

Sarasota County
Central County Solid Waste Disposal Complex
Permit Number: 130542-022-SO/01
WACS ID: SWD/58/51614

2019 Semi-Annual Groundwater Report (January – June 2019)

2019 Semi-Annual Surface Water Report (January – June 2019)

June 2019

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



4000 Knights Trail Rd.
Nokomis, FL 34275

941-861-5000
scgov.net

June 20, 2019

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
1st Semi-Annual Groundwater Report (January – June 2019)
1st Semi-Annual Surface Water Report (January – June 2019)

To Whom It May Concern:

Enclosed are the 1st 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 10.9 ug/L which is consistent with the previous sampling events. The iron result for NAM -3 was reported at 6,370

ug/L exceeding the limit of 6300 ug/L, but within historical values. NAM-4 had an exceedance for pH at 5.90 pH.

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,

A handwritten signature in black ink, appearing to read "R. L. Moore".

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.

June 20, 2019

(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) _____

Northwest District
160 Government Center
Pensacola, FL 32501-5794
850-595-8360

Northeast District
7825 Baymeadows Way, Ste. 200 B
Jacksonville, FL 32256-7590
904-807-3300

Central District
3319 Maguire Blvd., Ste. 232
Orlando, FL 32803-3767
407-894-7555

Southwest District
13051 N. Telecom Pky.
Temple Terrace, FL
813-632-7600

South District
2295 Victoria Ave., Ste. 364
Fort Myers, FL 33902-2549
239-332-6975

Southeast District
400 North Congress Ave.
West Palm Beach, FL 33401
561-681-6600

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

2019 - 1st Semi-Annual Groundwater Evaluation Monitoring Report - Groundwater Monitoring Wells

Parameter	MCL	20585	21455	4509	4510	23031	23032	23033	29095	27140	27141
		Background	Detection	Detection	Detection	Detection	Detection	Detection	Detection	Detection	Detection
		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		5.98		6.19		6.30	6.25	5.70		
Sodium	456 mg/l*										
Chloride	643 mg/l*										

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

2019 - 1st Semi-Annual Groundwater Evaluation Monitoring Report - Natural Attenuation Monitoring Wells

Parameter	MCL	29091	29092	29093	29094
		NAM	NAM	NAM	NAM
		NAM-1	NAM-2	NAM-3	NAM-4
pH	6.5-8.5				5.90
Total Ammonia	2.8 mg/l				
Iron	6.3 mg/l*			6.37	
Manganese	50 ug/l				
Arsenic	10 ug/l		10.90		
Solids, Total Dissolved	1924 mg/l*				

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

2019 - 1st Semi-Annual Surface Water Evaluation Monitoring Report

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

There were no exceedences for Surface Water.

Central County Solid Waste Disposal Complex
Water Elevation Table 04/30/2019

Well	Date Measured	Depth to Water (ft)	Top of Casing (ft) NGVD 1929	Calculated Water Elevation (ft) NGVD 1929
MW-3	4/30/2019	5.20	23.340	18.14
MW-5	4/30/2019	6.92	23.190	16.27
MW-1R	4/30/2019	6.59	24.428	17.84
MW-8A	4/30/2019	16.43	35.400	18.97
MW-9	4/30/2019	12.17	32.08	19.91
MW-10R	4/30/2019	20.79	39.49	18.70
CW-8A	4/30/2019	16.28	35.040	18.76
CW-9	4/30/2019	7.73	26.582	18.85
CW-10R	4/30/2019	8.10	26.982	18.88
MW-15	4/30/2019	25.45	44.320	18.87
MW-16	4/30/2019	25.51	43.730	18.22
MW-17	4/30/2019	28.68	46.150	17.47
MW-18R	4/30/2019	11.10	28.330	17.23
CW-15	4/30/2019	11.24	30.173	18.93
CW-16	4/30/2019	11.38	29.578	18.20
MW-19A	4/30/2019	10.69	27.52	16.83
MW-20A	4/30/2019	11.14	27.38	16.24
NAM-1	4/30/2019	5.02	19.87	14.85
NAM-2	4/30/2019	5.26	20.02	14.76
NAM-3	4/30/2019	5.26	20.62	15.36
NAM-4	4/30/2019	7.89	22.66	14.77

