31/19 15:44	11/02/19 05:45	7440-23-5	
Vanadium	**4.4 I**	ug/L	10.0	1.0	1	10/31/19 15:44	11/02/19 05:45	7440-62-2	
Zinc	**11.0 U**	ug/L	20.0	11.0	1	10/31/19 15:44	11/02/19 05:45	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Antimony	**0.50 U**	ug/L	1.0	0.50	1	10/31/19 15:44	11/01/19 13:36	7440-36-0	
Arsenic	**6.5**	ug/L	1.0	0.50	1	10/31/19 15:44	11/01/19 13:36	7440-38-2	
Thallium	**0.11 U**	ug/L	1.0	0.11	1	10/31/19 15:44	11/01/19 13:36	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	**0.10 U**	ug/L	0.20	0.10	1	11/05/19 11:11	11/06/19 14:04	7439-97-6	
8260 MSV	Analytical Method: EPA 8260								
Acetone	**5.3 U**	ug/L	20.0	5.3	1		11/08/19 17:51	67-64-1	
Acrylonitrile	**3.7 U**	ug/L	10.0	3.7	1		11/08/19 17:51	107-13-1	
Benzene	**0.30 U**	ug/L	1.0	0.30	1		11/08/19 17:51	71-43-2	
Bromochloromethane	**0.37 U**	ug/L	1.0	0.37	1		11/08/19 17:51	74-97-5	
Bromodichloromethane	**0.19 U**	ug/L	0.60	0.19	1		11/08/19 17:51	75-27-4	
Bromoform	**2.6 U**	ug/L	3.0	2.6	1		11/08/19 17:51	75-25-2	
Bromomethane	**4.0 U**	ug/L	5.0	4.0	1		11/08/19 17:51	74-83-9	
2-Butanone (MEK)	**7.5 U**	ug/L	10.0	7.5	1		11/08/19 17:51	78-93-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508386

Sample: MW-18R (29095) **Lab ID: 35508386004** Collected: 10/30/19 10:00 Received: 10/30/19 16:10 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Carbon disulfide	**0.45 U**	ug/L	10.0	0.45	1		11/08/19 17:51	75-15-0	J(v2)
Carbon tetrachloride	**1.1 U**	ug/L	3.0	1.1	1		11/08/19 17:51	56-23-5	
Chlorobenzene	**0.35 U**	ug/L	1.0	0.35	1		11/08/19 17:51	108-90-7	
Chloroethane	**3.7 U**	ug/L	10.0	3.7	1		11/08/19 17:51	75-00-3	
Chloroform	**0.32 U**	ug/L	1.0	0.32	1		11/08/19 17:51	67-66-3	
Chloromethane	**0.97 U**	ug/L	1.0	0.97	1		11/08/19 17:51	74-87-3	
Dibromochloromethane	**0.45 U**	ug/L	2.0	0.45	1		11/08/19 17:51	124-48-1	
Dibromomethane	**0.68 U**	ug/L	2.0	0.68	1		11/08/19 17:51	74-95-3	
1,2-Dichlorobenzene	**0.29 U**	ug/L	1.0	0.29	1		11/08/19 17:51	95-50-1	
1,4-Dichlorobenzene	**0.28 U**	ug/L	1.0	0.28	1		11/08/19 17:51	106-46-7	
trans-1,4-Dichloro-2-butene	**2.5 U**	ug/L	10.0	2.5	1		11/08/19 17:51	110-57-6	
1,1-Dichloroethane	**0.34 U**	ug/L	1.0	0.34	1		11/08/19 17:51	75-34-3	
1,2-Dichloroethane	**0.27 U**	ug/L	1.0	0.27	1		11/08/19 17:51	107-06-2	
1,1-Dichloroethene	**0.27 U**	ug/L	1.0	0.27	1		11/08/19 17:51	75-35-4	J(v2)
cis-1,2-Dichloroethene	**0.27 U**	ug/L	1.0	0.27	1		11/08/19 17:51	156-59-2	
trans-1,2-Dichloroethene	**0.23 U**	ug/L	1.0	0.23	1		11/08/19 17:51	156-60-5	
1,2-Dichloropropane	**0.23 U**	ug/L	1.0	0.23	1		11/08/19 17:51	78-87-5	
cis-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/08/19 17:51	10061-01-5	
trans-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/08/19 17:51	10061-02-6	
Ethylbenzene	**0.30 U**	ug/L	1.0	0.30	1		11/08/19 17:51	100-41-4	
2-Hexanone	**0.85 U**	ug/L	10.0	0.85	1		11/08/19 17:51	591-78-6	
Iodomethane	**9.3 U**	ug/L	10.0	9.3	1		11/08/19 17:51	74-88-4	
Methylene Chloride	**2.0 U**	ug/L	5.0	2.0	1		11/08/19 17:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	**0.32 U**	ug/L	10.0	0.32	1		11/08/19 17:51	108-10-1	
Styrene	**0.26 U**	ug/L	1.0	0.26	1		11/08/19 17:51	100-42-5	
1,1,1,2-Tetrachloroethane	**0.32 U**	ug/L	1.0	0.32	1		11/08/19 17:51	630-20-6	
1,1,2,2-Tetrachloroethane	**0.20 U**	ug/L	0.50	0.20	1		11/08/19 17:51	79-34-5	
Tetrachloroethene	**0.38 U**	ug/L	1.0	0.38	1		11/08/19 17:51	127-18-4	
Toluene	**0.33 U**	ug/L	1.0	0.33	1		11/08/19 17:51	108-88-3	
1,1,1-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/08/19 17:51	71-55-6	
1,1,2-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/08/19 17:51	79-00-5	
Trichloroethene	**0.36 U**	ug/L	1.0	0.36	1		11/08/19 17:51	79-01-6	J(v2)
Trichlorofluoromethane	**0.35 U**	ug/L	1.0	0.35	1		11/08/19 17:51	75-69-4	
1,2,3-Trichloropropane	**1.1 U**	ug/L	2.0	1.1	1		11/08/19 17:51	96-18-4	J(v2)
Vinyl acetate	**0.19 U**	ug/L	10.0	0.19	1		11/08/19 17:51	108-05-4	J(v2)
Vinyl chloride	**0.39 U**	ug/L	1.0	0.39	1		11/08/19 17:51	75-01-4	
Xylene (Total)	**2.1 U**	ug/L	5.0	2.1	1		11/08/19 17:51	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	92	%	70-130		1		11/08/19 17:51	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	70-130		1		11/08/19 17:51	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		11/08/19 17:51	2037-26-5	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**299**	mg/L	5.0	5.0	1		10/31/19 15:41		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508386

Sample: MW-18R (29095) **Lab ID: 35508386004** Collected: 10/30/19 10:00 Received: 10/30/19 16:10 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**4.5 I**	mg/L	5.0	2.5	1		11/06/19 03:46	16887-00-6	
Sulfate	**2.5 U**	mg/L	5.0	2.5	1		11/06/19 03:46	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**8.7**	mg/L	0.050	0.035	1		11/05/19 11:09	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.025 U**	mg/L	0.050	0.025	1		10/31/19 05:00	14797-55-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508386

Sample: Trip Blank 8260 2 **Lab ID: 35508386005** Collected: 10/30/19 08:25 Received: 10/30/19 16:10 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Acetone	**8.5 I**	ug/L	20.0	5.3	1		11/08/19 14:44	67-64-1	
Acrylonitrile	**3.7 U**	ug/L	10.0	3.7	1		11/08/19 14:44	107-13-1	
Benzene	**0.30 U**	ug/L	1.0	0.30	1		11/08/19 14:44	71-43-2	
Bromochloromethane	**0.37 U**	ug/L	1.0	0.37	1		11/08/19 14:44	74-97-5	
Bromodichloromethane	**0.19 U**	ug/L	0.60	0.19	1		11/08/19 14:44	75-27-4	
Bromoform	**2.6 U**	ug/L	3.0	2.6	1		11/08/19 14:44	75-25-2	
Bromomethane	**4.0 U**	ug/L	5.0	4.0	1		11/08/19 14:44	74-83-9	
2-Butanone (MEK)	**7.5 U**	ug/L	10.0	7.5	1		11/08/19 14:44	78-93-3	
Carbon disulfide	**0.45 U**	ug/L	10.0	0.45	1		11/08/19 14:44	75-15-0	J(v2)
Carbon tetrachloride	**1.1 U**	ug/L	3.0	1.1	1		11/08/19 14:44	56-23-5	
Chlorobenzene	**0.35 U**	ug/L	1.0	0.35	1		11/08/19 14:44	108-90-7	
Chloroethane	**3.7 U**	ug/L	10.0	3.7	1		11/08/19 14:44	75-00-3	
Chloroform	**0.32 U**	ug/L	1.0	0.32	1		11/08/19 14:44	67-66-3	
Chloromethane	**0.97 U**	ug/L	1.0	0.97	1		11/08/19 14:44	74-87-3	
Dibromochloromethane	**0.45 U**	ug/L	2.0	0.45	1		11/08/19 14:44	124-48-1	
Dibromomethane	**0.68 U**	ug/L	2.0	0.68	1		11/08/19 14:44	74-95-3	
1,2-Dichlorobenzene	**0.29 U**	ug/L	1.0	0.29	1		11/08/19 14:44	95-50-1	
1,4-Dichlorobenzene	**0.28 U**	ug/L	1.0	0.28	1		11/08/19 14:44	106-46-7	
trans-1,4-Dichloro-2-butene	**2.5 U**	ug/L	10.0	2.5	1		11/08/19 14:44	110-57-6	
1,1-Dichloroethane	**0.34 U**	ug/L	1.0	0.34	1		11/08/19 14:44	75-34-3	
1,2-Dichloroethane	**0.27 U**	ug/L	1.0	0.27	1		11/08/19 14:44	107-06-2	
1,1-Dichloroethene	**0.27 U**	ug/L	1.0	0.27	1		11/08/19 14:44	75-35-4	J(v2)
cis-1,2-Dichloroethene	**0.27 U**	ug/L	1.0	0.27	1		11/08/19 14:44	156-59-2	
trans-1,2-Dichloroethene	**0.23 U**	ug/L	1.0	0.23	1		11/08/19 14:44	156-60-5	
1,2-Dichloropropane	**0.23 U**	ug/L	1.0	0.23	1		11/08/19 14:44	78-87-5	
cis-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/08/19 14:44	10061-01-5	
trans-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/08/19 14:44	10061-02-6	
Ethylbenzene	**0.30 U**	ug/L	1.0	0.30	1		11/08/19 14:44	100-41-4	
2-Hexanone	**0.85 U**	ug/L	10.0	0.85	1		11/08/19 14:44	591-78-6	
Iodomethane	**9.3 U**	ug/L	10.0	9.3	1		11/08/19 14:44	74-88-4	
Methylene Chloride	**2.0 U**	ug/L	5.0	2.0	1		11/08/19 14:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	**0.32 U**	ug/L	10.0	0.32	1		11/08/19 14:44	108-10-1	
Styrene	**0.26 U**	ug/L	1.0	0.26	1		11/08/19 14:44	100-42-5	
1,1,1,2-Tetrachloroethane	**0.32 U**	ug/L	1.0	0.32	1		11/08/19 14:44	630-20-6	
1,1,2,2-Tetrachloroethane	**0.20 U**	ug/L	0.50	0.20	1		11/08/19 14:44	79-34-5	
Tetrachloroethene	**0.38 U**	ug/L	1.0	0.38	1		11/08/19 14:44	127-18-4	
Toluene	**0.33 U**	ug/L	1.0	0.33	1		11/08/19 14:44	108-88-3	
1,1,1-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/08/19 14:44	71-55-6	
1,1,2-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/08/19 14:44	79-00-5	
Trichloroethene	**0.36 U**	ug/L	1.0	0.36	1		11/08/19 14:44	79-01-6	J(v2)
Trichlorofluoromethane	**0.35 U**	ug/L	1.0	0.35	1		11/08/19 14:44	75-69-4	
1,2,3-Trichloropropane	**1.1 U**	ug/L	2.0	1.1	1		11/08/19 14:44	96-18-4	J(v2)
Vinyl acetate	**0.19 U**	ug/L	10.0	0.19	1		11/08/19 14:44	108-05-4	J(v2)
Vinyl chloride	**0.39 U**	ug/L	1.0	0.39	1		11/08/19 14:44	75-01-4	
Xylene (Total)	**2.1 U**	ug/L	5.0	2.1	1		11/08/19 14:44	1330-20-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508386

Sample: Trip Blank 8260 2 **Lab ID: 35508386005** Collected: 10/30/19 08:25 Received: 10/30/19 16:10 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Surrogates									
4-Bromofluorobenzene (S)	92	%	70-130		1		11/08/19 14:44	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	70-130		1		11/08/19 14:44	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		11/08/19 14:44	2037-26-5	

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ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508386

Sample: Trip Blank 8011 2 **Lab ID: 35508386006** Collected: 10/30/19 08:25 Received: 10/30/19 16:10 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromo-3-chloropropane	**0.0068 U**	ug/L	0.021	0.0068	1	10/31/19 13:57	11/05/19 16:53	96-12-8	
1,2-Dibromoethane (EDB)	**0.0080 U**	ug/L	0.011	0.0080	1	10/31/19 13:57	11/05/19 16:53	106-93-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508386

QC Batch: 584407 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 35508386001, 35508386002, 35508386003, 35508386004

METHOD BLANK: 3177061 Matrix: Water
Associated Lab Samples: 35508386001, 35508386002, 35508386003, 35508386004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	0.10 U	0.20	0.10	11/06/19 13:02	

LABORATORY CONTROL SAMPLE: 3177062

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2	2.0	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3177063 3177064

Parameter	Units	35508004006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	0.10 U	2	2	2.1	2.0	105	100	75-125	4	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508386

QC Batch: 583385 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 35508386001, 35508386002, 35508386003, 35508386004

METHOD BLANK: 3171586 Matrix: Water
Associated Lab Samples: 35508386001, 35508386002, 35508386003, 35508386004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Barium	ug/L	0.84 U	10.0	0.84	11/01/19 12:07	
Beryllium	ug/L	1.6 U	4.0	1.6	11/01/19 12:07	
Cadmium	ug/L	0.33 U	1.0	0.33	11/01/19 12:07	
Chromium	ug/L	1.7 U	5.0	1.7	11/01/19 12:07	
Cobalt	ug/L	0.96 U	10.0	0.96	11/01/19 12:07	
Copper	ug/L	2.6 U	5.0	2.6	11/01/19 12:07	
Iron	ug/L	9.2 U	40.0	9.2	11/01/19 12:07	
Lead	ug/L	4.6 U	10.0	4.6	11/01/19 12:07	
Manganese	ug/L	0.42 U	5.0	0.42	11/01/19 12:07	
Nickel	ug/L	2.1 U	5.0	2.1	11/01/19 12:07	
Selenium	ug/L	8.5 U	15.0	8.5	11/01/19 12:07	
Silver	ug/L	1.0 U	5.0	1.0	11/01/19 12:07	
Sodium	mg/L	0.27 U	2.0	0.27	11/01/19 12:07	
Vanadium	ug/L	1.0 U	10.0	1.0	11/01/19 12:07	
Zinc	ug/L	11.0 U	20.0	11.0	11/01/19 12:07	

LABORATORY CONTROL SAMPLE: 3171588

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	250	271	108	80-120	
Beryllium	ug/L	25	25.9	104	80-120	
Cadmium	ug/L	25	26.5	106	80-120	
Chromium	ug/L	250	265	106	80-120	
Cobalt	ug/L	250	272	109	80-120	
Copper	ug/L	250	256	103	80-120	
Iron	ug/L	2500	2680	107	80-120	
Lead	ug/L	250	269	108	80-120	
Manganese	ug/L	250	267	107	80-120	
Nickel	ug/L	250	268	107	80-120	
Selenium	ug/L	250	260	104	80-120	
Silver	ug/L	25	25.7	103	80-120	
Sodium	mg/L	12.5	13.5	108	80-120	
Vanadium	ug/L	250	264	105	80-120	
Zinc	ug/L	1250	1340	107	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508386

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3171589 3171590

Parameter	Units	35508491010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	ug/L	238	250	250	504	505	106	107	75-125	0	20	
Beryllium	ug/L	1.6 U	25	25	25.1	25.3	100	101	75-125	1	20	
Cadmium	ug/L	0.33 U	25	25	25.7	26.0	102	103	75-125	1	20	
Chromium	ug/L	1.7 U	250	250	262	264	104	106	75-125	1	20	
Cobalt	ug/L	0.96 U	250	250	265	268	106	107	75-125	1	20	
Copper	ug/L	2.6 U	250	250	262	265	105	106	75-125	1	20	
Iron	ug/L	6770	2500	2500	9330	9390	103	105	75-125	1	20	
Lead	ug/L	6.0 I	250	250	265	267	104	104	75-125	1	20	
Manganese	ug/L	263	250	250	520	525	103	105	75-125	1	20	
Nickel	ug/L	2.1 U	250	250	260	262	104	105	75-125	1	20	
Selenium	ug/L	8.5 U	250	250	257	258	103	103	75-125	1	20	
Silver	ug/L	1.0 U	25	25	26.2	26.3	105	105	75-125	1	20	
Sodium	mg/L	17500 ug/L	12.5	12.5	30.9	31.0	107	108	75-125	0	20	
Vanadium	ug/L	1.7 I	250	250	266	269	106	107	75-125	1	20	
Zinc	ug/L	11.0 U	1250	1250	1280	1290	102	103	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508386

QC Batch: 583386 Analysis Method: EPA 6020
QC Batch Method: EPA 3010 Analysis Description: 6020 MET
Associated Lab Samples: 35508386001, 35508386002, 35508386003, 35508386004

METHOD BLANK: 3171618 Matrix: Water
Associated Lab Samples: 35508386001, 35508386002, 35508386003, 35508386004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	0.50 U	1.0	0.50	11/01/19 13:21	
Arsenic	ug/L	0.50 U	1.0	0.50	11/01/19 13:21	
Thallium	ug/L	0.11 U	1.0	0.11	11/01/19 13:21	

LABORATORY CONTROL SAMPLE: 3171619

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	50	53.3	107	80-120	
Arsenic	ug/L	50	49.9	100	80-120	
Thallium	ug/L	50	50.8	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3171620 3171621

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	0.50 U	50	50	44.4	48.8	89	98	75-125	10	20	
Arsenic	ug/L	10.7	50	50	54.3	58.7	87	96	75-125	8	20	
Thallium	ug/L	0.11 U	50	50	42.0	46.8	84	94	75-125	11	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508386

QC Batch: 585675 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 35508386001, 35508386002, 35508386003, 35508386004, 35508386005