Staff Gauge	Date Measured	Staff Gauge Reading (ft)	Staff Gauge Elevation (ft)	Calculated Water Elevation (ft)
STW1	4/30/2019	1.40	21.187 (3')	19.59
STW1A	4/30/2019	*	22.64 (6')	*
STW2	4/30/2019	1.10	20.305 (4')	17.41
STW2A	4/30/2019	***	20.18 (5')	***
STW3	4/30/2019	0.85	20.191 (4')	17.04
STW3A	4/30/2019	2.58	18.43 (4')	17.01
STW4	4/30/2019	Dry	19.342 (4')	Dry
STW4A	4/30/2019	2.95	17.35 (4')	16.30
STW5A	4/30/2019	Dry	19.788 (4')	Dry
STW5B	4/30/2019	**	18.04 (4')	**
STW6	4/30/2019	0.55	19.37 (4')	15.92
STW6A	4/30/2019	3.54	17.67 (5')	16.21
STW7	4/30/2019	0.90	22.287 (4')	19.19
STW7A	4/30/2019	4.18	19.02 (4')	19.20

* Not readable due to vegetation coverage and leaning. Scheduled to be repaired or replaced.

** Not readable due to leaning. Scheduled to be repaired or replaced.

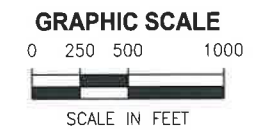
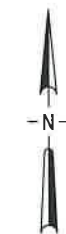
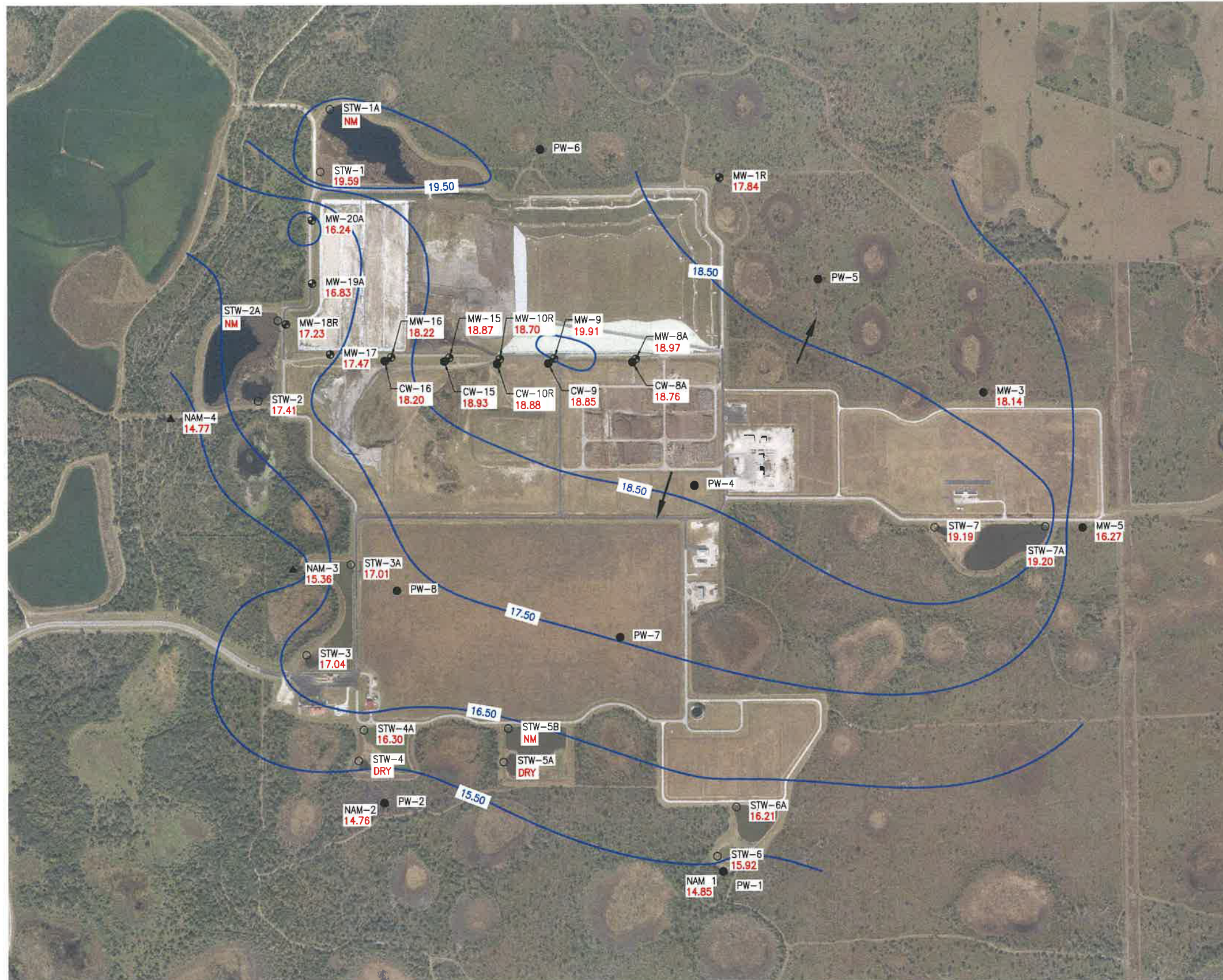
*** Staff Gauge is missing. Scheduled to be replaced.

Measured by Ronald Moore on 4/30/2019

SAVED: 5/9/2019 1:51 PM SURFER12

\\JEDM\001\GWA\JONES EDMUNDS\SARASOTA COUNTY\CENTRAL CSWDC\GWA 2019\1951\CENTRAL CSWDC_1951.DWG

SAVED: 5/9/2019 1:51 PM SURFER12



LEGEND	
	MW-8A 18.97 GROUNDWATER MONITORING WELL
	NAM-1 14.85 NATURAL ATTENUATION MONITORING WELL
	PW-7 PIEZOMETER WELL
	STW-7A 19.20 STAFF GAUGE
	17.50 GROUNDWATER CONTOUR AT 1.00 FOOT INTERVALS
	GROUNDWATER FLOW DIRECTION
	NM NOT MEASURED

SARASOTA COUNTY
CENTRAL COUNTY SOLID
WASTE DISPOSAL COMPLEX
GROUNDWATER CONTOUR MAP
APRIL 30, 2019

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: 3/27/19

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ronald L. Moore / Sarasota County				SAMPLER(S) SIGNATURE(S): 			SAMPLING INITIATED AT: 0900		SAMPLING ENDED AT: 0905	
PUMP OR TUBING DEPTH IN WELL (feet): 4.8				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				
B	1	HDPE	250 mL	HNO3 & wet ice	N/A		Metals		APP	400
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A		Total Ammonia		APP	400
A	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorganics		APP	400
REMARKS: EQUIP BLANK Taken 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: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings < 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (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: 3/27/19	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ronald L. Moore / Sarasota County				SAMPLER(S) SIGNATURE(S): 			SAMPLING INITIATED AT: 1025		SAMPLING ENDED AT: 1040	
PUMP OR TUBING DEPTH IN WELL (feet): 5.5				TUBING MATERIAL CODE: S / HDPE			FIELD-FILTERED: Y (N)		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N (replaced))							DUPLICATE: (Y) ← N → PP			
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				
B	1	HDPE	250 mL	HNO3 & wet ice	N/A	<2	Metals	APP	400	
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A	<2	Total Ammonia	APP	400	
A	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorganics	APP	400	
REMARKS: DUP filled 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; RFPF = Reverse Flow Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible 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: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