METHOD BLANK: 3184511 Matrix: Water
Associated Lab Samples: 35508386001, 35508386002, 35508386003, 35508386004, 35508386005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	0.32 U	1.0	0.32	11/08/19 13:24	
1,1,1-Trichloroethane	ug/L	0.30 U	1.0	0.30	11/08/19 13:24	
1,1,2,2-Tetrachloroethane	ug/L	0.20 U	0.50	0.20	11/08/19 13:24	
1,1,2-Trichloroethane	ug/L	0.30 U	1.0	0.30	11/08/19 13:24	
1,1-Dichloroethane	ug/L	0.34 U	1.0	0.34	11/08/19 13:24	
1,1-Dichloroethene	ug/L	0.27 U	1.0	0.27	11/08/19 13:24	J(v2)
1,2,3-Trichloropropane	ug/L	1.1 U	2.0	1.1	11/08/19 13:24	J(v2)
1,2-Dichlorobenzene	ug/L	0.29 U	1.0	0.29	11/08/19 13:24	
1,2-Dichloroethane	ug/L	0.27 U	1.0	0.27	11/08/19 13:24	
1,2-Dichloropropane	ug/L	0.23 U	1.0	0.23	11/08/19 13:24	
1,4-Dichlorobenzene	ug/L	0.28 U	1.0	0.28	11/08/19 13:24	
2-Butanone (MEK)	ug/L	7.5 U	10.0	7.5	11/08/19 13:24	
2-Hexanone	ug/L	0.85 U	10.0	0.85	11/08/19 13:24	
4-Methyl-2-pentanone (MIBK)	ug/L	0.32 U	10.0	0.32	11/08/19 13:24	
Acetone	ug/L	5.3 U	20.0	5.3	11/08/19 13:24	
Acrylonitrile	ug/L	3.7 U	10.0	3.7	11/08/19 13:24	
Benzene	ug/L	0.30 U	1.0	0.30	11/08/19 13:24	
Bromochloromethane	ug/L	0.37 U	1.0	0.37	11/08/19 13:24	
Bromodichloromethane	ug/L	0.19 U	0.60	0.19	11/08/19 13:24	
Bromoform	ug/L	2.6 U	3.0	2.6	11/08/19 13:24	
Bromomethane	ug/L	4.0 U	5.0	4.0	11/08/19 13:24	
Carbon disulfide	ug/L	0.45 U	10.0	0.45	11/08/19 13:24	J(v2)
Carbon tetrachloride	ug/L	1.1 U	3.0	1.1	11/08/19 13:24	
Chlorobenzene	ug/L	0.35 U	1.0	0.35	11/08/19 13:24	
Chloroethane	ug/L	3.7 U	10.0	3.7	11/08/19 13:24	
Chloroform	ug/L	0.32 U	1.0	0.32	11/08/19 13:24	
Chloromethane	ug/L	0.97 U	1.0	0.97	11/08/19 13:24	
cis-1,2-Dichloroethene	ug/L	0.27 U	1.0	0.27	11/08/19 13:24	
cis-1,3-Dichloropropene	ug/L	0.17 U	0.50	0.17	11/08/19 13:24	
Dibromochloromethane	ug/L	0.45 U	2.0	0.45	11/08/19 13:24	
Dibromomethane	ug/L	0.68 U	2.0	0.68	11/08/19 13:24	
Ethylbenzene	ug/L	0.30 U	1.0	0.30	11/08/19 13:24	
Iodomethane	ug/L	9.3 U	10.0	9.3	11/08/19 13:24	
Methylene Chloride	ug/L	2.0 U	5.0	2.0	11/08/19 13:24	
Styrene	ug/L	0.26 U	1.0	0.26	11/08/19 13:24	
Tetrachloroethene	ug/L	0.38 U	1.0	0.38	11/08/19 13:24	
Toluene	ug/L	0.33 U	1.0	0.33	11/08/19 13:24	
trans-1,2-Dichloroethene	ug/L	0.23 U	1.0	0.23	11/08/19 13:24	
trans-1,3-Dichloropropene	ug/L	0.17 U	0.50	0.17	11/08/19 13:24	
trans-1,4-Dichloro-2-butene	ug/L	2.5 U	10.0	2.5	11/08/19 13:24	
Trichloroethene	ug/L	0.36 U	1.0	0.36	11/08/19 13:24	J(v2)

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508386

METHOD BLANK: 3184511 Matrix: Water
Associated Lab Samples: 35508386001, 35508386002, 35508386003, 35508386004, 35508386005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Trichlorofluoromethane	ug/L	0.35 U	1.0	0.35	11/08/19 13:24	
Vinyl acetate	ug/L	0.19 U	10.0	0.19	11/08/19 13:24	J(v2)
Vinyl chloride	ug/L	0.39 U	1.0	0.39	11/08/19 13:24	
Xylene (Total)	ug/L	2.1 U	5.0	2.1	11/08/19 13:24	
1,2-Dichloroethane-d4 (S)	%	112	70-130		11/08/19 13:24	
4-Bromofluorobenzene (S)	%	94	70-130		11/08/19 13:24	
Toluene-d8 (S)	%	100	70-130		11/08/19 13:24	

LABORATORY CONTROL SAMPLE: 3184512

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	17.8	89	70-130	
1,1,1-Trichloroethane	ug/L	20	17.4	87	70-130	
1,1,2,2-Tetrachloroethane	ug/L	20	17.9	89	68-125	
1,1,2-Trichloroethane	ug/L	20	17.5	87	70-130	
1,1-Dichloroethane	ug/L	20	18.1	90	70-130	
1,1-Dichloroethene	ug/L	20	15.8	79	66-133	J(v3)
1,2,3-Trichloropropane	ug/L	20	14.4	72	62-127	J(v3)
1,2-Dichlorobenzene	ug/L	20	17.8	89	70-130	
1,2-Dichloroethane	ug/L	20	17.7	89	70-130	
1,2-Dichloropropane	ug/L	20	17.8	89	70-130	
1,4-Dichlorobenzene	ug/L	20	17.6	88	70-130	
2-Butanone (MEK)	ug/L	40	36.1	90	47-143	
2-Hexanone	ug/L	40	36.7	92	48-145	
4-Methyl-2-pentanone (MIBK)	ug/L	40	36.6	91	57-132	
Acetone	ug/L	40	43.3	108	46-148	
Acrylonitrile	ug/L	200	198	99	60-143	
Benzene	ug/L	20	17.5	87	70-130	
Bromochloromethane	ug/L	20	17.5	87	70-130	
Bromodichloromethane	ug/L	20	18.9	94	70-130	
Bromoform	ug/L	20	17.8	89	49-126	
Bromomethane	ug/L	20	18.7	93	10-165	
Carbon disulfide	ug/L	20	12.6	63	60-141	J(v3)
Carbon tetrachloride	ug/L	20	16.8	84	63-126	
Chlorobenzene	ug/L	20	17.1	86	70-130	
Chloroethane	ug/L	20	21.3	107	71-142	
Chloroform	ug/L	20	18.5	93	70-130	
Chloromethane	ug/L	20	21.4	107	40-140	
cis-1,2-Dichloroethene	ug/L	20	17.0	85	70-130	
cis-1,3-Dichloropropene	ug/L	20	19.6	98	70-130	
Dibromochloromethane	ug/L	20	18.0	90	62-118	
Dibromomethane	ug/L	20	16.8	84	70-130	
Ethylbenzene	ug/L	20	17.5	88	70-130	
Iodomethane	ug/L	40	38.0	95	10-164	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508386

LABORATORY CONTROL SAMPLE: 3184512

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	20	18.2	91	65-136	
Styrene	ug/L	20	18.8	94	70-130	
Tetrachloroethene	ug/L	20	18.4	92	64-134	
Toluene	ug/L	20	16.5	82	70-130	
trans-1,2-Dichloroethene	ug/L	20	16.6	83	68-127	
trans-1,3-Dichloropropene	ug/L	20	19.4	97	65-121	
trans-1,4-Dichloro-2-butene	ug/L	20	19.0	95	42-129	
Trichloroethene	ug/L	20	15.9	79	70-130	J(v3)
Trichlorofluoromethane	ug/L	20	19.4	97	65-135	
Vinyl acetate	ug/L	20	12.7	64	60-144	J(v3)
Vinyl chloride	ug/L	20	23.0	115	68-131	
Xylene (Total)	ug/L	60	54.3	90	70-130	
1,2-Dichloroethane-d4 (S)	%			110	70-130	
4-Bromofluorobenzene (S)	%			97	70-130	
Toluene-d8 (S)	%			101	70-130	

MATRIX SPIKE SAMPLE: 3184514

Parameter	Units	35508386002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	0.32 U	20	17.8	89	70-130	
1,1,1-Trichloroethane	ug/L	0.30 U	20	19.7	98	70-130	
1,1,2,2-Tetrachloroethane	ug/L	0.20 U	20	18.7	94	68-125	
1,1,2-Trichloroethane	ug/L	0.30 U	20	17.3	87	70-130	
1,1-Dichloroethane	ug/L	0.34 U	20	19.6	98	70-130	
1,1-Dichloroethene	ug/L	0.27 U	20	18.5	92	66-133	J(v3)
1,2,3-Trichloropropane	ug/L	1.1 U	20	15.8	79	62-127	J(v3)
1,2-Dichlorobenzene	ug/L	0.29 U	20	17.6	88	70-130	
1,2-Dichloroethane	ug/L	0.27 U	20	17.9	89	70-130	
1,2-Dichloropropane	ug/L	0.23 U	20	18.5	93	70-130	
1,4-Dichlorobenzene	ug/L	0.28 U	20	17.7	88	70-130	
2-Butanone (MEK)	ug/L	7.5 U	40	31.8	79	47-143	
2-Hexanone	ug/L	0.85 U	40	35.8	90	48-145	
4-Methyl-2-pentanone (MIBK)	ug/L	0.32 U	40	35.8	89	57-132	
Acetone	ug/L	5.3 U	40	40.7	97	46-148	
Acrylonitrile	ug/L	3.7 U	200	198	99	60-143	
Benzene	ug/L	0.30 U	20	18.5	92	70-130	
Bromochloromethane	ug/L	0.37 U	20	17.4	87	70-130	
Bromodichloromethane	ug/L	0.19 U	20	19.0	95	70-130	
Bromoform	ug/L	2.6 U	20	17.6	88	49-126	
Bromomethane	ug/L	4.0 U	20	4.0 U	18	10-165	
Carbon disulfide	ug/L	0.45 U	20	22.0	110	60-141	J(v3)
Carbon tetrachloride	ug/L	1.1 U	20	19.1	96	63-126	
Chlorobenzene	ug/L	0.35 U	20	17.4	87	70-130	
Chloroethane	ug/L	3.7 U	20	20.6	103	71-142	
Chloroform	ug/L	0.32 U	20	19.5	97	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508386

MATRIX SPIKE SAMPLE: 3184514

Parameter	Units	35508386002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloromethane	ug/L	0.97 U	20	19.1	95	40-140	
cis-1,2-Dichloroethene	ug/L	0.27 U	20	17.9	89	70-130	
cis-1,3-Dichloropropene	ug/L	0.17 U	20	18.1	90	70-130	
Dibromochloromethane	ug/L	0.45 U	20	17.9	90	62-118	
Dibromomethane	ug/L	0.68 U	20	16.6	83	70-130	
Ethylbenzene	ug/L	0.30 U	20	17.8	89	70-130	
Iodomethane	ug/L	9.3 U	40	9.6 I	24	10-164	
Methylene Chloride	ug/L	2.0 U	20	18.0	90	65-136	
Styrene	ug/L	0.26 U	20	18.5	93	70-130	
Tetrachloroethene	ug/L	0.38 U	20	14.3	71	64-134	
Toluene	ug/L	0.33 U	20	17.1	86	70-130	
trans-1,2-Dichloroethene	ug/L	0.23 U	20	17.3	87	68-127	
trans-1,3-Dichloropropene	ug/L	0.17 U	20	18.8	94	65-121	
trans-1,4-Dichloro-2-butene	ug/L	2.5 U	20	17.9	90	42-129	
Trichloroethene	ug/L	0.36 U	20	16.7	84	70-130	J(v3)
Trichlorofluoromethane	ug/L	0.35 U	20	19.9	99	65-135	
Vinyl acetate	ug/L	0.19 U	20	21.1	106	60-144	J(v3)
Vinyl chloride	ug/L	0.39 U	20	21.1	105	68-131	
Xylene (Total)	ug/L	2.1 U	60	54.8	91	70-130	
1,2-Dichloroethane-d4 (S)	%				114	70-130	
4-Bromofluorobenzene (S)	%				94	70-130	
Toluene-d8 (S)	%				100	70-130	

SAMPLE DUPLICATE: 3184513

Parameter	Units	35508386001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	0.32 U	0.32 U		40	
1,1,1-Trichloroethane	ug/L	0.30 U	0.30 U		40	
1,1,2,2-Tetrachloroethane	ug/L	0.20 U	0.20 U		40	
1,1,2-Trichloroethane	ug/L	0.30 U	0.30 U		40	
1,1-Dichloroethane	ug/L	0.34 U	0.34 U		40	
1,1-Dichloroethene	ug/L	0.27 U	0.27 U		40	J(v2)
1,2,3-Trichloropropane	ug/L	1.1 U	1.1 U		40	J(v2)
1,2-Dichlorobenzene	ug/L	0.29 U	0.29 U		40	
1,2-Dichloroethane	ug/L	0.27 U	0.27 U		40	
1,2-Dichloropropane	ug/L	0.23 U	0.23 U		40	
1,4-Dichlorobenzene	ug/L	0.28 U	0.28 U		40	
2-Butanone (MEK)	ug/L	7.5 U	7.5 U		40	
2-Hexanone	ug/L	0.85 U	0.85 U		40	
4-Methyl-2-pentanone (MIBK)	ug/L	0.32 U	0.32 U		40	
Acetone	ug/L	5.3 U	5.3 U		40	
Acrylonitrile	ug/L	3.7 U	3.7 U		40	
Benzene	ug/L	0.30 U	0.30 U		40	
Bromochloromethane	ug/L	0.37 U	0.37 U		40	
Bromodichloromethane	ug/L	0.19 U	0.19 U		40	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508386

SAMPLE DUPLICATE: 3184513

Parameter	Units	35508386001 Result	Dup Result	RPD	Max RPD	Qualifiers
Bromoform	ug/L	2.6 U	2.6 U		40	
Bromomethane	ug/L	4.0 U	4.0 U		40	
Carbon disulfide	ug/L	0.45 U	0.45 U		40	J(v2)
Carbon tetrachloride	ug/L	1.1 U	1.1 U		40	
Chlorobenzene	ug/L	0.35 U	0.35 U		40	
Chloroethane	ug/L	3.7 U	3.7 U		40	
Chloroform	ug/L	0.32 U	0.32 U		40	
Chloromethane	ug/L	0.97 U	0.97 U		40	
cis-1,2-Dichloroethene	ug/L	0.27 U	0.27 U		40	
cis-1,3-Dichloropropene	ug/L	0.17 U	0.17 U		40	
Dibromochloromethane	ug/L	0.45 U	0.45 U		40	
Dibromomethane	ug/L	0.68 U	0.68 U		40	
Ethylbenzene	ug/L	0.30 U	0.30 U		40	
Iodomethane	ug/L	9.3 U	9.3 U		40	
Methylene Chloride	ug/L	2.0 U	2.0 U		40	
Styrene	ug/L	0.26 U	0.26 U		40	
Tetrachloroethene	ug/L	0.38 U	0.38 U		40	
Toluene	ug/L	0.33 U	0.33 U		40	
trans-1,2-Dichloroethene	ug/L	0.23 U	0.23 U		40	
trans-1,3-Dichloropropene	ug/L	0.17 U	0.17 U		40	
trans-1,4-Dichloro-2-butene	ug/L	2.5 U	2.5 U		40	
Trichloroethene	ug/L	0.36 U	0.36 U		40	J(v2)
Trichlorofluoromethane	ug/L	0.35 U	0.35 U		40	
Vinyl acetate	ug/L	0.19 U	0.19 U		40	J(v2)
Vinyl chloride	ug/L	0.39 U	0.39 U		40	
Xylene (Total)	ug/L	2.1 U	2.1 U		40	
1,2-Dichloroethane-d4 (S)	%	113	113		40	
4-Bromofluorobenzene (S)	%	92	92		40	
Toluene-d8 (S)	%	100	100		40	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508386

QC Batch: 583271 Analysis Method: EPA 8011
QC Batch Method: EPA 8011 Analysis Description: 8011 EDB DBCP
Associated Lab Samples: 35508386001, 35508386002, 35508386003, 35508386004, 35508386006

METHOD BLANK: 3170909 Matrix: Water
Associated Lab Samples: 35508386001, 35508386002, 35508386003, 35508386004, 35508386006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.0064 U	0.020	0.0064	11/05/19 13:21	
1,2-Dibromoethane (EDB)	ug/L	0.0075 U	0.010	0.0075	11/05/19 13:21	

LABORATORY CONTROL SAMPLE: 3170910

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.26	103	60-140	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.25	98	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3170911 3170912

Parameter	Units	35508530001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L				0.56	0.55				1	40	
1,2-Dibromoethane (EDB)	ug/L				0.50	0.50				0	40	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508386

QC Batch: 583390 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 35508386001, 35508386002, 35508386003, 35508386004

METHOD BLANK: 3171689 Matrix: Water
Associated Lab Samples: 35508386001, 35508386002, 35508386003, 35508386004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	5.0 U	5.0	5.0	10/31/19 15:39	

LABORATORY CONTROL SAMPLE: 3171690

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	300	317	106	90-110	

SAMPLE DUPLICATE: 3171692

Parameter	Units	35508386003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	950	954	0	5	

SAMPLE DUPLICATE: 3172138

Parameter	Units	35508418002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	8880	9560	7	5	J(D6)

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508386

QC Batch: 584484 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 35508386001, 35508386002, 35508386003, 35508386004

METHOD BLANK: 3177425 Matrix: Water
Associated Lab Samples: 35508386001, 35508386002, 35508386003, 35508386004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	2.5 U	5.0	2.5	11/06/19 00:05	
Sulfate	mg/L	2.5 U	5.0	2.5	11/06/19 00:05	

LABORATORY CONTROL SAMPLE: 3177426

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.0	96	90-110	
Sulfate	mg/L	50	47.6	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3178959 3178960

Parameter	Units	35508255001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	13.4	50	50	62.2	65.6	98	104	90-110	5	20	
Sulfate	mg/L	74.4	50	50	129	133	109	117	90-110	3	20	J(M1), L

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508386

QC Batch: 584003 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 35508386001, 35508386002, 35508386003, 35508386004

METHOD BLANK: 3175283 Matrix: Water
Associated Lab Samples: 35508386001, 35508386002, 35508386003, 35508386004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	0.035 U	0.050	0.035	11/05/19 10:26	

LABORATORY CONTROL SAMPLE: 3175284

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	1	1.1	108	90-110	

MATRIX SPIKE SAMPLE: 3175286

Parameter	Units	35508278001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	0.84	1	2.0	114	90-110	J(M1)

SAMPLE DUPLICATE: 3175285

Parameter	Units	35508278001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	0.84	0.84	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508386

QC Batch: 583109 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 35508386001, 35508386002, 35508386003, 35508386004

METHOD BLANK: 3170380 Matrix: Water
Associated Lab Samples: 35508386001, 35508386002, 35508386003, 35508386004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.050	0.025	10/31/19 04:28	

SAMPLE DUPLICATE: 3170382

Parameter	Units	35508347005 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.13	0.055	80	20	J(D6)

SAMPLE DUPLICATE: 3170384

Parameter	Units	35508313001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.029 I	0.029 I		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALIFIERS

Project: Central County Landfill Semian
Pace Project No.: 35508386

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-O	Pace Analytical Services - Ormond Beach

ANALYTE QUALIFIERS

I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
U	Compound was analyzed for but not detected.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
J(D6)	Estimated Value. The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.
J(M1)	Estimated Value. Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
J(v2)	The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.
J(v3)	The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have a low bias.
L	Off-scale high. Actual value is known to be greater than value given.