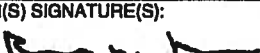
DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC		SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: NAM-3		SAMPLE ID: 29093	
		DATE: 3/27/19	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ronald L. Moore / Sarasota County				SAMPLER(S) SIGNATURE(S): 			SAMPLING INITIATED AT: 1200		SAMPLING ENDED AT: 1205	
PUMP OR TUBING DEPTH IN WELL (feet): 5.0				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				
B	1	HDPE	250mL	HNO3 & wet ice	N/A		Metals		APP	400
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A		Total Ammonia		APP	400
A	1	HDPE	1 L	Wet ice	N/A		Misc. Inorganics		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; RFPP = Reverse Flow Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible 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: $\pm 5\%$ 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: CCSVDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275
WELL NO: NAM-4	SAMPLE ID: 29094
DATE: 3/27/19	

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): 0.25	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 6.98	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 - 6.98 feet) X 0.16 gallons/foot = 1.2 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): 8.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8.0	PURGING INITIATED AT: 1255	PURGING ENDED AT: 1312	TOTAL VOLUME PURGED (gallons): 1.8

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)
1306	1.2	1.2	0.11	7.56	5.73	22.03	553	0.23	1.04	Clear	None
1309	0.3	1.5	0.11	7.55	5.85	22.03	555	0.30	1.40	Clear	None
1312	0.3	1.8	0.11	7.55	5.90	22.05	555	0.20	0.73	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: 1315	SAMPLING ENDED AT: 1320
PUMP OR TUBING DEPTH IN WELL (feet): 8.0	TUBING MATERIAL CODE: S / HDPE	FIELD-FILTERED: Y (N)	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			
B	1	HDPE	250 mL	HNO3 & wet ice	N/A	—	Metals	APP	400
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A	—	Total Ammonia	APP	400
A	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorganics	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: MW-1R	SAMPLE ID: 20585	DATE: 4/2/19	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ronald L. Moore / Sarasota County				SAMPLER(S) SIGNATURE(S): 			SAMPLING INITIATED AT: 0935		SAMPLING ENDED AT: 0950	
PUMP OR TUBING DEPTH IN WELL (feet): 8.0				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				
A, B, C	3	CG	40 mL	HCl & wet ice	N/A		8260-vocs App. I		APP	300
D, E	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I		APP	
F	1	HDPE	250 mL	HNO3 & wet ice	N/A		Metals - App. I		APP	
G	1	HDPE	250 mL	H2SO4 & wet ice	N/A		Nutrients - App. I		APP	
H	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorg. App. I		APP	
REMARKS: EQUIP 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; RFPF = 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:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (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: 4/3/19	

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): 0.25	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 16.09	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 - 16.09 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): 17.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 17.0	PURGING INITIATED AT: 1110	PURGING ENDED AT: 1131	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)
1123	1.0	1.6	0.08	16.68	5.87	23.89	1046	0.32	1.64	Clear	None
1127	0.3	1.3	0.08	16.71	5.92	23.96	1043	0.32	1.66	Clear	None
1131	0.3	1.6	0.08	16.72	5.98	24.04	1045	0.31	1.55	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: 1135	SAMPLING ENDED AT: 1150
PUMP OR TUBING DEPTH IN WELL (feet): 17.0	TUBING MATERIAL CODE: S / HDPE	FIELD-FILTERED: Y (N)	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			
A, B, C	3	CG	40 mL	HCl & wet ice	N/A	—	8260-vocs App. I	APP	300
D, E	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I	APP	—
F	1	HDPE	250 mL	HNO3 & wet ice	N/A	—	Metals – App. I	APP	—
G	1	HDPE	250 mL	H2SO4 & wet ice	N/A	—	Nutrients – App. I	APP	—
H	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorg. App. I	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;
RFPF = 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: CCSVDC		SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: MW-9	SAMPLE ID: 4509		DATE: 4/4/19

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ronald L. Moore / Sarasota County				SAMPLER(S) SIGNATURE(S): 			SAMPLING INITIATED AT: 0805		SAMPLING ENDED AT: 0815	
PUMP OR TUBING DEPTH IN WELL (feet): 13.8				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				
A, B, C	3	CG	40 mL	HCl & wet ice	N/A		8260-vocs App. I		APP	400
D, E	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I		APP	
F	1	HDPE	250 mL	HNO3 & wet ice	N/A		Metals – App. I		APP	
G	1	HDPE	250 mL	H2SO4 & wet ice	N/A		Nutrients – App. I		APP	
H	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorg. App. I		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; RFPP = Reverse Flow Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible 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:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (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-10R		SAMPLE ID: 4510	DATE: 4/4/19

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ronald L. Moore / Sarasota County				SAMPLER(S) SIGNATURE(S): 			SAMPLING INITIATED AT: 1140		SAMPLING ENDED AT: 1150	
PUMP OR TUBING DEPTH IN WELL (feet): 21.5				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				
A, B, C	3	CG	40 mL	HCl & wet ice	N/A	N/A	8260-vocs App. I		ESP	200
D, E	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I		ESP	
F	1	HDPE	250 mL	HNO3 & wet ice	N/A	4.2	Metals – App. I		ESP	
G	1	HDPE	250 mL	H2SO4 & wet ice	N/A	4.2	Nutrients – App. I		ESP	
H	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorg. App. I		ESP	
REMARKS: Heavy Sheen in Water.										
EQUIP BLANK #3 was taken after DECON after this well. (DI 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; RFPF = 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: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (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:	4/10/19

PURGING DATA

WELL DIAMETER (inches): 2.0		TUBING DIAMETER (inches): 0.375		WELL SCREEN INTERVAL DEPTH: feet to feet		STATIC DEPTH TO WATER (feet): 24.67		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 - 24.67 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): 25.7		FINAL PUMP OR TUBING DEPTH IN WELL (feet): 25.7		PURGING INITIATED AT: 0800		PURGING ENDED AT: 0832		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) <u>µmhos/cm</u> or µS/cm	DISSOLVED OXYGEN (circle units) <u>(mg/L or</u> % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
0820	1.0	1.0	0.05	25.20	6.77	26.85	3245	0.27	5.24	lt. Amber	None
0826	0.3	1.3	0.05	25.23	6.77	26.83	3238	0.24	2.83	lt. Amber	None
0832	0.3	1.6	0.05	25.28	6.74	26.75	3219	0.20	2.04	lt. Amber	None
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.08; 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" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 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: 0835		SAMPLING ENDED AT: 0850	
PUMP OR TUBING DEPTH IN WELL (feet): 25.7				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				
A, B, C	3	CG	40 mL	HCl & wet ice	N/A		8260-vocs App. I	ESP	200 	
D, E	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I	ESP		
F	1	HDPE	250 mL	HNO3 & wet ice	N/A		Metals – App. I	ESP		
G	1	HDPE	250 mL	H2SO4 & wet ice	N/A		Nutrients – App. I	ESP		
H	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorg. App. I	ESP		
REMARKS: Heavy sheen on water. Difficult filling, VOCs with no bubbles due to interaction with preservative.										
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; RFPF = 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: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