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Central County Landfill Semian
Pace Project No.: 35508386

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
35508386001	**MW-8A (21453)**				
35508386002	**MW-9 (4509)**				
35508386003	**MW-17 (23033)**				
35508386004	**MW-18R (29095)**				
35508386001	**MW-8A (21453)**	EPA 8011	583271	EPA 8011	583434
35508386002	**MW-9 (4509)**	EPA 8011	583271	EPA 8011	583434
35508386003	**MW-17 (23033)**	EPA 8011	583271	EPA 8011	583434
35508386004	**MW-18R (29095)**	EPA 8011	583271	EPA 8011	583434
35508386006	**Trip Blank 8011 2**	EPA 8011	583271	EPA 8011	583434
35508386001	**MW-8A (21453)**	EPA 3010	583385	EPA 6010	583466
35508386002	**MW-9 (4509)**	EPA 3010	583385	EPA 6010	583466
35508386003	**MW-17 (23033)**	EPA 3010	583385	EPA 6010	583466
35508386004	**MW-18R (29095)**	EPA 3010	583385	EPA 6010	583466
35508386001	**MW-8A (21453)**	EPA 3010	583386	EPA 6020	583467
35508386002	**MW-9 (4509)**	EPA 3010	583386	EPA 6020	583467
35508386003	**MW-17 (23033)**	EPA 3010	583386	EPA 6020	583467
35508386004	**MW-18R (29095)**	EPA 3010	583386	EPA 6020	583467
35508386001	**MW-8A (21453)**	EPA 7470	584407	EPA 7470	584487
35508386002	**MW-9 (4509)**	EPA 7470	584407	EPA 7470	584487
35508386003	**MW-17 (23033)**	EPA 7470	584407	EPA 7470	584487
35508386004	**MW-18R (29095)**	EPA 7470	584407	EPA 7470	584487
35508386001	**MW-8A (21453)**	EPA 8260	585675		
35508386002	**MW-9 (4509)**	EPA 8260	585675		
35508386003	**MW-17 (23033)**	EPA 8260	585675		
35508386004	**MW-18R (29095)**	EPA 8260	585675		
35508386005	**Trip Blank 8260 2**	EPA 8260	585675		
35508386001	**MW-8A (21453)**	SM 2540C	583390		
35508386002	**MW-9 (4509)**	SM 2540C	583390		
35508386003	**MW-17 (23033)**	SM 2540C	583390		
35508386004	**MW-18R (29095)**	SM 2540C	583390		
35508386001	**MW-8A (21453)**	EPA 300.0	584484		
35508386002	**MW-9 (4509)**	EPA 300.0	584484		
35508386003	**MW-17 (23033)**	EPA 300.0	584484		
35508386004	**MW-18R (29095)**	EPA 300.0	584484		
35508386001	**MW-8A (21453)**	EPA 350.1	584003		
35508386002	**MW-9 (4509)**	EPA 350.1	584003		
35508386003	**MW-17 (23033)**	EPA 350.1	584003		
35508386004	**MW-18R (29095)**	EPA 350.1	584003		
35508386001	**MW-8A (21453)**	EPA 353.2	583109		
35508386002	**MW-9 (4509)**	EPA 353.2	583109		
35508386003	**MW-17 (23033)**	EPA 353.2	583109		
35508386004	**MW-18R (29095)**	EPA 353.2	583109		

Pace Analytical

CHAIN-OF-CUSTODY /

The Chain-of-Custody is a LEGAL DO

WO# : 35508386

35508386

Page : 1 Of 1

Section A
Required Client Information:

Company:	Sarasota County
Address:	1255 T. Mabry Carlton Parkway
Venice, FL 34293	
Email:	hbryen@scgov.net
Phone:	941-650-1112 Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Heather Bryen
Copy To:	
Purchase Order #:	
Project Name:	Central County Landfill Semiannual GW
Project #:	

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	martha.montero@pacelabs.com,
Pace Profile #:	833 #1

Regulatory Agency

State / Location
FL

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM #	SAMPLE ID		MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	metals by 6010/6020/7470	TDS NO3 Cl SO4	NH3 Total Ammonia-N	Voc by 8260 Appendix 1	EDB and DBCP EPA 8011	Trip Blank 8260	Trip Blank 8011	Residual Chlorine (Y/N)	
1	~~MW-1R~~	~~(20585)~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~					~~A~~	~~B~~	~~C~~	~~D,E,F~~	G,H				Metals:Fe,Hg,Na,Mn
2	MW-8A	(21453)	WT	G	10/30/19	1105				8	3	1	1	3					A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
3	MW-9	(4509)	WT	G	10/30/19	0825				8	3	1	1	3					A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
4	~~MW-10R~~	~~(4510)~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~					~~A~~	~~B~~	~~C~~	~~D,E,F~~	G,H				Metals:Fe,Hg,Na,Mn
5	~~MW-15~~	~~(23031)~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~					~~A~~	~~B~~	~~C~~	~~D,E,F~~	G,H				Metals:Fe,Hg,Na,Mn
6	~~MW-16~~	~~(23032)~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~					~~A~~	~~B~~	~~C~~	~~D,E,F~~	G,H				Metals:Fe,Hg,Na,Mn
7	MW-17	(23033)	WT	G	10/30/19	1245				8	3	1	1	3					A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
8	MW-18R	(29095)	WT	G	10/30/19	1000				8	3	1	1	3					A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
9	~~MW-19A~~	~~(27140)~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~					~~A~~	~~B~~	~~C~~	~~D,E,F~~	G,H				Metals:Fe,Hg,Na,Mn
10	~~MW-20A~~	~~(27141)~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~					A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
11	~~DUP-1~~		WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~					A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
12	~~Equipment Blank-1~~		WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~					~~A~~	~~B~~	~~C~~	~~D,E,F~~	G,H				Metals:Fe,Hg,Na,Mn

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Central county Monitoring wells Adapt	Sarasota County	10/30/19	1435	Pace	10/30/19	1435	TEMP in C: 3			
PLEASE USE ADAPT		10/30/19	1610		10/30/19	1610	3.8	X	~	X

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ronald L. Moore

SIGNATURE of SAMPLER:

DATE Signed: 10-30-19

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 2 Of 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:			
Company:	Sarasota County	Report To:	Heather Bryen	Attention:			
Address:	1255 T. Mabry Carlton Parkway	Copy To:		Company Name:			
Venice, FL 34293				Address:		Regulatory Agency	
Email:	hbryen@scgov.net	Purchase Order #:		Pace Quote:			
Phone: 941-650-1112	Fax:	Project Name:	Central County Landfill Semiannual GW	Pace Project Manager:	martha.montero@pacelabs.com,	State / Location	
Requested Due Date:		Project #:		Pace Profile #:	833 #1	FL	

MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

SAMPLE ID: One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	metals by 6010/6020/7470	TDS NO3 Cl SO4	NH3 Total Ammonia-N	Voc by 8260 Appendix 1	EDB and DBCP EPA 8011	Trip Blank 8260	Trip Blank 8011	Residual Chlorine (Y/N)	
13	~~Equipment Blank 2~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
14	~~Equipment Blank 3~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
15	~~Trip Blank 8260 1~~ RLM	WT							~~2~~				~~2~~											~~2~~			
16	Trip Blank 8260 2	WT		10/30					2				2											2			
17	~~Trip Blank 8260 3~~ RLM	WT							~~2~~				~~2~~											~~2~~			
18	~~Trip Blank 8011 1~~ RLM	WT							~~2~~	~~2~~															~~2~~		
19	Trip Blank 8011 2	WT		10/30					2	2															2		
20	~~Trip Blank 8011 3~~ RLM	WT							~~2~~	~~2~~															~~2~~		
21																											
22																											
23																											
24																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Central county Monitoring wells Adapt	[signature] / Sarasota County	10-30-19	1435	[signature] Pace	10/30/19	1435				
Please use ADAPT	[signature] Pace	10-30-19	1610	MMC [signature] / PACE	10-30-19	1610	Y	~	Y	
							3.8	T203		
							TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ronald L. Moore

SIGNATURE of SAMPLER: [signature] DATE Signed: 10-30-19

Pace Analytical Florida Laboratory	Document Name: Sample Condition Upon Receipt Form	Document Revised: May 30, 2018
	Document No.: F-FL-C-007 rev. 13	Issuing Authority: Pace Florida Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project # WO# : 35508386 ✓

Project Manager: PM: MIM **Due Date:** 11/13/19

Client: CLIENT: SARCOU

Date and Initials of person:
Examining contents: MUL
Label: 10/30/19
Deliver:
pH: ✓

Thermometer Used: T-203 Date: 10-30-19 Time: 1610 Initials: MJM

State of Origin: FL ☐ For WV projects, all containers verified to ≤6 °C

Cooler #1 Temp.°C	3.9 **(Visual)**	-0.1 **(Correction Factor)**	3.8 **(Actual)**	☐ Samples on ice, cooling process has begun
Cooler #2 Temp.°C	_____ **(Visual)**	_____ **(Correction Factor)**	_____ **(Actual)**	☐ Samples on ice, cooling process has begun
Cooler #3 Temp.°C	_____ **(Visual)**	_____ **(Correction Factor)**	_____ **(Actual)**	☐ Samples on ice, cooling process has begun
Cooler #4 Temp.°C	_____ **(Visual)**	_____ **(Correction Factor)**	_____ **(Actual)**	☐ Samples on ice, cooling process has begun
Cooler #5 Temp.°C	_____ **(Visual)**	_____ **(Correction Factor)**	_____ **(Actual)**	☐ Samples on ice, cooling process has begun
Cooler #6 Temp.°C	_____ **(Visual)**	_____ **(Correction Factor)**	_____ **(Actual)**	☐ Samples on ice, cooling process has begun

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other_____

Shipping Method: ☐ First Overnight ☐ Priority Overnight ☐ Standard Overnight ☐ Ground ☐ International Priority
☐ Other_____

Billing: ☐ Recipient ☐ Sender ☐ Third Party ☐ Credit Card ☐ Unknown

Tracking # _____

Custody Seal on Cooler/Box Present: ☐ Yes ☐ No **Seals intact:** ☐ Yes ☐ No **Ice:** Wet Blue Dry None

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other_____

Samples shorted to lab (If Yes, complete) Shorted Date:_____ Shorted Time:_____ Qty:_____

		Comments:
Chain of Custody Present	☑Yes ☐ No ☐N/A	
Chain of Custody Filled Out	☑Yes ☐ No ☐N/A	
Relinquished Signature & Sampler Name COC	☑Yes ☐ No ☐N/A	
Samples Arrived within Hold Time	☑Yes ☐ No ☐N/A	
Rush TAT requested on COC	☐Yes ☑ No ☐N/A	
Sufficient Volume	☑Yes ☐ No ☐N/A	
Correct Containers Used	☑Yes ☐ No ☐N/A	
Containers Intact	☑Yes ☐ No ☐N/A	
Sample Labels match COC (sample IDs & date/time of collection)	☑Yes ☐ No ☐N/A	
All containers needing acid/base preservation have been checked. All Containers needing preservation are found to be in compliance with EPA recommendation: Exceptions: VOA, Coliform, TOC, O&G, Carbamates	☑Yes ☐ No ☐N/A ☑Yes ☐ No ☐N/A	Preservation Information: Preservative:_____ Lot #/Trace #:_____ Date:_____ Time:_____ Initials:_____
Headspace in VOA Vials? (>6mm):	☐Yes ☑ No ☐N/A	
Trip Blank Present:	☑Yes ☐ No ☐N/A	8260d 8011

Client Notification/ Resolution:
Person Contacted:_____ Date/Time:_____

Comments/ Resolution (use back for additional comments):_____

Project Manager Review:_____ Date:_____

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **MW-8A**	SAMPLE ID: **21453**	DATE: 10-30-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.25**	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 15.62	PURGE PUMP TYPE OR BAILER: **PP**

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (**22.4** feet – 15.62 feet) X **0.16** gallons/foot = 1.1 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): 16.6	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 17.0	PURGING INITIATED AT: 1040	PURGING ENDED AT: 1102	TOTAL VOLUME PURGED (gallons): 1.7

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)
1054	1.1	1.1	0.08	16.19	6.40	28.0	1171	0.35	1.22	lt. Amber	None
1058	0.3	1.4	0.08	16.21	6.39	28.0	1157	0.32	1.50	lt. Amber	None
1102	0.3	1.7	0.08	16.22	6.39	28.0	1164	0.31	1.28	lt. Amber	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1105	SAMPLING ENDED AT: 1120
PUMP OR TUBING DEPTH IN WELL (feet): 17.0	TUBING MATERIAL CODE: **S / HDPE**	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 (including wet ice)			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			
D,E,F	3	CG	40 mL	HCl & wet ice	N/A	\	8260-vocs App. I	APP	300
G,H	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I	APP	|
A	1	HDPE	250 mL	HNO3 & wet ice	N/A	\	Metals – App. I	APP	|
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A		Total Ammonia-N	APP	|
B	1	HDPE	1 L	Wet ice	N/A	N/A	TDS,NO3,Cl,SO4	APP	|

REMARKS: Difficult to fill VOCs headspace free due to interaction with HCl.

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **MW-9**	SAMPLE ID: **4509**	DATE: 10-30-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.25**	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 12.20	PURGE PUMP TYPE OR BAILER: **PP**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (**22.8** feet – 12.20 feet) X **0.16** gallons/foot = 1.7 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): 13.2	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 13.5	PURGING INITIATED AT: 0755	PURGING ENDED AT: 0821	TOTAL VOLUME PURGED (gallons): 2.7 ✓

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)
0811	1.7	1.7	0.11	12.69	6.59	29.5	1643	0.31	0.89	lt. Amber	None
0816	0.5	2.2	0.11	12.72	6.57	29.6	1635	0.32	1.27	lt. Amber	None
0821	0.5	2.7	0.11	12.74	6.57	29.6	1633	0.32	1.54	lt. Amber	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0825 ✓	SAMPLING ENDED AT: 0840
PUMP OR TUBING DEPTH IN WELL (feet): 13.5	TUBING MATERIAL CODE: **S / HDPE**	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 (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
D,E,F	3	CG	40 mL	HCl & wet ice	N/A	\	8260-vocs App. I	APP	400
G,H	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I	APP	|
A	1	HDPE	250 mL	HNO3 & wet ice	N/A	\	Metals – App. I	APP	|
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A	\	Total Ammonia-N	APP	|
B	1	HDPE	1 L	Wet ice	N/A	N/A	TDS	APP	|

REMARKS:
VOCs difficult to fill headspace free due to interaction with HCl.

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **MW-17**	SAMPLE ID: **23033**	DATE: 10-30-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.375**	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 27.68	PURGE PUMP TYPE OR BAILER: **ESP**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (**32.6** feet − 27.68 feet) X **0.16** gallons/foot = 0.8 ✓ 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): 28.6	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 28.6	PURGING INITIATED AT: 1220	PURGING ENDED AT: 1244	TOTAL VOLUME PURGED (gallons): 1.2 ✓

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)
1236	0.8	0.8	0.05	27.77	6.33	29.2	1810	0.32	9.11	Amber	None
1240	0.2	1.0	0.05	27.80	6.31	29.2	1811	0.34	12.31	Amber	None
1244	0.2	1.2	0.05	27.82	6.31	29.2	1808	0.41	16.49	Amber	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1245 ✓	SAMPLING ENDED AT: 1305
PUMP OR TUBING DEPTH IN WELL (feet): 28.6	TUBING MATERIAL CODE: **LDPE**	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 (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
D,E,F	3	CG	40 mL	HCl & wet ice	N/A	\	8260-vocs App. I	ESP	200
G,H	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I	ESP	|
A	1	HDPE	250 mL	HNO3 & wet ice	N/A	<2	Metals – App. I	ESP	|
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A	<2	Total Ammonia-N	ESP	|
B	1	HDPE	1 L	Wet ice	N/A	N/A	TDS,NO3,Cl,SO4	ESP	|

REMARKS:
Heavy Sheen on water. Difficult filling VOC; ~~with~~ no headspace free due to interaction with HCl.