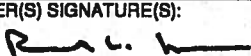
DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC		SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: MW-16		DATE: 4/10/19	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ronald L. Moore / Sarasota County				SAMPLER(S) SIGNATURE(S): 			SAMPLING INITIATED AT: 1025		SAMPLING ENDED AT: 1040	
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)			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				
A, B, C	3	CG	40 mL	HCl & wet ice	N/A		8260-vocs App. I	ESP		
D, E	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I	ESP		
F	1	HDPE	250 mL	HNO3 & wet ice	N/A		Metals – App. I	ESP		
G	1	HDPE	250 mL	H2SO4 & wet ice	N/A		Nutrients – App. I	ESP		
H	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorg. App. I	ESP		
REMARKS: Heavy Sheen on Water. Difficult to fill VOC, with no bubbles due to interaction with preservative.										
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; RPPP = Reverse Flow Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible 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: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (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		DATE: 4/10/19	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ronald L. Moore / Sarasota County				SAMPLER(S) SIGNATURE(S): 			SAMPLING INITIATED AT: 1215		SAMPLING ENDED AT: 1230		
PUMP OR TUBING DEPTH IN WELL (feet): 29.0				TUBING MATERIAL CODE: LDPE			FIELD-FILTERED: Y (N)		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 ID CODE				# CONTAINERS		MATERIAL CODE		VOLUME		PRESERVATIVE USED	
TOTAL VOL ADDED IN FIELD (mL)		FINAL pH		ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)			
A, B, C	3	CG	40 mL	HCl & wet ice	N/A	N/A	8260-vocs App. I	ESP	200		
D, E	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I	ESP			
F	1	HDPE	250 mL	HNO3 & wet ice	N/A	< 2	Metals - App. I	ESP			
G	1	HDPE	250 mL	H2SO4 & wet ice	N/A	< 2	Nutrients - App. I	ESP			
H	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorg. App. I	ESP			
REMARKS: Heavy Sheen on Water. Difficult Filling VOC with no bubbles due to interaction with preservatives.											
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; RFPF = Reverse Flow Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

NOTES: 1. The above do not constitute all of the information required by Chapter 82-160, 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:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

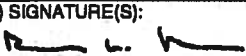
DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC		SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: MW-18R	SAMPLE ID: 29095	DATE: 4/3/19	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ronald L. Moore / Sarasota County				SAMPLER(S) SIGNATURE(S): 			SPRING INITIATED AT: 1015		SPRING ENDED AT: 1025		
PUMP OR TUBING DEPTH IN WELL (feet): 11.5				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)			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					
A, B, C	3	CG	40 mL	HCl & wet ice	N/A		8260-vocs App. I		APP		300
D, E	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I		APP		
F	1	HDPE	250 mL	HNO3 & wet ice	N/A		Metals – App. I		APP		
G	1	HDPE	250 mL	H2SO4 & wet ice	N/A		Nutrients – App. I		APP		
H	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorg. App. I		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; RFPF = Reverse Flow Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible 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:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ 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:	4/3/19

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ronald L. Moore / Sarasota County				SAMPLER(S) SIGNATURE(S): <i>R. L. Moore</i>			SAMPLING INITIATED AT: 0835		SAMPLING ENDED AT: 0850		
PUMP OR TUBING DEPTH IN WELL (feet): 12.0				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					
A, B, C	3	CG	40 mL	HCl & wet ice	N/A	/	8260-vocs App. I		APP		300
D, E	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I		APP		
F	1	HDPE	250 mL	HNO3 & wet ice	N/A	/	Metals - App. I		APP		
G	1	HDPE	250 mL	H2SO4 & wet ice	N/A	/	Nutrients - App. I		APP		
H	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorg. App. I		APP		
REMARKS: Odor in air coming from Active face of Landfill. Amb Temp 59° Wind NE @ 10 (DUP-filled from Well.) * Small particulates floating 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; RPPP = 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:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (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: 4/2/19

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ronald L. Moore / Sarasota County				SAMPLER(S) SIGNATURE(S): 			SAMPLING INITIATED AT: 1130		SAMPLING ENDED AT: 1145	
PUMP OR TUBING DEPTH IN WELL (feet): 13.0				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				
A, B, C	3	CG	40 mL	HCl & wet ice	N/A	NA	8260-vocs App. I		APP	300
D, E	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I		APP	
F	1	HDPE	250 mL	HNO3 & wet ice	N/A	22	Metals - App. I		APP	
G	1	HDPE	250 mL	H2SO4 & wet ice	N/A	22	Nutrients - App. I		APP	
H	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorg. App. I		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: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

SURVEY/PROJECT: Central County 1st Semi-Annual

METER # YSI-556

HACH 2100 G

[illegible]