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **MW-18R**	SAMPLE ID: **29095**	DATE: 10-30-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.25**	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 9.67	PURGE PUMP TYPE OR BAILER: **PP**

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (**18.63** feet – 9.67 feet) X **0.16** gallons/foot = 1.5 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): 10.6	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 11.0	PURGING INITIATED AT: 0930	PURGING ENDED AT: 0959	TOTAL VOLUME PURGED (gallons): 2.3 ✓

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)
0949	1.5	1.5	0.08	10.21	6.21	29.3	572	0.25	1.86	lt. Amber	None
0954	0.4	1.9	0.08	10.25	6.21	29.3	576	0.33	1.77	lt. Amber	None
0959	0.4	2.3	0.08	10.28	6.20	29.3	575	0.30	1.75	lt. Amber	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1000 ✓	SAMPLING ENDED AT: 1015
PUMP OR TUBING DEPTH IN WELL (feet): 11.0	TUBING MATERIAL CODE: **S / HDPE**	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 (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
D,E,F	3	CG	40 mL	HCl & wet ice	N/A	\	8260-vocs App. I	APP	300
G,H	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I	APP	|
A	1	HDPE	250 mL	HNO3 & wet ice	N/A	\	Metals – App. I	APP	|
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A	\	Total Ammonia-N	APP	|
B	1	HDPE	1 L	Wet ice	N/A	N/A	TDS,NO3,Cl,SO4	APP	|

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

REVIEWED
By Cesar Rodriguez-Palacios at 3:34 pm, Dec 10, 2019

November 12, 2019

Mr. Cesar Rodriguez
Sarasota County
1255 T. Mabry Carlton Parkway
Venice, FL 34292

RE: Project: Central County Landfill Semian
Pace Project No.: 35508653

Dear Mr. Rodriguez:
Enclosed are the analytical results for sample(s) received by the laboratory on October 31, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Martha Montero
martha.montero@pacelabs.com
(386)672-5668
Project Manager

Enclosures

cc: Ms. Heather Bryen, Sarasota County

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

CERTIFICATIONS

Project: Central County Landfill Semian
Pace Project No.: 35508653

Ormond Beach Certification IDs

8 East Tower Circle, Ormond Beach, FL 32174
Alaska DEC- CS/UST/LUST
Alabama Certification #: 41320
Arizona Certification# AZ0819
Colorado Certification: FL NELAC Reciprocity
Connecticut Certification #: PH-0216
Delaware Certification: FL NELAC Reciprocity
Florida Certification #: E83079
Georgia Certification #: 955
Guam Certification: FL NELAC Reciprocity
Hawaii Certification: FL NELAC Reciprocity
Illinois Certification #: 200068
Indiana Certification: FL NELAC Reciprocity
Kansas Certification #: E-10383
Kentucky Certification #: 90050
Louisiana Certification #: FL NELAC Reciprocity
Louisiana Environmental Certificate #: 05007
Maryland Certification: #346
Michigan Certification #: 9911
Mississippi Certification: FL NELAC Reciprocity
Missouri Certification #: 236
Montana Certification #: Cert 0074
Nebraska Certification: NE-OS-28-14
New Hampshire Certification #: 2958
New Jersey Certification #: FL022
New York Certification #: 11608
North Carolina Environmental Certificate #: 667
North Carolina Certification #: 12710
North Dakota Certification #: R-216
Oklahoma Certification #: D9947
Pennsylvania Certification #: 68-00547
Puerto Rico Certification #: FL01264
South Carolina Certification: #96042001
Tennessee Certification #: TN02974
Texas Certification: FL NELAC Reciprocity
US Virgin Islands Certification: FL NELAC Reciprocity
Virginia Environmental Certification #: 460165
West Virginia Certification #: 9962C
Wisconsin Certification #: 399079670
Wyoming (EPA Region 8): FL NELAC Reciprocity

Pace Analytical Services, LLC
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(386)672-5668

SAMPLE SUMMARY

Project: Central County Landfill Semian
Pace Project No.: 35508653

Lab ID	Sample ID	Matrix	Date Collected	Date Received
35508653001	**MW-10R (4510)**	Water	10/31/19 12:35	10/31/19 15:55
35508653002	**MW-15 (23031)**	Water	10/31/19 10:35	10/31/19 15:55
35508653003	**MW-16 (23032)**	Water	10/31/19 08:30	10/31/19 15:55
35508653004	**Equipment Blank 2**	Water	10/31/19 09:15	10/31/19 15:55
35508653005	**Trip Blank 8260 3**	Water	10/31/19 00:01	10/31/19 15:55
35508653006	**Trip Blank 8011 3**	Water	10/31/19 00:01	10/31/19 15:55

Pace Analytical Services, LLC
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Ormond Beach, FL 32174
(386)672-5668

SAMPLE ANALYTE COUNT

Project: Central County Landfill Semian
Pace Project No.: 35508653

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
35508653001	**MW-10R (4510)**	EPA 8011	TSW	2	PASI-O
		EPA 6010	ATC, KPP	15	PASI-O
		EPA 6020	SLG	3	PASI-O
		EPA 7470	NMP	1	PASI-O
		EPA 8260	SK1	48	PASI-O
		SM 2540C	MRS	1	PASI-O
		EPA 300.0	JDW	2	PASI-O
		EPA 350.1	MAJ	1	PASI-O
		EPA 353.2	MH1	1	PASI-O
35508653002	**MW-15 (23031)**	EPA 8011	TSW	2	PASI-O
		EPA 6010	ATC, KPP	15	PASI-O
		EPA 6020	SLG	3	PASI-O
		EPA 7470	NMP	1	PASI-O
		EPA 8260	SK1	48	PASI-O
		SM 2540C	MRS	1	PASI-O
		EPA 300.0	JDW	2	PASI-O
		EPA 350.1	MAJ	1	PASI-O
		EPA 353.2	MH1	1	PASI-O
35508653003	**MW-16 (23032)**	EPA 8011	TSW	2	PASI-O
		EPA 6010	ATC, KPP	15	PASI-O
		EPA 6020	SLG	3	PASI-O
		EPA 7470	NMP	1	PASI-O
		EPA 8260	SK1	48	PASI-O
		SM 2540C	MRS	1	PASI-O
		EPA 300.0	JDW	2	PASI-O
		EPA 350.1	MAJ	1	PASI-O
		EPA 353.2	MH1	1	PASI-O
35508653004	**Equipment Blank 2**	EPA 8011	TSW	2	PASI-O
		EPA 6010	ATC	15	PASI-O
		EPA 6020	SLG	3	PASI-O
		EPA 7470	NMP	1	PASI-O
		EPA 8260	SK1	48	PASI-O
		SM 2540C	MRS	1	PASI-O
		EPA 300.0	JDW	2	PASI-O
		EPA 350.1	MAJ	1	PASI-O
		EPA 353.2	CLL	1	PASI-O
35508653005	**Trip Blank 8260 3**	EPA 8260	SK1	48	PASI-O

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: Central County Landfill Semian
Pace Project No.: 35508653

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
35508653006	**Trip Blank 8011 3**	EPA 8011	TSW	2	PASI-O

Pace Analytical Services, LLC
8 East Tower Circle
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ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508653

Sample: MW-10R (4510) **Lab ID: 35508653001** Collected: 10/31/19 12:35 Received: 10/31/19 15:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**6.39**	Std. Units			1		10/31/19 12:35		
Field Temperature	**29.3**	deg C			1		10/31/19 12:35		
Field Specific Conductance	**1641**	umhos/cm			1		10/31/19 12:35		
Oxygen, Dissolved	**0.02**	mg/L			1		10/31/19 12:35	7782-44-7	
Turbidity	**2.15**	NTU			1		10/31/19 12:35		
Water Level(NGVD)	**19.43**	feet			1		10/31/19 12:35		
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromo-3-chloropropane	**0.0066 U**	ug/L	0.021	0.0066	1	11/04/19 11:03	11/06/19 09:29	96-12-8	
1,2-Dibromoethane (EDB)	**0.0077 U**	ug/L	0.010	0.0077	1	11/04/19 11:03	11/06/19 09:29	106-93-4	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Barium	**78.5**	ug/L	10.0	0.84	1	11/01/19 04:09	11/02/19 06:57	7440-39-3	
Beryllium	**1.6 U**	ug/L	4.0	1.6	1	11/01/19 04:09	11/02/19 06:57	7440-41-7	
Cadmium	**0.33 U**	ug/L	1.0	0.33	1	11/01/19 04:09	11/02/19 06:57	7440-43-9	
Chromium	**1.7 U**	ug/L	5.0	1.7	1	11/01/19 04:09	11/02/19 06:57	7440-47-3	
Cobalt	**0.96 U**	ug/L	10.0	0.96	1	11/01/19 04:09	11/02/19 06:57	7440-48-4	
Copper	**2.6 U**	ug/L	5.0	2.6	1	11/01/19 04:09	11/02/19 06:57	7440-50-8	
Iron	**58400**	ug/L	400	92.0	10	11/01/19 04:09	11/03/19 17:55	7439-89-6	
Lead	**4.6 U**	ug/L	10.0	4.6	1	11/01/19 04:09	11/02/19 06:57	7439-92-1	
Manganese	**22.6**	ug/L	5.0	0.42	1	11/01/19 04:09	11/02/19 06:57	7439-96-5	
Nickel	**2.1 U**	ug/L	5.0	2.1	1	11/01/19 04:09	11/02/19 06:57	7440-02-0	
Selenium	**8.5 U**	ug/L	15.0	8.5	1	11/01/19 04:09	11/02/19 06:57	7782-49-2	
Silver	**1.0 U**	ug/L	5.0	1.0	1	11/01/19 04:09	11/02/19 06:57	7440-22-4	
Sodium	**77.2**	mg/L	2.0	0.27	1	11/01/19 04:09	11/02/19 06:57	7440-23-5	
Vanadium	**2.3 I**	ug/L	10.0	1.0	1	11/01/19 04:09	11/02/19 06:57	7440-62-2	
Zinc	**11.0 U**	ug/L	20.0	11.0	1	11/01/19 04:09	11/02/19 06:57	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Antimony	**2.5 U**	ug/L	5.0	2.5	5	11/01/19 04:09	11/01/19 14:45	7440-36-0	D3
Arsenic	**14.3**	ug/L	5.0	2.5	5	11/01/19 04:09	11/01/19 14:45	7440-38-2	D3
Thallium	**0.53 U**	ug/L	5.0	0.53	5	11/01/19 04:09	11/01/19 14:45	7440-28-0	D3
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	**0.10 U**	ug/L	0.20	0.10	1	11/07/19 12:14	11/11/19 15:27	7439-97-6	
8260 MSV	Analytical Method: EPA 8260								
Acetone	**5.3 U**	ug/L	20.0	5.3	1		11/09/19 23:08	67-64-1	
Acrylonitrile	**3.7 U**	ug/L	10.0	3.7	1		11/09/19 23:08	107-13-1	
Benzene	**0.10 U**	ug/L	1.0	0.10	1		11/09/19 23:08	71-43-2	
Bromochloromethane	**0.37 U**	ug/L	1.0	0.37	1		11/09/19 23:08	74-97-5	
Bromodichloromethane	**0.19 U**	ug/L	0.60	0.19	1		11/09/19 23:08	75-27-4	
Bromoform	**2.6 U**	ug/L	3.0	2.6	1		11/09/19 23:08	75-25-2	
Bromomethane	**4.0 U**	ug/L	5.0	4.0	1		11/09/19 23:08	74-83-9	
2-Butanone (MEK)	**5.0 U**	ug/L	10.0	5.0	1		11/09/19 23:08	78-93-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508653

Sample: MW-10R (4510) **Lab ID: 35508653001** Collected: 10/31/19 12:35 Received: 10/31/19 15:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Carbon disulfide	**0.45 U**	ug/L	10.0	0.45	1		11/09/19 23:08	75-15-0	
Carbon tetrachloride	**0.50 U**	ug/L	3.0	0.50	1		11/09/19 23:08	56-23-5	
Chlorobenzene	**0.50 U**	ug/L	1.0	0.50	1		11/09/19 23:08	108-90-7	
Chloroethane	**3.7 U**	ug/L	10.0	3.7	1		11/09/19 23:08	75-00-3	
Chloroform	**0.50 U**	ug/L	1.0	0.50	1		11/09/19 23:08	67-66-3	
Chloromethane	**0.97 U**	ug/L	1.0	0.97	1		11/09/19 23:08	74-87-3	
Dibromochloromethane	**0.45 U**	ug/L	2.0	0.45	1		11/09/19 23:08	124-48-1	
Dibromomethane	**0.68 U**	ug/L	2.0	0.68	1		11/09/19 23:08	74-95-3	
1,2-Dichlorobenzene	**0.50 U**	ug/L	1.0	0.50	1		11/09/19 23:08	95-50-1	
1,4-Dichlorobenzene	**0.50 U**	ug/L	1.0	0.50	1		11/09/19 23:08	106-46-7	
trans-1,4-Dichloro-2-butene	**2.5 U**	ug/L	10.0	2.5	1		11/09/19 23:08	110-57-6	
1,1-Dichloroethane	**0.34 U**	ug/L	1.0	0.34	1		11/09/19 23:08	75-34-3	
1,2-Dichloroethane	**0.50 U**	ug/L	1.0	0.50	1		11/09/19 23:08	107-06-2	
1,1-Dichloroethene	**0.50 U**	ug/L	1.0	0.50	1		11/09/19 23:08	75-35-4	
cis-1,2-Dichloroethene	**0.50 U**	ug/L	1.0	0.50	1		11/09/19 23:08	156-59-2	
trans-1,2-Dichloroethene	**0.50 U**	ug/L	1.0	0.50	1		11/09/19 23:08	156-60-5	
1,2-Dichloropropane	**0.23 U**	ug/L	1.0	0.23	1		11/09/19 23:08	78-87-5	
cis-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/09/19 23:08	10061-01-5	
trans-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/09/19 23:08	10061-02-6	
Ethylbenzene	**0.50 U**	ug/L	1.0	0.50	1		11/09/19 23:08	100-41-4	
2-Hexanone	**0.85 U**	ug/L	10.0	0.85	1		11/09/19 23:08	591-78-6	
Iodomethane	**9.3 U**	ug/L	10.0	9.3	1		11/09/19 23:08	74-88-4	
Methylene Chloride	**2.0 U**	ug/L	5.0	2.0	1		11/09/19 23:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	**0.32 U**	ug/L	10.0	0.32	1		11/09/19 23:08	108-10-1	
Styrene	**0.26 U**	ug/L	1.0	0.26	1		11/09/19 23:08	100-42-5	
1,1,1,2-Tetrachloroethane	**0.32 U**	ug/L	1.0	0.32	1		11/09/19 23:08	630-20-6	
1,1,2,2-Tetrachloroethane	**0.20 U**	ug/L	0.50	0.20	1		11/09/19 23:08	79-34-5	
Tetrachloroethene	**0.50 U**	ug/L	1.0	0.50	1		11/09/19 23:08	127-18-4	
Toluene	**0.50 U**	ug/L	1.0	0.50	1		11/09/19 23:08	108-88-3	
1,1,1-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/09/19 23:08	71-55-6	
1,1,2-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/09/19 23:08	79-00-5	
Trichloroethene	**0.50 U**	ug/L	1.0	0.50	1		11/09/19 23:08	79-01-6	
Trichlorofluoromethane	**0.35 U**	ug/L	1.0	0.35	1		11/09/19 23:08	75-69-4	
1,2,3-Trichloropropane	**1.1 U**	ug/L	2.0	1.1	1		11/09/19 23:08	96-18-4	
Vinyl acetate	**0.19 U**	ug/L	10.0	0.19	1		11/09/19 23:08	108-05-4	
Vinyl chloride	**0.50 U**	ug/L	1.0	0.50	1		11/09/19 23:08	75-01-4	
Xylene (Total)	**1.0 U**	ug/L	5.0	1.0	1		11/09/19 23:08	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	70-130		1		11/09/19 23:08	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-130		1		11/09/19 23:08	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		11/09/19 23:08	2037-26-5	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**826**	mg/L	10.0	10.0	1		11/03/19 12:25		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508653

Sample: MW-10R (4510) **Lab ID: 35508653001** Collected: 10/31/19 12:35 Received: 10/31/19 15:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**98.7**	mg/L	5.0	2.5	1		11/07/19 09:01	16887-00-6	
Sulfate	**2.5 U**	mg/L	5.0	2.5	1		11/07/19 09:01	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**7.8**	mg/L	0.050	0.035	1		11/05/19 10:17	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.12 U**	mg/L	0.25	0.12	5		11/01/19 15:52	14797-55-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508653

Sample: MW-15 (23031) **Lab ID: 35508653002** Collected: 10/31/19 10:35 Received: 10/31/19 15:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**6.58**	Std. Units			1		10/31/19 10:35		
Field Temperature	**27.9**	deg C			1		10/31/19 10:35		
Field Specific Conductance	**3297**	umhos/cm			1		10/31/19 10:35		
Oxygen, Dissolved	**0.04**	mg/L			1		10/31/19 10:35	7782-44-7	
Turbidity	**2.60**	NTU			1		10/31/19 10:35		
Water Level(NGVD)	**20.00**	feet			1		10/31/19 10:35		
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromo-3-chloropropane	**0.0067 U**	ug/L	0.021	0.0067	1	11/04/19 11:03	11/06/19 09:44	96-12-8	
1,2-Dibromoethane (EDB)	**0.0078 U**	ug/L	0.010	0.0078	1	11/04/19 11:03	11/06/19 09:44	106-93-4	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Barium	**358**	ug/L	10.0	0.84	1	11/01/19 04:09	11/02/19 07:01	7440-39-3	
Beryllium	**1.6 U**	ug/L	4.0	1.6	1	11/01/19 04:09	11/02/19 07:01	7440-41-7	
Cadmium	**0.33 U**	ug/L	1.0	0.33	1	11/01/19 04:09	11/02/19 07:01	7440-43-9	
Chromium	**1.7 U**	ug/L	5.0	1.7	1	11/01/19 04:09	11/02/19 07:01	7440-47-3	
Cobalt	**0.96 U**	ug/L	10.0	0.96	1	11/01/19 04:09	11/02/19 07:01	7440-48-4	
Copper	**2.6 U**	ug/L	5.0	2.6	1	11/01/19 04:09	11/02/19 07:01	7440-50-8	
Iron	**63900**	ug/L	400	92.0	10	11/01/19 04:09	11/03/19 17:58	7439-89-6	
Lead	**4.6 U**	ug/L	10.0	4.6	1	11/01/19 04:09	11/02/19 07:01	7439-92-1	
Manganese	**512**	ug/L	5.0	0.42	1	11/01/19 04:09	11/02/19 07:01	7439-96-5	
Nickel	**2.2 I**	ug/L	5.0	2.1	1	11/01/19 04:09	11/02/19 07:01	7440-02-0	
Selenium	**8.5 U**	ug/L	15.0	8.5	1	11/01/19 04:09	11/02/19 07:01	7782-49-2	
Silver	**1.0 U**	ug/L	5.0	1.0	1	11/01/19 04:09	11/02/19 07:01	7440-22-4	
Sodium	**64.5**	mg/L	2.0	0.27	1	11/01/19 04:09	11/02/19 07:01	7440-23-5	
Vanadium	**4.6 I**	ug/L	10.0	1.0	1	11/01/19 04:09	11/02/19 07:01	7440-62-2	
Zinc	**11.0 U**	ug/L	20.0	11.0	1	11/01/19 04:09	11/02/19 07:01	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Antimony	**2.5 U**	ug/L	5.0	2.5	5	11/01/19 04:09	11/01/19 14:52	7440-36-0	D3
Arsenic	**74.6**	ug/L	5.0	2.5	5	11/01/19 04:09	11/01/19 14:52	7440-38-2	D3
Thallium	**0.53 U**	ug/L	5.0	0.53	5	11/01/19 04:09	11/01/19 14:52	7440-28-0	D3
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	**0.10 U**	ug/L	0.20	0.10	1	11/07/19 12:14	11/11/19 15:29	7439-97-6	
8260 MSV	Analytical Method: EPA 8260								
Acetone	**5.3 U**	ug/L	20.0	5.3	1		11/09/19 23:35	67-64-1	J(v2)
Acrylonitrile	**3.7 U**	ug/L	10.0	3.7	1		11/09/19 23:35	107-13-1	
Benzene	**0.10 U**	ug/L	1.0	0.10	1		11/09/19 23:35	71-43-2	
Bromochloromethane	**0.37 U**	ug/L	1.0	0.37	1		11/09/19 23:35	74-97-5	
Bromodichloromethane	**0.19 U**	ug/L	0.60	0.19	1		11/09/19 23:35	75-27-4	
Bromoform	**2.6 U**	ug/L	3.0	2.6	1		11/09/19 23:35	75-25-2	
Bromomethane	**4.0 U**	ug/L	5.0	4.0	1		11/09/19 23:35	74-83-9	J(v2)
2-Butanone (MEK)	**5.0 U**	ug/L	10.0	5.0	1		11/09/19 23:35	78-93-3	J(v2)