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

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: 3/27/19

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ronald L. Moore / Sarasota County				SAMPLER(S) SIGNATURE(S): 			SAMPLING INITIATED AT: 0900		SAMPLING ENDED AT: 0905	
PUMP OR TUBING DEPTH IN WELL (feet): 4.8				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				
B	1	HDPE	250 mL	HNO3 & wet ice	N/A		Metals		APP	400
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A		Total Ammonia		APP	400
A	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorganics		APP	400
REMARKS: EQUIP BLANK Taken 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; RFPF = Reverse Flow Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible 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: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings < 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (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: 3/27/19	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ronald L. Moore / Sarasota County				SAMPLER(S) SIGNATURE(S): 			SAMPLING INITIATED AT: 1025		SAMPLING ENDED AT: 1040	
PUMP OR TUBING DEPTH IN WELL (feet): 5.5				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 → R			
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				
B	1	HDPE	250 mL	HNO3 & wet ice	N/A	<2	Metals	APP	400	
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A	<2	Total Ammonia	APP	400	
A	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorganics	APP	400	
REMARKS: DUP filled 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 = Baller; 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: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (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: 3/27/19	

PURGING DATA

WELL DIAMETER (Inches): 2.0	TUBING DIAMETER (Inches): 0.25	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 4.08	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) = (14.5 feet - 4.08 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): 5.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 5.0	PURGING INITIATED AT: 1130	PURGING ENDED AT: 1156	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)
1146	1.7	1.7	0.11	4.72	6.54	21.06	558	0.13	1.24	Clear	None
1151	0.5	2.2	0.11	4.74	6.56	21.00	558	0.15	3.87	Clear	None
1156	0.5	2.7	0.11	4.75	6.55	21.08	560	0.18	1.17	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" = 0.0008; 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: 1200	SAMPLING ENDED AT: 1205
PUMP OR TUBING DEPTH IN WELL (feet): 5.0	TUBING MATERIAL CODE: S / HDPE	FIELD-FILTERED: Y (N)	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			
B	1	HDPE	250mL	HNO3 & wet ice	N/A	/	Metals	APP	400
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A	/	Total Ammonia	APP	400
A	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorganics	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: CCSVDC	SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275
WELL NO: NAM-4	SAMPLE ID: 29094
DATE: 3/27/19	

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): 0.25	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 6.98	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 - 6.98 feet) X 0.16 gallons/foot = 1.2 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): 8.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8.0	PURGING INITIATED AT: 1255	PURGING ENDED AT: 1312	TOTAL VOLUME PURGED (gallons): 1.8

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)
1306	1.2	1.2	0.11	7.56	5.73	22.03	553	0.23	1.04	Clear	None
1309	0.3	1.5	0.11	7.55	5.85	22.03	555	0.30	1.40	Clear	None
1312	0.3	1.8	0.11	7.55	5.90	22.05	555	0.20	0.73	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: 1315	SAMPLING ENDED AT: 1320
PUMP OR TUBING DEPTH IN WELL (feet): 8.0	TUBING MATERIAL CODE: S / HDPE	FIELD-FILTERED: Y (N)	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			
B	1	HDPE	250 mL	HNO3 & wet ice	N/A	✓	Metals	APP	400
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A	✓	Total Ammonia	APP	400
A	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorganics	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: MW-1R	SAMPLE ID: 20585	DATE: 4/2/19	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ronald L. Moore / Sarasota County				SAMPLER(S) SIGNATURE(S): 			SAMPLING INITIATED AT: 0935		SAMPLING ENDED AT: 0950	
PUMP OR TUBING DEPTH IN WELL (feet): 8.0				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				
A, B, C	3	CG	40 mL	HCl & wet ice	N/A		8260-vocs App. I		APP	300
D, E	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I		APP	
F	1	HDPE	250 mL	HNO3 & wet ice	N/A		Metals - App. I		APP	
G	1	HDPE	250 mL	H2SO4 & wet ice	N/A		Nutrients - App. I		APP	
H	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorg. App. I		APP	
REMARKS: EQUIP 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; RFPF = 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:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (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: 4/3/19	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ronald L. Moore / Sarasota County				SAMPLER(S) SIGNATURE(S): 			SPRING INITIATED AT: 1135		SPRING ENDED AT: 1150	
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				
A, B, C	3	CG	40 mL	HCl & wet ice	N/A		8260-vocs App. I		APP	300
D, E	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I		APP	
F	1	HDPE	250 mL	HNO3 & wet ice	N/A		Metals - App. I		APP	
G	1	HDPE	250 mL	H2SO4 & wet ice	N/A		Nutrients - App. I		APP	
H	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorg. App. I		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 = Bailor; 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:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ 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: CCSVDC		SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: MW-9	SAMPLE ID: 4509		DATE: 4/4/19