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508653

Sample: MW-15 (23031) **Lab ID: 35508653002** Collected: 10/31/19 10:35 Received: 10/31/19 15:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Carbon disulfide	**0.45 U**	ug/L	10.0	0.45	1		11/09/19 23:35	75-15-0	
Carbon tetrachloride	**0.50 U**	ug/L	3.0	0.50	1		11/09/19 23:35	56-23-5	
Chlorobenzene	**0.50 U**	ug/L	1.0	0.50	1		11/09/19 23:35	108-90-7	
Chloroethane	**3.7 U**	ug/L	10.0	3.7	1		11/09/19 23:35	75-00-3	
Chloroform	**0.50 U**	ug/L	1.0	0.50	1		11/09/19 23:35	67-66-3	
Chloromethane	**0.97 U**	ug/L	1.0	0.97	1		11/09/19 23:35	74-87-3	
Dibromochloromethane	**0.45 U**	ug/L	2.0	0.45	1		11/09/19 23:35	124-48-1	
Dibromomethane	**0.68 U**	ug/L	2.0	0.68	1		11/09/19 23:35	74-95-3	
1,2-Dichlorobenzene	**0.50 U**	ug/L	1.0	0.50	1		11/09/19 23:35	95-50-1	
1,4-Dichlorobenzene	**0.50 U**	ug/L	1.0	0.50	1		11/09/19 23:35	106-46-7	
trans-1,4-Dichloro-2-butene	**2.5 U**	ug/L	10.0	2.5	1		11/09/19 23:35	110-57-6	J(v2)
1,1-Dichloroethane	**0.34 U**	ug/L	1.0	0.34	1		11/09/19 23:35	75-34-3	
1,2-Dichloroethane	**0.50 U**	ug/L	1.0	0.50	1		11/09/19 23:35	107-06-2	
1,1-Dichloroethene	**0.50 U**	ug/L	1.0	0.50	1		11/09/19 23:35	75-35-4	
cis-1,2-Dichloroethene	**0.50 U**	ug/L	1.0	0.50	1		11/09/19 23:35	156-59-2	
trans-1,2-Dichloroethene	**0.50 U**	ug/L	1.0	0.50	1		11/09/19 23:35	156-60-5	J(v2)
1,2-Dichloropropane	**0.23 U**	ug/L	1.0	0.23	1		11/09/19 23:35	78-87-5	
cis-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/09/19 23:35	10061-01-5	
trans-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/09/19 23:35	10061-02-6	
Ethylbenzene	**0.50 U**	ug/L	1.0	0.50	1		11/09/19 23:35	100-41-4	
2-Hexanone	**0.85 U**	ug/L	10.0	0.85	1		11/09/19 23:35	591-78-6	
Iodomethane	**9.3 U**	ug/L	10.0	9.3	1		11/09/19 23:35	74-88-4	J(v2)
Methylene Chloride	**2.0 U**	ug/L	5.0	2.0	1		11/09/19 23:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	**0.32 U**	ug/L	10.0	0.32	1		11/09/19 23:35	108-10-1	
Styrene	**0.26 U**	ug/L	1.0	0.26	1		11/09/19 23:35	100-42-5	
1,1,1,2-Tetrachloroethane	**0.32 U**	ug/L	1.0	0.32	1		11/09/19 23:35	630-20-6	
1,1,2,2-Tetrachloroethane	**0.20 U**	ug/L	0.50	0.20	1		11/09/19 23:35	79-34-5	
Tetrachloroethene	**0.50 U**	ug/L	1.0	0.50	1		11/09/19 23:35	127-18-4	
Toluene	**0.50 U**	ug/L	1.0	0.50	1		11/09/19 23:35	108-88-3	
1,1,1-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/09/19 23:35	71-55-6	
1,1,2-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/09/19 23:35	79-00-5	
Trichloroethene	**0.50 U**	ug/L	1.0	0.50	1		11/09/19 23:35	79-01-6	
Trichlorofluoromethane	**0.35 U**	ug/L	1.0	0.35	1		11/09/19 23:35	75-69-4	
1,2,3-Trichloropropane	**1.1 U**	ug/L	2.0	1.1	1		11/09/19 23:35	96-18-4	
Vinyl acetate	**0.19 U**	ug/L	10.0	0.19	1		11/09/19 23:35	108-05-4	
Vinyl chloride	**0.50 U**	ug/L	1.0	0.50	1		11/09/19 23:35	75-01-4	
Xylene (Total)	**1.0 U**	ug/L	5.0	1.0	1		11/09/19 23:35	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	70-130		1		11/09/19 23:35	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-130		1		11/09/19 23:35	17060-07-0	
Toluene-d8 (S)	102	%	70-130		1		11/09/19 23:35	2037-26-5	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**1940**	mg/L	20.0	20.0	1		11/03/19 12:23		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508653

Sample: MW-15 (23031) **Lab ID: 35508653002** Collected: 10/31/19 10:35 Received: 10/31/19 15:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**140**	mg/L	100	50.0	20		11/06/19 22:03	16887-00-6	
Sulfate	**2.5 U**	mg/L	5.0	2.5	1		11/07/19 09:23	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**30.7**	mg/L	0.50	0.35	10		11/05/19 10:39	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.050 U**	mg/L	0.10	0.050	2		11/01/19 15:30	14797-55-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508653

Sample: MW-16 (23032) **Lab ID: 35508653003** Collected: 10/31/19 08:30 Received: 10/31/19 15:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**6.40**	Std. Units			1		10/31/19 08:30		
Field Temperature	**27.8**	deg C			1		10/31/19 08:30		
Field Specific Conductance	**2405**	umhos/cm			1		10/31/19 08:30		
Oxygen, Dissolved	**0.05**	mg/L			1		10/31/19 08:30	7782-44-7	
Turbidity	**3.06**	NTU			1		10/31/19 08:30		
Water Level(NGVD)	**19.28**	feet			1		10/31/19 08:30		
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromo-3-chloropropane	**0.0067 U**	ug/L	0.021	0.0067	1	11/04/19 11:03	11/06/19 09:59	96-12-8	
1,2-Dibromoethane (EDB)	**0.0079 U**	ug/L	0.011	0.0079	1	11/04/19 11:03	11/06/19 09:59	106-93-4	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Barium	**93.1**	ug/L	10.0	0.84	1	11/01/19 04:09	11/02/19 07:04	7440-39-3	
Beryllium	**1.6 U**	ug/L	4.0	1.6	1	11/01/19 04:09	11/02/19 07:04	7440-41-7	
Cadmium	**0.33 U**	ug/L	1.0	0.33	1	11/01/19 04:09	11/02/19 07:04	7440-43-9	
Chromium	**1.7 U**	ug/L	5.0	1.7	1	11/01/19 04:09	11/02/19 07:04	7440-47-3	
Cobalt	**0.96 U**	ug/L	10.0	0.96	1	11/01/19 04:09	11/02/19 07:04	7440-48-4	
Copper	**2.6 U**	ug/L	5.0	2.6	1	11/01/19 04:09	11/02/19 07:04	7440-50-8	
Iron	**50300**	ug/L	400	92.0	10	11/01/19 04:09	11/03/19 18:02	7439-89-6	
Lead	**4.6 U**	ug/L	10.0	4.6	1	11/01/19 04:09	11/02/19 07:04	7439-92-1	
Manganese	**21.7**	ug/L	5.0	0.42	1	11/01/19 04:09	11/02/19 07:04	7439-96-5	
Nickel	**2.1 U**	ug/L	5.0	2.1	1	11/01/19 04:09	11/02/19 07:04	7440-02-0	
Selenium	**8.5 U**	ug/L	15.0	8.5	1	11/01/19 04:09	11/02/19 07:04	7782-49-2	
Silver	**1.0 U**	ug/L	5.0	1.0	1	11/01/19 04:09	11/02/19 07:04	7440-22-4	
Sodium	**133**	mg/L	2.0	0.27	1	11/01/19 04:09	11/02/19 07:04	7440-23-5	
Vanadium	**4.6 I**	ug/L	10.0	1.0	1	11/01/19 04:09	11/02/19 07:04	7440-62-2	
Zinc	**11.0 U**	ug/L	20.0	11.0	1	11/01/19 04:09	11/02/19 07:04	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Antimony	**2.5 U**	ug/L	5.0	2.5	5	11/01/19 04:09	11/01/19 14:54	7440-36-0	D3
Arsenic	**41.7**	ug/L	5.0	2.5	5	11/01/19 04:09	11/01/19 14:54	7440-38-2	D3
Thallium	**0.53 U**	ug/L	5.0	0.53	5	11/01/19 04:09	11/01/19 14:54	7440-28-0	D3
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	**0.10 U**	ug/L	0.20	0.10	1	11/07/19 12:14	11/11/19 15:31	7439-97-6	
8260 MSV	Analytical Method: EPA 8260								
Acetone	**5.3 U**	ug/L	20.0	5.3	1		11/10/19 00:02	67-64-1	J(v2)
Acrylonitrile	**3.7 U**	ug/L	10.0	3.7	1		11/10/19 00:02	107-13-1	
Benzene	**0.10 U**	ug/L	1.0	0.10	1		11/10/19 00:02	71-43-2	
Bromochloromethane	**0.37 U**	ug/L	1.0	0.37	1		11/10/19 00:02	74-97-5	
Bromodichloromethane	**0.19 U**	ug/L	0.60	0.19	1		11/10/19 00:02	75-27-4	
Bromoform	**2.6 U**	ug/L	3.0	2.6	1		11/10/19 00:02	75-25-2	
Bromomethane	**4.0 U**	ug/L	5.0	4.0	1		11/10/19 00:02	74-83-9	J(v2)
2-Butanone (MEK)	**5.0 U**	ug/L	10.0	5.0	1		11/10/19 00:02	78-93-3	J(v2)

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508653

Sample: MW-16 (23032) **Lab ID: 35508653003** Collected: 10/31/19 08:30 Received: 10/31/19 15:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Carbon disulfide	**0.45 U**	ug/L	10.0	0.45	1		11/10/19 00:02	75-15-0	
Carbon tetrachloride	**0.50 U**	ug/L	3.0	0.50	1		11/10/19 00:02	56-23-5	
Chlorobenzene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:02	108-90-7	
Chloroethane	**3.7 U**	ug/L	10.0	3.7	1		11/10/19 00:02	75-00-3	
Chloroform	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:02	67-66-3	
Chloromethane	**0.97 U**	ug/L	1.0	0.97	1		11/10/19 00:02	74-87-3	
Dibromochloromethane	**0.45 U**	ug/L	2.0	0.45	1		11/10/19 00:02	124-48-1	
Dibromomethane	**0.68 U**	ug/L	2.0	0.68	1		11/10/19 00:02	74-95-3	
1,2-Dichlorobenzene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:02	95-50-1	
1,4-Dichlorobenzene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:02	106-46-7	
trans-1,4-Dichloro-2-butene	**2.5 U**	ug/L	10.0	2.5	1		11/10/19 00:02	110-57-6	J(v2)
1,1-Dichloroethane	**0.34 U**	ug/L	1.0	0.34	1		11/10/19 00:02	75-34-3	
1,2-Dichloroethane	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:02	107-06-2	
1,1-Dichloroethene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:02	75-35-4	
cis-1,2-Dichloroethene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:02	156-59-2	
trans-1,2-Dichloroethene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:02	156-60-5	J(v2)
1,2-Dichloropropane	**0.23 U**	ug/L	1.0	0.23	1		11/10/19 00:02	78-87-5	
cis-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/10/19 00:02	10061-01-5	
trans-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/10/19 00:02	10061-02-6	
Ethylbenzene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:02	100-41-4	
2-Hexanone	**0.85 U**	ug/L	10.0	0.85	1		11/10/19 00:02	591-78-6	
Iodomethane	**9.3 U**	ug/L	10.0	9.3	1		11/10/19 00:02	74-88-4	J(v2)
Methylene Chloride	**2.0 U**	ug/L	5.0	2.0	1		11/10/19 00:02	75-09-2	
4-Methyl-2-pentanone (MIBK)	**0.32 U**	ug/L	10.0	0.32	1		11/10/19 00:02	108-10-1	
Styrene	**0.26 U**	ug/L	1.0	0.26	1		11/10/19 00:02	100-42-5	
1,1,1,2-Tetrachloroethane	**0.32 U**	ug/L	1.0	0.32	1		11/10/19 00:02	630-20-6	
1,1,2,2-Tetrachloroethane	**0.20 U**	ug/L	0.50	0.20	1		11/10/19 00:02	79-34-5	
Tetrachloroethene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:02	127-18-4	
Toluene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:02	108-88-3	
1,1,1-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/10/19 00:02	71-55-6	
1,1,2-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/10/19 00:02	79-00-5	
Trichloroethene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:02	79-01-6	
Trichlorofluoromethane	**0.35 U**	ug/L	1.0	0.35	1		11/10/19 00:02	75-69-4	
1,2,3-Trichloropropane	**1.1 U**	ug/L	2.0	1.1	1		11/10/19 00:02	96-18-4	
Vinyl acetate	**0.19 U**	ug/L	10.0	0.19	1		11/10/19 00:02	108-05-4	
Vinyl chloride	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:02	75-01-4	
Xylene (Total)	**1.0 U**	ug/L	5.0	1.0	1		11/10/19 00:02	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	70-130		1		11/10/19 00:02	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-130		1		11/10/19 00:02	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		11/10/19 00:02	2037-26-5	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**1160**	mg/L	20.0	20.0	1		11/02/19 07:44		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508653

Sample: MW-16 (23032) **Lab ID: 35508653003** Collected: 10/31/19 08:30 Received: 10/31/19 15:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**108**	mg/L	50.0	25.0	10		11/06/19 22:25	16887-00-6	
Sulfate	**2.5 U**	mg/L	5.0	2.5	1		11/07/19 09:45	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**33.4**	mg/L	0.50	0.35	10		11/05/19 10:44	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.050 U**	mg/L	0.10	0.050	2		11/01/19 15:22	14797-55-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508653

Sample: Equipment Blank 2 **Lab ID: 35508653004** Collected: 10/31/19 09:15 Received: 10/31/19 15:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromo-3-chloropropane	**0.0066 U**	ug/L	0.020	0.0066	1	11/04/19 11:03	11/06/19 10:29	96-12-8	
1,2-Dibromoethane (EDB)	**0.0077 U**	ug/L	0.010	0.0077	1	11/04/19 11:03	11/06/19 10:29	106-93-4	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Barium	**0.84 U**	ug/L	10.0	0.84	1	11/01/19 04:09	11/02/19 07:07	7440-39-3	
Beryllium	**1.6 U**	ug/L	4.0	1.6	1	11/01/19 04:09	11/02/19 07:07	7440-41-7	
Cadmium	**0.33 U**	ug/L	1.0	0.33	1	11/01/19 04:09	11/02/19 07:07	7440-43-9	
Chromium	**1.7 U**	ug/L	5.0	1.7	1	11/01/19 04:09	11/02/19 07:07	7440-47-3	
Cobalt	**0.96 U**	ug/L	10.0	0.96	1	11/01/19 04:09	11/02/19 07:07	7440-48-4	
Copper	**2.6 U**	ug/L	5.0	2.6	1	11/01/19 04:09	11/02/19 07:07	7440-50-8	
Iron	**9.2 U**	ug/L	40.0	9.2	1	11/01/19 04:09	11/02/19 07:07	7439-89-6	
Lead	**4.6 U**	ug/L	10.0	4.6	1	11/01/19 04:09	11/02/19 07:07	7439-92-1	
Manganese	**0.42 U**	ug/L	5.0	0.42	1	11/01/19 04:09	11/02/19 07:07	7439-96-5	
Nickel	**2.1 U**	ug/L	5.0	2.1	1	11/01/19 04:09	11/02/19 07:07	7440-02-0	
Selenium	**8.5 U**	ug/L	15.0	8.5	1	11/01/19 04:09	11/02/19 07:07	7782-49-2	
Silver	**1.0 U**	ug/L	5.0	1.0	1	11/01/19 04:09	11/02/19 07:07	7440-22-4	
Sodium	**0.27 U**	mg/L	2.0	0.27	1	11/01/19 04:09	11/02/19 07:07	7440-23-5	
Vanadium	**1.0 U**	ug/L	10.0	1.0	1	11/01/19 04:09	11/02/19 07:07	7440-62-2	
Zinc	**124**	ug/L	20.0	11.0	1	11/01/19 04:09	11/02/19 07:07	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Antimony	**0.50 U**	ug/L	1.0	0.50	1	11/01/19 04:09	11/01/19 14:56	7440-36-0	
Arsenic	**0.50 U**	ug/L	1.0	0.50	1	11/01/19 04:09	11/01/19 14:56	7440-38-2	
Thallium	**0.11 U**	ug/L	1.0	0.11	1	11/01/19 04:09	11/01/19 14:56	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	**0.10 U**	ug/L	0.20	0.10	1	11/07/19 12:14	11/11/19 15:38	7439-97-6	
8260 MSV	Analytical Method: EPA 8260								
Acetone	**7.2 I**	ug/L	20.0	5.3	1		11/10/19 00:29	67-64-1	J(v2)
Acrylonitrile	**3.7 U**	ug/L	10.0	3.7	1		11/10/19 00:29	107-13-1	
Benzene	**0.10 U**	ug/L	1.0	0.10	1		11/10/19 00:29	71-43-2	
Bromochloromethane	**0.37 U**	ug/L	1.0	0.37	1		11/10/19 00:29	74-97-5	
Bromodichloromethane	**0.19 U**	ug/L	0.60	0.19	1		11/10/19 00:29	75-27-4	
Bromoform	**2.6 U**	ug/L	3.0	2.6	1		11/10/19 00:29	75-25-2	
Bromomethane	**4.0 U**	ug/L	5.0	4.0	1		11/10/19 00:29	74-83-9	J(v2)
2-Butanone (MEK)	**5.0 U**	ug/L	10.0	5.0	1		11/10/19 00:29	78-93-3	J(v2)
Carbon disulfide	**1.1 I**	ug/L	10.0	0.45	1		11/10/19 00:29	75-15-0	
Carbon tetrachloride	**0.50 U**	ug/L	3.0	0.50	1		11/10/19 00:29	56-23-5	
Chlorobenzene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:29	108-90-7	
Chloroethane	**3.7 U**	ug/L	10.0	3.7	1		11/10/19 00:29	75-00-3	
Chloroform	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:29	67-66-3	
Chloromethane	**0.97 U**	ug/L	1.0	0.97	1		11/10/19 00:29	74-87-3	
Dibromochloromethane	**0.45 U**	ug/L	2.0	0.45	1		11/10/19 00:29	124-48-1	
Dibromomethane	**0.68 U**	ug/L	2.0	0.68	1		11/10/19 00:29	74-95-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508653

Sample: Equipment Blank 2 **Lab ID: 35508653004** Collected: 10/31/19 09:15 Received: 10/31/19 15:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,2-Dichlorobenzene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:29	95-50-1	
1,4-Dichlorobenzene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:29	106-46-7	
trans-1,4-Dichloro-2-butene	**2.5 U**	ug/L	10.0	2.5	1		11/10/19 00:29	110-57-6	J(v2)
1,1-Dichloroethane	**0.34 U**	ug/L	1.0	0.34	1		11/10/19 00:29	75-34-3	
1,2-Dichloroethane	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:29	107-06-2	
1,1-Dichloroethene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:29	75-35-4	
cis-1,2-Dichloroethene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:29	156-59-2	
trans-1,2-Dichloroethene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:29	156-60-5	J(v2)
1,2-Dichloropropane	**0.23 U**	ug/L	1.0	0.23	1		11/10/19 00:29	78-87-5	
cis-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/10/19 00:29	10061-01-5	
trans-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/10/19 00:29	10061-02-6	
Ethylbenzene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:29	100-41-4	
2-Hexanone	**0.85 U**	ug/L	10.0	0.85	1		11/10/19 00:29	591-78-6	
Iodomethane	**9.3 U**	ug/L	10.0	9.3	1		11/10/19 00:29	74-88-4	J(v2)
Methylene Chloride	**2.0 U**	ug/L	5.0	2.0	1		11/10/19 00:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	**0.32 U**	ug/L	10.0	0.32	1		11/10/19 00:29	108-10-1	
Styrene	**0.26 U**	ug/L	1.0	0.26	1		11/10/19 00:29	100-42-5	
1,1,1,2-Tetrachloroethane	**0.32 U**	ug/L	1.0	0.32	1		11/10/19 00:29	630-20-6	
1,1,2,2-Tetrachloroethane	**0.20 U**	ug/L	0.50	0.20	1		11/10/19 00:29	79-34-5	
Tetrachloroethene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:29	127-18-4	
Toluene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:29	108-88-3	
1,1,1-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/10/19 00:29	71-55-6	
1,1,2-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/10/19 00:29	79-00-5	
Trichloroethene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:29	79-01-6	
Trichlorofluoromethane	**0.35 U**	ug/L	1.0	0.35	1		11/10/19 00:29	75-69-4	
1,2,3-Trichloropropane	**1.1 U**	ug/L	2.0	1.1	1		11/10/19 00:29	96-18-4	
Vinyl acetate	**0.19 U**	ug/L	10.0	0.19	1		11/10/19 00:29	108-05-4	
Vinyl chloride	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:29	75-01-4	
Xylene (Total)	**1.0 U**	ug/L	5.0	1.0	1		11/10/19 00:29	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	70-130		1		11/10/19 00:29	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-130		1		11/10/19 00:29	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		11/10/19 00:29	2037-26-5	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**5.0 U**	mg/L	5.0	5.0	1		11/02/19 07:44		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.5 U**	mg/L	5.0	2.5	1		11/06/19 22:47	16887-00-6	
Sulfate	**2.5 U**	mg/L	5.0	2.5	1		11/06/19 22:47	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.035 U**	mg/L	0.050	0.035	1		11/05/19 10:25	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508653

Sample: Equipment Blank 2 **Lab ID: 35508653004** Collected: 10/31/19 09:15 Received: 10/31/19 15:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.025 U**	mg/L	0.050	0.025	1		11/01/19 07:56	14797-55-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508653

Sample: Trip Blank 8260 3 **Lab ID: 35508653005** Collected: 10/31/19 00:01 Received: 10/31/19 15:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Acetone	**5.3 U**	ug/L	20.0	5.3	1		11/10/19 00:56	67-64-1	J(v2)
Acrylonitrile	**3.7 U**	ug/L	10.0	3.7	1		11/10/19 00:56	107-13-1	
Benzene	**0.10 U**	ug/L	1.0	0.10	1		11/10/19 00:56	71-43-2	
Bromochloromethane	**0.37 U**	ug/L	1.0	0.37	1		11/10/19 00:56	74-97-5	
Bromodichloromethane	**0.19 U**	ug/L	0.60	0.19	1		11/10/19 00:56	75-27-4	
Bromoform	**2.6 U**	ug/L	3.0	2.6	1		11/10/19 00:56	75-25-2	
Bromomethane	**4.0 U**	ug/L	5.0	4.0	1		11/10/19 00:56	74-83-9	J(v2)
2-Butanone (MEK)	**5.0 U**	ug/L	10.0	5.0	1		11/10/19 00:56	78-93-3	J(v2)
Carbon disulfide	**0.45 U**	ug/L	10.0	0.45	1		11/10/19 00:56	75-15-0	
Carbon tetrachloride	**0.50 U**	ug/L	3.0	0.50	1		11/10/19 00:56	56-23-5	
Chlorobenzene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:56	108-90-7	
Chloroethane	**3.7 U**	ug/L	10.0	3.7	1		11/10/19 00:56	75-00-3	
Chloroform	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:56	67-66-3	
Chloromethane	**0.97 U**	ug/L	1.0	0.97	1		11/10/19 00:56	74-87-3	
Dibromochloromethane	**0.45 U**	ug/L	2.0	0.45	1		11/10/19 00:56	124-48-1	
Dibromomethane	**0.68 U**	ug/L	2.0	0.68	1		11/10/19 00:56	74-95-3	
1,2-Dichlorobenzene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:56	95-50-1	
1,4-Dichlorobenzene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:56	106-46-7	
trans-1,4-Dichloro-2-butene	**2.5 U**	ug/L	10.0	2.5	1		11/10/19 00:56	110-57-6	J(v2)
1,1-Dichloroethane	**0.34 U**	ug/L	1.0	0.34	1		11/10/19 00:56	75-34-3	
1,2-Dichloroethane	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:56	107-06-2	
1,1-Dichloroethene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:56	75-35-4	
cis-1,2-Dichloroethene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:56	156-59-2	
trans-1,2-Dichloroethene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:56	156-60-5	J(v2)
1,2-Dichloropropane	**0.23 U**	ug/L	1.0	0.23	1		11/10/19 00:56	78-87-5	
cis-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/10/19 00:56	10061-01-5	
trans-1,3-Dichloropropene	**0.17 U**	ug/L	0.50	0.17	1		11/10/19 00:56	10061-02-6	
Ethylbenzene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:56	100-41-4	
2-Hexanone	**0.85 U**	ug/L	10.0	0.85	1		11/10/19 00:56	591-78-6	
Iodomethane	**9.3 U**	ug/L	10.0	9.3	1		11/10/19 00:56	74-88-4	J(v2)
Methylene Chloride	**2.0 U**	ug/L	5.0	2.0	1		11/10/19 00:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	**0.32 U**	ug/L	10.0	0.32	1		11/10/19 00:56	108-10-1	
Styrene	**0.26 U**	ug/L	1.0	0.26	1		11/10/19 00:56	100-42-5	
1,1,1,2-Tetrachloroethane	**0.32 U**	ug/L	1.0	0.32	1		11/10/19 00:56	630-20-6	
1,1,2,2-Tetrachloroethane	**0.20 U**	ug/L	0.50	0.20	1		11/10/19 00:56	79-34-5	
Tetrachloroethene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:56	127-18-4	
Toluene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:56	108-88-3	
1,1,1-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/10/19 00:56	71-55-6	
1,1,2-Trichloroethane	**0.30 U**	ug/L	1.0	0.30	1		11/10/19 00:56	79-00-5	
Trichloroethene	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:56	79-01-6	
Trichlorofluoromethane	**0.35 U**	ug/L	1.0	0.35	1		11/10/19 00:56	75-69-4	
1,2,3-Trichloropropane	**1.1 U**	ug/L	2.0	1.1	1		11/10/19 00:56	96-18-4	
Vinyl acetate	**0.19 U**	ug/L	10.0	0.19	1		11/10/19 00:56	108-05-4	
Vinyl chloride	**0.50 U**	ug/L	1.0	0.50	1		11/10/19 00:56	75-01-4	
Xylene (Total)	**1.0 U**	ug/L	5.0	1.0	1		11/10/19 00:56	1330-20-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508653

Sample: Trip Blank 8260 3 **Lab ID: 35508653005** Collected: 10/31/19 00:01 Received: 10/31/19 15:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Surrogates									
4-Bromofluorobenzene (S)	95	%	70-130		1		11/10/19 00:56	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-130		1		11/10/19 00:56	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		11/10/19 00:56	2037-26-5	

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8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

ANALYTICAL RESULTS

Project: Central County Landfill Semian
Pace Project No.: 35508653

Sample: Trip Blank 8011 3 **Lab ID: 35508653006** Collected: 10/31/19 00:01 Received: 10/31/19 15:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromo-3-chloropropane	**0.0066 U**	ug/L	0.021	0.0066	1	11/04/19 11:03	11/06/19 10:44	96-12-8	
1,2-Dibromoethane (EDB)	**0.0077 U**	ug/L	0.010	0.0077	1	11/04/19 11:03	11/06/19 10:44	106-93-4	

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508653

QC Batch: 585203 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 35508653001, 35508653002, 35508653003, 35508653004

METHOD BLANK: 3181812 Matrix: Water
Associated Lab Samples: 35508653001, 35508653002, 35508653003, 35508653004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	0.10 U	0.20	0.10	11/11/19 15:22	

LABORATORY CONTROL SAMPLE: 3181813

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2	2.0	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3181814 3181815

Parameter	Units	35508653004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	0.10 U	2	2	2.1	2.1	105	106	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508653

QC Batch: 583510 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 35508653001, 35508653002, 35508653003, 35508653004

METHOD BLANK: 3172474 Matrix: Water
Associated Lab Samples: 35508653001, 35508653002, 35508653003, 35508653004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Barium	ug/L	0.84 U	10.0	0.84	11/03/19 17:52	
Beryllium	ug/L	1.6 U	4.0	1.6	11/03/19 17:52	
Cadmium	ug/L	0.33 U	1.0	0.33	11/03/19 17:52	
Chromium	ug/L	1.7 U	5.0	1.7	11/03/19 17:52	
Cobalt	ug/L	0.96 U	10.0	0.96	11/03/19 17:52	
Copper	ug/L	2.6 U	5.0	2.6	11/03/19 17:52	
Iron	ug/L	9.2 U	40.0	9.2	11/03/19 17:52	
Lead	ug/L	4.6 U	10.0	4.6	11/03/19 17:52	
Manganese	ug/L	0.42 U	5.0	0.42	11/03/19 17:52	
Nickel	ug/L	2.1 U	5.0	2.1	11/03/19 17:52	
Selenium	ug/L	8.5 U	15.0	8.5	11/03/19 17:52	
Silver	ug/L	1.0 U	5.0	1.0	11/03/19 17:52	
Sodium	mg/L	0.27 U	2.0	0.27	11/03/19 17:52	
Vanadium	ug/L	1.0 U	10.0	1.0	11/03/19 17:52	
Zinc	ug/L	11.0 U	20.0	11.0	11/03/19 17:52	

LABORATORY CONTROL SAMPLE: 3172475

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	250	258	103	80-120	
Beryllium	ug/L	25	24.0	96	80-120	
Cadmium	ug/L	25	24.7	99	80-120	
Chromium	ug/L	250	244	98	80-120	
Cobalt	ug/L	250	254	101	80-120	
Copper	ug/L	250	238	95	80-120	
Iron	ug/L	2500	2500	100	80-120	
Lead	ug/L	250	250	100	80-120	
Manganese	ug/L	250	248	99	80-120	
Nickel	ug/L	250	249	100	80-120	
Selenium	ug/L	250	243	97	80-120	
Silver	ug/L	25	23.2	93	80-120	
Sodium	mg/L	12.5	12.6	101	80-120	
Vanadium	ug/L	250	244	98	80-120	
Zinc	ug/L	1250	1240	99	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508653

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3172476 3172477

Parameter	Units	35508764002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	ug/L	39.5	250	250	302	297	105	103	75-125	2	20	
Beryllium	ug/L	<1.6	25	25	24.7	24.3	99	97	75-125	2	20	
Cadmium	ug/L	<0.33	25	25	24.4	24.2	98	97	75-125	1	20	
Chromium	ug/L	<1.7	250	250	247	245	98	97	75-125	1	20	
Cobalt	ug/L	<0.96	250	250	257	253	103	101	75-125	2	20	
Copper	ug/L	<2.6	250	250	254	251	101	100	75-125	1	20	
Iron	ug/L	<9.2	2500	2500	2530	2500	101	100	75-125	1	20	
Lead	ug/L	<4.6	250	250	249	245	98	97	75-125	1	20	
Manganese	ug/L	17.6	250	250	265	263	99	98	75-125	1	20	
Nickel	ug/L	<2.1	250	250	249	248	100	99	75-125	0	20	
Selenium	ug/L	<8.5	250	250	209	210	83	84	75-125	1	20	
Silver	ug/L	<1.0	25	25	24.0	23.7	96	95	75-125	2	20	
Sodium	mg/L	76.0	12.5	12.5	89.8	88.8	111	102	75-125	1	20	
Vanadium	ug/L	<1.0	250	250	251	249	100	99	75-125	1	20	
Zinc	ug/L	<11.0	1250	1250	1220	1220	98	97	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
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(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508653

QC Batch: 583509 Analysis Method: EPA 6020
QC Batch Method: EPA 3010 Analysis Description: 6020 MET
Associated Lab Samples: 35508653001, 35508653002, 35508653003, 35508653004

METHOD BLANK: 3172470 Matrix: Water
Associated Lab Samples: 35508653001, 35508653002, 35508653003, 35508653004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	0.50 U	1.0	0.50	11/01/19 14:41	
Arsenic	ug/L	0.50 U	1.0	0.50	11/01/19 14:41	
Thallium	ug/L	0.11 U	1.0	0.11	11/01/19 14:41	

LABORATORY CONTROL SAMPLE: 3172471

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	50	53.3	107	80-120	
Arsenic	ug/L	50	48.1	96	80-120	
Thallium	ug/L	50	51.1	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3172472 3172473

Parameter	Units	35508653001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	2.5 U	50	50	55.6	50.7	111	101	75-125	9	20	D3
Arsenic	ug/L	14.3	50	50	64.5	62.6	100	97	75-125	3	20	D3
Thallium	ug/L	0.53 U	50	50	50.9	47.8	102	96	75-125	6	20	D3

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508653

QC Batch: 585889 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 35508653001, 35508653002, 35508653003, 35508653004, 35508653005

METHOD BLANK: 3186396 Matrix: Water
Associated Lab Samples: 35508653001, 35508653002, 35508653003, 35508653004, 35508653005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	0.32 U	1.0	0.32	11/09/19 15:28	
1,1,1-Trichloroethane	ug/L	0.30 U	1.0	0.30	11/09/19 15:28	
1,1,2,2-Tetrachloroethane	ug/L	0.20 U	0.50	0.20	11/09/19 15:28	
1,1,2-Trichloroethane	ug/L	0.30 U	1.0	0.30	11/09/19 15:28	
1,1-Dichloroethane	ug/L	0.34 U	1.0	0.34	11/09/19 15:28	
1,1-Dichloroethene	ug/L	0.50 U	1.0	0.50	11/09/19 15:28	
1,2,3-Trichloropropane	ug/L	1.1 U	2.0	1.1	11/09/19 15:28	
1,2-Dichlorobenzene	ug/L	0.50 U	1.0	0.50	11/09/19 15:28	
1,2-Dichloroethane	ug/L	0.50 U	1.0	0.50	11/09/19 15:28	
1,2-Dichloropropane	ug/L	0.23 U	1.0	0.23	11/09/19 15:28	
1,4-Dichlorobenzene	ug/L	0.50 U	1.0	0.50	11/09/19 15:28	
2-Butanone (MEK)	ug/L	5.0 U	10.0	5.0	11/09/19 15:28	J(v2)
2-Hexanone	ug/L	0.85 U	10.0	0.85	11/09/19 15:28	
4-Methyl-2-pentanone (MIBK)	ug/L	0.32 U	10.0	0.32	11/09/19 15:28	
Acetone	ug/L	5.3 U	20.0	5.3	11/09/19 15:28	J(v2)
Acrylonitrile	ug/L	3.7 U	10.0	3.7	11/09/19 15:28	
Benzene	ug/L	0.10 U	1.0	0.10	11/09/19 15:28	
Bromochloromethane	ug/L	0.37 U	1.0	0.37	11/09/19 15:28	
Bromodichloromethane	ug/L	0.19 U	0.60	0.19	11/09/19 15:28	
Bromoform	ug/L	2.6 U	3.0	2.6	11/09/19 15:28	
Bromomethane	ug/L	4.0 U	5.0	4.0	11/09/19 15:28	J(v2)
Carbon disulfide	ug/L	0.45 U	10.0	0.45	11/09/19 15:28	
Carbon tetrachloride	ug/L	0.50 U	3.0	0.50	11/09/19 15:28	
Chlorobenzene	ug/L	0.50 U	1.0	0.50	11/09/19 15:28	
Chloroethane	ug/L	3.7 U	10.0	3.7	11/09/19 15:28	
Chloroform	ug/L	0.50 U	1.0	0.50	11/09/19 15:28	
Chloromethane	ug/L	0.97 U	1.0	0.97	11/09/19 15:28	
cis-1,2-Dichloroethene	ug/L	0.50 U	1.0	0.50	11/09/19 15:28	
cis-1,3-Dichloropropene	ug/L	0.17 U	0.50	0.17	11/09/19 15:28	
Dibromochloromethane	ug/L	0.45 U	2.0	0.45	11/09/19 15:28	
Dibromomethane	ug/L	0.68 U	2.0	0.68	11/09/19 15:28	
Ethylbenzene	ug/L	0.50 U	1.0	0.50	11/09/19 15:28	
Iodomethane	ug/L	9.3 U	10.0	9.3	11/09/19 15:28	J(v2)
Methylene Chloride	ug/L	2.0 U	5.0	2.0	11/09/19 15:28	
Styrene	ug/L	0.26 U	1.0	0.26	11/09/19 15:28	
Tetrachloroethene	ug/L	0.50 U	1.0	0.50	11/09/19 15:28	
Toluene	ug/L	0.50 U	1.0	0.50	11/09/19 15:28	
trans-1,2-Dichloroethene	ug/L	0.50 U	1.0	0.50	11/09/19 15:28	
trans-1,3-Dichloropropene	ug/L	0.17 U	0.50	0.17	11/09/19 15:28	
trans-1,4-Dichloro-2-butene	ug/L	2.5 U	10.0	2.5	11/09/19 15:28	J(v2)
Trichloroethene	ug/L	0.50 U	1.0	0.50	11/09/19 15:28	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
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(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508653

METHOD BLANK: 3186396 Matrix: Water
Associated Lab Samples: 35508653001, 35508653002, 35508653003, 35508653004, 35508653005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Trichlorofluoromethane	ug/L	0.35 U	1.0	0.35	11/09/19 15:28	
Vinyl acetate	ug/L	0.19 U	10.0	0.19	11/09/19 15:28	
Vinyl chloride	ug/L	0.50 U	1.0	0.50	11/09/19 15:28	
Xylene (Total)	ug/L	1.0 U	5.0	1.0	11/09/19 15:28	
1,2-Dichloroethane-d4 (S)	%	96	70-130		11/09/19 15:28	
4-Bromofluorobenzene (S)	%	101	70-130		11/09/19 15:28	
Toluene-d8 (S)	%	98	70-130		11/09/19 15:28	

LABORATORY CONTROL SAMPLE: 3186397

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	20.5	102	70-130	
1,1,1-Trichloroethane	ug/L	20	19.1	96	70-130	
1,1,2,2-Tetrachloroethane	ug/L	20	19.2	96	68-125	
1,1,2-Trichloroethane	ug/L	20	19.5	97	70-130	
1,1-Dichloroethane	ug/L	20	18.2	91	70-130	
1,1-Dichloroethene	ug/L	20	16.6	83	66-133	
1,2,3-Trichloropropane	ug/L	20	18.2	91	62-127	
1,2-Dichlorobenzene	ug/L	20	18.8	94	70-130	
1,2-Dichloroethane	ug/L	20	16.3	81	70-130	
1,2-Dichloropropane	ug/L	20	18.3	92	70-130	
1,4-Dichlorobenzene	ug/L	20	18.2	91	70-130	
2-Butanone (MEK)	ug/L	40	30.6	77	47-143	J(v3)
2-Hexanone	ug/L	40	32.4	81	48-145	
4-Methyl-2-pentanone (MIBK)	ug/L	40	36.0	90	57-132	
Acetone	ug/L	40	24.8	62	46-148	J(v3)
Acrylonitrile	ug/L	200	182	91	60-143	
Benzene	ug/L	20	18.4	92	70-130	
Bromochloromethane	ug/L	20	17.4	87	70-130	
Bromodichloromethane	ug/L	20	19.3	96	70-130	
Bromoform	ug/L	20	16.8	84	49-126	
Bromomethane	ug/L	20	5.4	27	10-165	J(v3)
Carbon disulfide	ug/L	20	16.6	83	60-141	
Carbon tetrachloride	ug/L	20	17.7	88	63-126	
Chlorobenzene	ug/L	20	18.7	94	70-130	
Chloroethane	ug/L	20	21.7	108	71-142	
Chloroform	ug/L	20	18.2	91	70-130	
Chloromethane	ug/L	20	17.1	86	40-140	
cis-1,2-Dichloroethene	ug/L	20	16.9	84	70-130	
cis-1,3-Dichloropropene	ug/L	20	17.3	86	70-130	
Dibromochloromethane	ug/L	20	17.2	86	62-118	
Dibromomethane	ug/L	20	18.3	92	70-130	
Ethylbenzene	ug/L	20	19.0	95	70-130	
Iodomethane	ug/L	40	12.4	31	10-164	J(v3)

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508653

LABORATORY CONTROL SAMPLE: 3186397

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	20	17.5	88	65-136	
Styrene	ug/L	20	20.5	102	70-130	
Tetrachloroethene	ug/L	20	20.4	102	64-134	
Toluene	ug/L	20	19.5	97	70-130	
trans-1,2-Dichloroethene	ug/L	20	15.4	77	68-127	J(v3)
trans-1,3-Dichloropropene	ug/L	20	17.6	88	65-121	
trans-1,4-Dichloro-2-butene	ug/L	20	15.6	78	42-129	J(v3)
Trichloroethene	ug/L	20	18.1	91	70-130	
Trichlorofluoromethane	ug/L	20	20.2	101	65-135	
Vinyl acetate	ug/L	20	15.6	78	60-144	
Vinyl chloride	ug/L	20	20.0	100	68-131	
Xylene (Total)	ug/L	60	58.5	98	70-130	
1,2-Dichloroethane-d4 (S)	%			98	70-130	
4-Bromofluorobenzene (S)	%			104	70-130	
Toluene-d8 (S)	%			101	70-130	

MATRIX SPIKE SAMPLE: 3186399

Parameter	Units	35510494001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	0.32 U	20	20.5	102	70-130	
1,1,1-Trichloroethane	ug/L	0.30 U	20	20.6	103	70-130	
1,1,2,2-Tetrachloroethane	ug/L	0.20 U	20	18.5	92	68-125	
1,1,2-Trichloroethane	ug/L	0.30 U	20	18.8	94	70-130	
1,1-Dichloroethane	ug/L	0.34 U	20	19.0	95	70-130	
1,1-Dichloroethene	ug/L	0.50 U	20	18.6	93	66-133	
1,2,3-Trichloropropane	ug/L	1.1 U	20	17.3	86	62-127	
1,2-Dichlorobenzene	ug/L	0.50 U	20	18.4	92	70-130	
1,2-Dichloroethane	ug/L	0.50 U	20	16.3	82	70-130	
1,2-Dichloropropane	ug/L	0.23 U	20	18.2	91	70-130	
1,4-Dichlorobenzene	ug/L	0.50 U	20	18.4	92	70-130	
2-Butanone (MEK)	ug/L	5.0 U	40	25.9	65	47-143	J(v3)
2-Hexanone	ug/L	0.85 U	40	25.4	63	48-145	
4-Methyl-2-pentanone (MIBK)	ug/L	0.32 U	40	28.6	72	57-132	
Acetone	ug/L	5.3 U	40	15.9 I	40	46-148	J(M1),J(v3)
Acrylonitrile	ug/L	3.7 U	200	164	82	60-143	
Benzene	ug/L	0.10 U	20	18.6	93	70-130	
Bromochloromethane	ug/L	0.37 U	20	17.7	88	70-130	
Bromodichloromethane	ug/L	0.19 U	20	18.8	94	70-130	
Bromoform	ug/L	2.6 U	20	15.6	78	49-126	
Bromomethane	ug/L	4.0 U	20	4.0 U	16	10-165	J(v3)
Carbon disulfide	ug/L	0.45 U	20	17.8	88	60-141	
Carbon tetrachloride	ug/L	0.50 U	20	19.8	99	63-126	
Chlorobenzene	ug/L	0.50 U	20	19.0	93	70-130	
Chloroethane	ug/L	3.7 U	20	23.5	118	71-142	
Chloroform	ug/L	0.50 U	20	18.8	94	70-130	

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Ormond Beach, FL 32174
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QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508653

MATRIX SPIKE SAMPLE: 3186399

Parameter	Units	35510494001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloromethane	ug/L	0.97 U	20	17.6	88	40-140	
cis-1,2-Dichloroethene	ug/L	0.50 U	20	16.7	83	70-130	
cis-1,3-Dichloropropene	ug/L	0.17 U	20	15.1	75	70-130	
Dibromochloromethane	ug/L	0.45 U	20	16.1	80	62-118	
Dibromomethane	ug/L	0.68 U	20	16.9	84	70-130	
Ethylbenzene	ug/L	0.50 U	20	19.5	98	70-130	
Iodomethane	ug/L	9.3 U	40	9.3 U	6	10-164	J(M1),J(v3)
Methylene Chloride	ug/L	2.0 U	20	16.3	81	65-136	
Styrene	ug/L	0.26 U	20	20.0	100	70-130	
Tetrachloroethene	ug/L	0.50 U	20	17.9	89	64-134	
Toluene	ug/L	0.50 U	20	19.9	99	70-130	
trans-1,2-Dichloroethene	ug/L	0.50 U	20	15.4	77	68-127	J(v3)
trans-1,3-Dichloropropene	ug/L	0.17 U	20	15.9	79	65-121	
trans-1,4-Dichloro-2-butene	ug/L	2.5 U	20	12.6	63	42-129	J(v3)
Trichloroethene	ug/L	0.50 U	20	18.4	92	70-130	
Trichlorofluoromethane	ug/L	0.35 U	20	22.6	113	65-135	
Vinyl acetate	ug/L	0.19 U	20	12.8	64	60-144	
Vinyl chloride	ug/L	0.50 U	20	20.6	103	68-131	
Xylene (Total)	ug/L	1.0 U	60	58.8	98	70-130	
1,2-Dichloroethane-d4 (S)	%				99	70-130	
4-Bromofluorobenzene (S)	%				100	70-130	
Toluene-d8 (S)	%				101	70-130	

SAMPLE DUPLICATE: 3186398

Parameter	Units	35510815001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	0.32 U	0.32 U		40	
1,1,1-Trichloroethane	ug/L	0.30 U	0.30 U		40	
1,1,2,2-Tetrachloroethane	ug/L	0.20 U	0.20 U		40	
1,1,2-Trichloroethane	ug/L	0.30 U	0.30 U		40	
1,1-Dichloroethane	ug/L	0.34 U	0.34 U		40	
1,1-Dichloroethene	ug/L	0.50 U	0.50 U		40	
1,2,3-Trichloropropane	ug/L	1.1 U	1.1 U		40	
1,2-Dichlorobenzene	ug/L	0.50 U	0.50 U		40	
1,2-Dichloroethane	ug/L	0.50 U	0.50 U		40	
1,2-Dichloropropane	ug/L	0.23 U	0.23 U		40	
1,4-Dichlorobenzene	ug/L	0.50 U	0.50 U		40	
2-Butanone (MEK)	ug/L	5.0 U	5.0 U		40	J(v2)
2-Hexanone	ug/L	0.85 U	0.85 U		40	
4-Methyl-2-pentanone (MIBK)	ug/L	0.32 U	0.32 U		40	
Acetone	ug/L	5.3 U	5.3 U		40	J(v2)
Acrylonitrile	ug/L		3.7 U		40	
Benzene	ug/L	0.10 U	0.10 U		40	
Bromochloromethane	ug/L	0.37 U	0.37 U		40	
Bromodichloromethane	ug/L	0.19 U	0.19 U		40	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508653

SAMPLE DUPLICATE: 3186398

Parameter	Units	35510815001 Result	Dup Result	RPD	Max RPD	Qualifiers
Bromoform	ug/L	2.6 U	2.6 U		40	
Bromomethane	ug/L	4.0 U	4.0 U		40	J(v2)
Carbon disulfide	ug/L	0.45 U	0.45 U		40	
Carbon tetrachloride	ug/L	0.50 U	0.50 U		40	
Chlorobenzene	ug/L	1.8	3.0	51	40	J(D6)
Chloroethane	ug/L	3.7 U	3.7 U		40	
Chloroform	ug/L	0.50 U	0.50 U		40	
Chloromethane	ug/L	0.97 U	0.97 U		40	
cis-1,2-Dichloroethene	ug/L	0.50 U	0.50 U		40	
cis-1,3-Dichloropropene	ug/L	0.17 U	0.17 U		40	
Dibromochloromethane	ug/L	0.45 U	0.45 U		40	
Dibromomethane	ug/L	0.68 U	0.68 U		40	
Ethylbenzene	ug/L	0.50 U	0.50 U		40	
Iodomethane	ug/L	9.3 U	9.3 U		40	J(v2)
Methylene Chloride	ug/L	2.0 U	2.0 U		40	
Styrene	ug/L	0.26 U	0.26 U		40	
Tetrachloroethene	ug/L	0.50 U	0.50 U		40	
Toluene	ug/L	0.50 U	0.50 U		40	
trans-1,2-Dichloroethene	ug/L	0.50 U	0.50 U		40	J(v2)
trans-1,3-Dichloropropene	ug/L	0.17 U	0.17 U		40	
trans-1,4-Dichloro-2-butene	ug/L		2.5 U		40	J(v2)
Trichloroethene	ug/L	0.50 U	0.50 U		40	
Trichlorofluoromethane	ug/L	0.35 U	0.35 U		40	
Vinyl acetate	ug/L	0.19 U	0.19 U		40	
Vinyl chloride	ug/L	0.50 U	0.50 U		40	
Xylene (Total)	ug/L	1.0 U	1.0 U		40	
1,2-Dichloroethane-d4 (S)	%	97	95		40	
4-Bromofluorobenzene (S)	%	97	97		40	
Toluene-d8 (S)	%	99	98		40	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508653

QC Batch: 583924 Analysis Method: EPA 8011
QC Batch Method: EPA 8011 Analysis Description: 8011 EDB DBCP
Associated Lab Samples: 35508653001, 35508653002, 35508653003, 35508653004, 35508653006

METHOD BLANK: 3175087 Matrix: Water
Associated Lab Samples: 35508653001, 35508653002, 35508653003, 35508653004, 35508653006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.0064 U	0.020	0.0064	11/05/19 17:08	
1,2-Dibromoethane (EDB)	ug/L	0.0075 U	0.010	0.0075	11/05/19 17:08	

LABORATORY CONTROL SAMPLE: 3175088

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.26	102	60-140	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.27	107	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3175089 3175090

Parameter	Units	35508692001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.0065 U	0.44	0.44	0.52	0.50	119	115	60-140	3	40	
1,2-Dibromoethane (EDB)	ug/L	0.0076 U	0.44	0.44	0.52	0.51	120	117	60-140	2	40	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508653

QC Batch: 583792 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 35508653003, 35508653004

METHOD BLANK: 3174329 Matrix: Water
Associated Lab Samples: 35508653003, 35508653004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	5.0 U	5.0	5.0	11/02/19 07:41	

LABORATORY CONTROL SAMPLE: 3174330

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	300	297	99	90-110	

SAMPLE DUPLICATE: 3174331

Parameter	Units	20127948001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	220	215	2	5	

SAMPLE DUPLICATE: 3174332

Parameter	Units	35508653003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1160	1160	0	5	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508653

QC Batch: 583869 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 35508653001, 35508653002

METHOD BLANK: 3174952 Matrix: Water
Associated Lab Samples: 35508653001, 35508653002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	5.0 U	5.0	5.0	11/03/19 12:21	

LABORATORY CONTROL SAMPLE: 3174953

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	300	272	91	90-110	

SAMPLE DUPLICATE: 3174954

Parameter	Units	20128149001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	139	139	0	5	

SAMPLE DUPLICATE: 3174955

Parameter	Units	35508856003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	174	175	1	5	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508653

QC Batch: 584857 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 35508653001, 35508653002, 35508653003, 35508653004

METHOD BLANK: 3179433 Matrix: Water
Associated Lab Samples: 35508653001, 35508653002, 35508653003, 35508653004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	2.5 U	5.0	2.5	11/06/19 20:34	
Sulfate	mg/L	2.5 U	5.0	2.5	11/06/19 20:34	

LABORATORY CONTROL SAMPLE: 3179434

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	47.8	96	90-110	
Sulfate	mg/L	50	47.2	94	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3179540 3179541

Parameter	Units	35508655001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.6	50	50	53.3	53.3	96	95	90-110	0	20	
Sulfate	mg/L	2.5 U	50	50	47.9	47.8	92	92	90-110	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508653

QC Batch: 584002 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 35508653001, 35508653002, 35508653003, 35508653004

METHOD BLANK: 3175279 Matrix: Water
Associated Lab Samples: 35508653001, 35508653002, 35508653003, 35508653004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	0.035 U	0.050	0.035	11/04/19 15:18	

LABORATORY CONTROL SAMPLE: 3175280

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	1	1.0	99	90-110	

MATRIX SPIKE SAMPLE: 3175282

Parameter	Units	35508438001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	0.035 U	1	1.0	102	90-110	

SAMPLE DUPLICATE: 3175281

Parameter	Units	35508438001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	0.035 U	0.035 U		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508653

QC Batch: 583518 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 35508653004

METHOD BLANK: 3172507 Matrix: Water
Associated Lab Samples: 35508653004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.050	0.025	11/01/19 07:31	

SAMPLE DUPLICATE: 3172509

Parameter	Units	35505042001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	23.4	23.5	0	20	Q

SAMPLE DUPLICATE: 3172511

Parameter	Units	35508613001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	1.8	1.8	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Central County Landfill Semian
Pace Project No.: 35508653

QC Batch: 583683 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 35508653001, 35508653002, 35508653003

METHOD BLANK: 3173341 Matrix: Water
Associated Lab Samples: 35508653001, 35508653002, 35508653003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.050	0.025	11/01/19 14:59	

SAMPLE DUPLICATE: 3173343

Parameter	Units	20128061003 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.69	0.70	1	20	Q

SAMPLE DUPLICATE: 3173345

Parameter	Units	35508856003 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.025 U		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALIFIERS

Project: Central County Landfill Semian
Pace Project No.: 35508653

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-O	Pace Analytical Services - Ormond Beach

ANALYTE QUALIFIERS

I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
U	Compound was analyzed for but not detected.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
J(D6)	Estimated Value. The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.
J(M1)	Estimated Value. Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
J(v2)	The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.
J(v3)	The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have a low bias.
Q	Sample held beyond the accepted holding time.
Q	Sample held beyond the accepted holding time. Sample was received outside EPA method holding time.

Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Central County Landfill Semian
Pace Project No.: 35508653

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
35508653001	**MW-10R (4510)**				
35508653002	**MW-15 (23031)**				
35508653003	**MW-16 (23032)**				
35508653001	**MW-10R (4510)**	EPA 8011	583924	EPA 8011	584149
35508653002	**MW-15 (23031)**	EPA 8011	583924	EPA 8011	584149
35508653003	**MW-16 (23032)**	EPA 8011	583924	EPA 8011	584149
35508653004	**Equipment Blank 2**	EPA 8011	583924	EPA 8011	584149
35508653006	**Trip Blank 8011 3**	EPA 8011	583924	EPA 8011	584149
35508653001	**MW-10R (4510)**	EPA 3010	583510	EPA 6010	583514
35508653002	**MW-15 (23031)**	EPA 3010	583510	EPA 6010	583514
35508653003	**MW-16 (23032)**	EPA 3010	583510	EPA 6010	583514
35508653004	**Equipment Blank 2**	EPA 3010	583510	EPA 6010	583514
35508653001	**MW-10R (4510)**	EPA 3010	583509	EPA 6020	583513
35508653002	**MW-15 (23031)**	EPA 3010	583509	EPA 6020	583513
35508653003	**MW-16 (23032)**	EPA 3010	583509	EPA 6020	583513
35508653004	**Equipment Blank 2**	EPA 3010	583509	EPA 6020	583513
35508653001	**MW-10R (4510)**	EPA 7470	585203	EPA 7470	585304
35508653002	**MW-15 (23031)**	EPA 7470	585203	EPA 7470	585304
35508653003	**MW-16 (23032)**	EPA 7470	585203	EPA 7470	585304
35508653004	**Equipment Blank 2**	EPA 7470	585203	EPA 7470	585304
35508653001	**MW-10R (4510)**	EPA 8260	585889		
35508653002	**MW-15 (23031)**	EPA 8260	585889		
35508653003	**MW-16 (23032)**	EPA 8260	585889		
35508653004	**Equipment Blank 2**	EPA 8260	585889		
35508653005	**Trip Blank 8260 3**	EPA 8260	585889		
35508653001	**MW-10R (4510)**	SM 2540C	583869		
35508653002	**MW-15 (23031)**	SM 2540C	583869		
35508653003	**MW-16 (23032)**	SM 2540C	583792		
35508653004	**Equipment Blank 2**	SM 2540C	583792		
35508653001	**MW-10R (4510)**	EPA 300.0	584857		
35508653002	**MW-15 (23031)**	EPA 300.0	584857		
35508653003	**MW-16 (23032)**	EPA 300.0	584857		
35508653004	**Equipment Blank 2**	EPA 300.0	584857		
35508653001	**MW-10R (4510)**	EPA 350.1	584002		
35508653002	**MW-15 (23031)**	EPA 350.1	584002		
35508653003	**MW-16 (23032)**	EPA 350.1	584002		
35508653004	**Equipment Blank 2**	EPA 350.1	584002		
35508653001	**MW-10R (4510)**	EPA 353.2	583683		
35508653002	**MW-15 (23031)**	EPA 353.2	583683		
35508653003	**MW-16 (23032)**	EPA 353.2	583683		
35508653004	**Equipment Blank 2**	EPA 353.2	583518		

Pace Analytical

CHAIN-OF-CUSTODY /

The Chain-of-Custody is a LEGAL D

WO# : 35508653

35508653

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Sarasota County	Report To:	Heather Bryen	Attention:	
Address:	1255 T. Mabry Carlton Parkway	Copy To:		Company Name:	
Venice, FL 34293				Address:	
Email:	hbryen@scgov.net	Purchase Order #:		Pace Quote:	
Phone:	941-650-1112 Fax:	Project Name:	Central County Landfill Semiannual GW	Pace Project Manager:	martha.montero@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	833 #1

Regulatory Agency
State / Location
FL

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Y/N	Analyses Test: metals by 6010/6020/7470	TDS NO3 Cl SO4	NH3 Total Ammonia-N	Voc by 8260 Appendix 1	EDB and DBCP EPA 8011	Trip Blank 8260	Trip Blank 8011	Residual Chlorine (Y/N)	Requested Analysis Filtered (Y/N)
1	~~MW-1R (20585)~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
2	~~MW-8A (21453)~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
3	~~MW-9 (4509)~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
4	MW-10R (4510)	WT	G	10-31-19	1235				8	3	1	1	3						A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
5	MW-15 (23031)	WT	G	10-31-19	1035				8	3	1	1	3						A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
6	MW-16 (23032)	WT	G	10-31-19	0830				8	3	1	1	3						A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
7	~~MW-17 (23033)~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
8	~~MW-18R (29095)~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
9	~~MW-19A (27140)~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
10	~~MW-20A (27141)~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
11	~~DUP-1~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn
12	~~Equipment Blank-1~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						~~A~~	~~B~~	~~C~~	~~D,E,F~~	~~G,H~~				Metals:Fe,Hg,Na,Mn

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Central county Monitoring wells Adapt	Sarasota County	10-31-19	1420		10/31/19	1420	T203			
PLEASE USE ADAPT		10/31/19	1555		10/31/19	1555	4.5	X	~	X

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ronald L. Moore

SIGNATURE of SAMPLER:

DATE Signed: 10-31-19

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 2 Of 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Sarasota County	Report To:	Heather Bryen	Attention:	
Address:	1255 T. Mabry Carlton Parkway	Copy To:		Company Name:	
	Venice, FL 34293			Address:	
Email:	hbryen@scgov.net	Purchase Order #:		Pace Quote:	
Phone:	941-650-1112 Fax:	Project Name:	Central County Landfill Semiannual GW	Pace Project Manager:	martha.montero@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	833 #1

Regulatory Agency	
State / Location	FL

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	metals by 6010/6020/7470	TDS NO3 Cl SO4	NH3 Total Ammonia-N	Voc by 8260 Appendix 1	EDB and DBCP EPA 8011	Trip Blank 8260	Trip Blank 8011	Residual Chlorine (Y/N)	
	MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS																	Requested Analysis Filtered (Y/N)										
13	Equipment Blank 2	WT	G	10-31-19	0915				8	3	1	1	3						A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
14	~~Equipment Blank 3~~ RLM	WT	G						~~8~~	~~3~~	~~1~~	~~1~~	~~3~~						A	B	C	D,E,F	G,H				Metals:Fe,Hg,Na,Mn
15	~~Trip Blank 8260 1~~ RLM	WT							~~2~~				~~2~~											~~2~~			
16	~~Trip Blank 8260 2~~ RLM	WT							~~2~~				~~2~~											~~2~~			
17	Trip Blank 8260 3	WT		10-31-19					2				2											2			
18	~~Trip Blank 8011 1~~ RLM	WT							~~2~~	~~2~~															~~2~~		
19	~~Trip Blank 8011 2~~ RLM	WT							~~2~~	~~2~~															~~2~~		
20	Trip Blank 8011 3	WT		10-31-19					2	2															2		
21																											
22																											
23																											
24																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Central county Monitoring wells Adapt	Sarasota County	10-31-19	1420		10/31/19	1420	T203			
Please use ADAPT		10/31/19	1555	PACE	10-31-19	1555	4.5	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ronald L. Moore

SIGNATURE of SAMPLER: [signature] DATE Signed: 10-31-19

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical Florida Laboratory	Document Name: Sample Condition Upon Receipt Form	Document Revised: May 30, 2018
	Document No.: F-FL-C-007 rev. 13	Issuing Authority: Pace Florida Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project # WO#: 35508653 ✓

Project Manager: PM: MIM **Due Date:** 11/14/19

Client: CLIENT: SARCOU

Date and Initials of person:
Examining contents: MVL
Label: 10/31/19
Deliver:
pH:

Thermometer Used: T-203 Date: 10-31-19 Time: 1555 Initials: MJM

State of Origin: FL ☐ For WV projects, all containers verified to ≤6 °C

Cooler #1 Temp.°C	4.6 (Visual)	-0.1 (Correction Factor)	4.5 (Actual)	☑ Samples on ice, cooling process has begun
Cooler #2 Temp.°C	(Visual)	(Correction Factor)	(Actual)	☐ Samples on ice, cooling process has begun
Cooler #3 Temp.°C	(Visual)	(Correction Factor)	(Actual)	☐ Samples on ice, cooling process has begun
Cooler #4 Temp.°C	(Visual)	(Correction Factor)	(Actual)	☐ Samples on ice, cooling process has begun
Cooler #5 Temp.°C	(Visual)	(Correction Factor)	(Actual)	☐ Samples on ice, cooling process has begun
Cooler #6 Temp.°C	(Visual)	(Correction Factor)	(Actual)	☐ Samples on ice, cooling process has begun

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Shipping Method: ☐ First Overnight ☐ Priority Overnight ☐ Standard Overnight ☐ Ground ☐ International Priority ☐ Other

Billing: ☐ Recipient ☐ Sender ☐ Third Party ☐ Credit Card ☐ Unknown

Tracking #

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals intact:** ☐ Yes ☐ No **Ice:** Wet Blue Dry None

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Samples shorted to lab (If Yes, complete) Shorted Date: Shorted Time: Qty:

		Comments:
Chain of Custody Present	☑Yes ☐ No ☐N/A	
Chain of Custody Filled Out	☑Yes ☐ No ☐N/A	
Relinquished Signature & Sampler Name COC	☑Yes ☐ No ☐N/A	
Samples Arrived within Hold Time	☑Yes ☐ No ☐N/A	
Rush TAT requested on COC	☐Yes ☑ No ☐N/A	
Sufficient Volume	☑Yes ☐ No ☐N/A	
Correct Containers Used	☑Yes ☐ No ☐N/A	
Containers Intact	☑Yes ☐ No ☐N/A	
Sample Labels match COC (sample IDs & date/time of collection)	☑Yes ☐ No ☐N/A	
All containers needing acid/base preservation have been checked.	☑Yes ☐ No ☐N/A	Preservation Information:
All Containers needing preservation are found to be in compliance with EPA recommendation: Exceptions: VOA, Coliform, TOC, O&G, Carbamates	☑Yes ☐ No ☐N/A	Preservative: Lot #/Trace #: Date: Time: Initials:
Headspace in VOA Vials? (>6mm):	☐Yes ☑ No ☐N/A	
Trip Blank Present:	☑Yes ☐ No ☐N/A	8260d 8011

Client Notification/ Resolution:
Person Contacted: Date/Time:

Comments/ Resolution (use back for additional comments):

Project Manager Review: Date:

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **MW-10R**	SAMPLE ID: **4510**	DATE: 10-31-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.375**	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 20.06	PURGE PUMP TYPE OR BAILER: **ESP**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (**30.2** feet – 20.6 feet) X **0.16** gallons/foot = 1.7 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): 21.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 22.0	PURGING INITIATED AT: 1140	PURGING ENDED AT: 1234	TOTAL VOLUME PURGED (gallons): 2.7 ✓

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)
1214	1.7	1.7	0.05	21.35	6.39	29.2	1696	0.02	0.86	Amber	None
1224	0.5	2.2	0.05	21.22	6.38	29.2	1643	0.02	1.73	Amber	None
1234	0.5	2.7	0.05	21.30	6.39	29.3	1641	0.02	2.15	Amber	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1235 ✓	SAMPLING ENDED AT: 1245
PUMP OR TUBING DEPTH IN WELL (feet): 22.0	TUBING MATERIAL CODE: **LDPE**	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 (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
D,E,F	3	CG	40 mL	HCl & wet ice	N/A	\	8260-vocs App. I	ESP	200
G,H	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I	ESP	|
A	1	HDPE	250 mL	HNO3 & wet ice	N/A	< 2	Metals – App. I	ESP	|
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A	< 2	Total Ammonia-N	ESP	|
B	1	HDPE	1 L	Wet ice	N/A	N/A	TDS,NO3,Cl,SO4	ESP	|

REMARKS: Heavy sheen in water.

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **MW-15**	SAMPLE ID: **23031**	DATE: 10-31-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.375**	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 24.32	PURGE PUMP TYPE OR BAILER: **ESP**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (**30.5** feet – 24.32 feet) X **0.16** gallons/foot = 1.0 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): 25.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 26.5	PURGING INITIATED AT: 1000	PURGING ENDED AT: 1030	TOTAL VOLUME PURGED (gallons): 1.6 ✓

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)
1020	1.0	1.0	0.05	25.52	6.59	28.1	3306	0.06	2.37	Amber	None
1025	0.3	1.3	0.05	25.61	6.58	28.0	3298	0.04	2.51	Amber	None
1030	0.3	1.6	0.05	25.69	6.58	27.9	3297	0.04	2.60	Amber	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1035 ✓	SAMPLING ENDED AT: 1045
PUMP OR TUBING DEPTH IN WELL (feet): 26.5	TUBING MATERIAL CODE: **LDPE**	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 (including wet ice)			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			
D,E,F	3	CG	40 mL	HCl & wet ice	N/A	\	8260-vocs App. I	ESP	200
G,H	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I	ESP	|
A	1	HDPE	250 mL	HNO3 & wet ice	N/A	\	Metals – App. I	ESP	|
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A		Total Ammonia-N	ESP	|
B	1	HDPE	1 L	Wet ice	N/A	N/A	TDS,NO3,Cl,SO4	ESP	|

REMARKS:
Heavy sheen on water.

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: **MW-16**	SAMPLE ID: **23032**	DATE: 10-31-19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): **0.375**	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 24.45	PURGE PUMP TYPE OR BAILER: **ESP**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (**30.3** feet – 24.45 feet) X **0.16** gallons/foot = 1.0 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): 25.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 26.0	PURGING INITIATED AT: 0755	PURGING ENDED AT: 0825	TOTAL VOLUME PURGED (gallons): 1.6

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)
0815	1.0	1.0	0.05	25.18	6.41	27.6	2426	0.05	0.94	Amber	None
0820	0.3	1.3	0.05	25.07	6.41	27.7	2414	0.06	2.40	Amber	None
0825	0.3	1.6	0.05	25.10	6.40	27.8	2405	0.05	3.06	Amber	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: Ronald L. Moore / Sarasota County	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0830	SAMPLING ENDED AT: 0845
PUMP OR TUBING DEPTH IN WELL (feet): 26.0	TUBING MATERIAL CODE: **LDPE**	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 (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
D,E,F	3	CG	40 mL	HCl & wet ice	N/A	\	8260-vocs App. I	ESP	200
G,H	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I	ESP	|
A	1	HDPE	250 mL	HNO3 & wet ice	N/A	\	Metals – App. I	ESP	|
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A	\	Total Ammonia-N	ESP	|
B	1	HDPE	1 L	Wet ice	N/A	N/A	TDS,NO3,Cl,SO4	ESP	|

REMARKS: Heavy sheen on water. Equipment Blank 2 was taken next to this well after well was sampled and after decon of submersible well pump.

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) 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)

BENCHMARK
EnviroAnalytical Inc.

NELAC Certification #E84167

ANALYTICAL TEST REPORT
THESE RESULTS MEET NELAC STANDARDS

Submission Number : 19110651

Sarasota County Utilities Oper
1255 T. Mabry Carlton Pkwy
Venice, FL 34293

Cesar Rodriguez

Project Name : CENTRAL COUNTY SURFACE WATER
Date Received : 11/14/2019
Time Received : 1520

Submission Number: 19110651
Sample Number: 001
Sample Description: Pond 1
Sample Date: 11/14/2019
Sample Time: 0900
Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
FECAL COLIFORM	70 B	#/100 ML	10	10	SM9222D	11/14/2019 15:52	LG

Submission Number: 19110651
Sample Number: 002
Sample Description: Pond 2
Sample Date: 11/14/2019
Sample Time: 1030
Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
FECAL COLIFORM	20 B	#/100 ML	10	10	SM9222D	11/14/2019 15:52	LG

Submission Number: 19110651
Sample Number: 003
Sample Description: Dup-2
Sample Date: 11/14/2019
Sample Time: 0900
Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
FECAL COLIFORM	40 B	#/100 ML	10	10	SM9222D	11/14/2019 15:52	LG

Submission Number: 19110651
Sample Number: 004
Sample Description: Field Blank
Sample Date: 11/14/2019
Sample Time: 0827
Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
FECAL COLIFORM	10 U	#/100 ML	10	10	SM9222D	11/14/2019 15:52	LG

11/19/2019

Dale D. Dixon / Laboratory Director — Date

Tülay Tanrisever / Kara Peterson - QC/QA Officers

DATA QUALIFIERS THAT MAY APPLY:

A = Value reported is an average of two or more determinations.
B = Results based upon colony counts outside the ideal range.
H = Value based on field kit determination. Results may not be accurate.
I = Reported value is between the laboratory MDL and the PQL.
J1 = Estimated value. Surrogate recovery limits exceeded.
J2 = Estimated value. No quality control criteria exists for component.
J3 = Estimated value. Quality control criteria for precision or accuracy not met.
J4 = Estimated value. Sample matrix interference suspected.
J5 = Estimated value. Data questionable due to improper lab or field protocols.
K = Off-scale low. Value is known to be < the value reported.
L = Off-scale high. Value is known to be > the value reported.
N = Presumptive evidence of presence of material.
O = Sampled, but analysis lost or not performed.
Q = Sample held beyond accepted hold time.
T = Value reported is < MDL. Reported for informational purposes only and shall not be used in statistical analysis.
U = Analyte analyzed but not detected at the value indicated.
V = Analyte detected in sample and method blank. Results for this analyte in associated samples may be biased high. Standard, Duplicate and Spike values are within control limits. Reported data are usable.
Y = Analysis performed on an improperly preserved sample. Data may be inaccurate.
Z = Too many colonies were present (TNTC). The numeric value represents the filtration volume.
! = Data deviate from historically established concentration ranges.
? = Data rejected and should not be used. Some or all of QC data were outside criteria, and the presence or absence of the analyte cannot be determined from the data.
* = Not reported due to interference.
Oil & Grease - If client does not send sufficient sample quantity for spike evaluation surface water samples are supplied by the laboratory.

NOTES:

MBAS calculated as LAS; molecular weight = 340.
PQL = 4xMDL.
ND = Not detected at or above the adjusted reporting limit.
X = Value exceeds MCL.
G1 = Accuracy standard does not meet method control limits, but does meet lab control limits that are in agreement with USEPA generated data. USEPA letter available upon request.

COMMENTS:

For questions or comments regarding these results, please contact us at (941) 723-9986.

Results relate only to the samples.

Benchmark EnviroAnalytical, Inc.
1711 Twelfth Street East
Palmetto, FL 34221
(941) 723-9986
(941) 723-6061 fax
www.Benchmarkea.com

Please Use Adapt

Client: **Sarasota County Environmental Services**
Public Utilities
1255 T. Mabry Carlton Parkway
Venice, FL 34292
(941) 650-9834
(941) 650-1112
(941) 480-3558 fax

Project Name: Central County Surface Water
Purchase Order Number: 180708

Laboratory Submission #: 19110651

Station ID:		Sample Matrix[2]	Sample Type[1]	**Analysis Requested:**				
				Fecal Coliform				
				Preservative: Sodium Thiosulfate				
Pond 1	28824	SW	Grab	Date & Time: 11-14-19 0900 ✓				-1
Pond 2	28825	SW	Grab	Date & Time: 11-14-19 1030 ✓				-2
DUP-2		SW	G	11-14-19 0900 ✓				-3
Field Blank		SW	G	11-14-19 0827 ✓				-4

1 "Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).
2 "Sample Matrix" is used to indicate whether the sample is being discharged to drinking water (DW), groundwater (GW), surface water (SW), soil, sediment (SDMNT), or sludge (SLDG).
3 "Container Type" is used to indicate whether the container is plastic (P) or glass (G).
4 **Sample must be refrigerated or stored in wet ice after collection. The maximum temperature during storage should be 4°C (39.2°F).** (8 hr. hold time)
Under "Preservative," list any preservatives that were added to the sample container.

Laboratory Sample Acceptability: pH <2 : ✓
BEAS Temperature:
BEA Temperature: 1.8°C

Instructions:
1. Each bottle has a label identifying sample ID, premeasured preservative contained in the bottle, sample type, client ID, and parameters for analysis.
2. The following information should be added to each bottle label after collection with permanent black ink: date and time of collection, sampler's name or initials, and any field number or ID.
3. All bottles not containing preservative may be rinsed with appropriate sample prior to collection.
4. The client is responsible for documentation of the sampling event. Please note special sampling events on the sample custody form

1	Collector – Relinquished by: Ronald L Moore	Date: 11-14-19	Time: 1215	Received By:	Date: 11-14-19	Time: 1323
2	Relinquished by:	Date: 11-14-19	Time: 1520	Received By:	Date: 11-14-19	Time: 1520
3	Relinquished by:	Date:	Time	Received By:	Date:	Time