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ronald L. Moore / Sarasota County				SAMPLER(S) SIGNATURE(S): 			SAMPLING INITIATED AT: 0805		SAMPLING ENDED AT: 0815	
PUMP OR TUBING DEPTH IN WELL (feet): 13.8				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				
A, B, C	3	CG	40 mL	HCl & wet ice	N/A		8260-vocs App. I		APP	400
D, E	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I		APP	
F	1	HDPE	250 mL	HNO3 & wet ice	N/A		Metals – App. I		APP	
G	1	HDPE	250 mL	H2SO4 & wet ice	N/A		Nutrients – App. I		APP	
H	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorg. App. I		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 = Baller; 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:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (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-10R		SAMPLE ID: 4510	DATE: 4/4/19

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ronald L. Moore / Sarasota County				SAMPLER(S) SIGNATURE(S): 			SAMPLING INITIATED AT: 1140		SAMPLING ENDED AT: 1150	
PUMP OR TUBING DEPTH IN WELL (feet): 21.5				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				
A, B, C	3	CG	40 mL	HCl & wet ice	N/A	/	8260-vocs App. I		ESP	200
D, E	2	CG	40 mL	Wet Ice	N/A	N/A	8011-EDB App. I		ESP	
F	1	HDPE	250 mL	HNO3 & wet ice	N/A	42	Metals - App. I		ESP	
G	1	HDPE	250 mL	H2SO4 & wet ice	N/A	42	Nutrients - App. I		ESP	
H	1	HDPE	1 L	Wet Ice	N/A	N/A	Misc. Inorg. App. I		ESP	
REMARKS: Heavy Sheen in Water. EQUIP BLANK #3 was taken after DECON after this well. (DI 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; RPPP = Reverse Flow Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible 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: $\pm 0.2^{\circ}\text{C}$ Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (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: 4/10/19

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ronald L. Moore / Sarasota County				SAMPLER(S) SIGNATURE(S): 			SAMPLING INITIATED AT: 0835		SAMPLING ENDED AT: 0850	
PUMP OR TUBING DEPTH IN WELL (feet): 25.7				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				
A, B, C	3	CG	40 mL	HCl & wet ice	N/A		8260-vocs App. I	ESP	200 	
D, E	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I	ESP		
F	1	HDPE	250 mL	HNO3 & wet ice	N/A		Metals – App. I	ESP		
G	1	HDPE	250 mL	H2SO4 & wet ice	N/A		Nutrients – App. I	ESP		
H	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorg. App. I	ESP		
REMARKS: Heavy sheen on water. Difficult filling, VOCs with no bubbles due to interaction with preservative.										
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; RFPF = 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: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

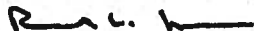
DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC		SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: MW-16	SAMPLE ID: 23032		DATE: 4/10/19

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ronald L. Moore / Sarasota County				SAMPLER(S) SIGNATURE(S): 			PROBING INITIATED AT: 1025		SAMPLING ENDED AT: 1040	
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)			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				
A, B, C	3	CG	40 mL	HCl & wet ice	N/A	/	8260-vocs App. I		ESP	200
D, E	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I		ESP	
F	1	HDPE	250 mL	HNO3 & wet ice	N/A	/	Metals - App. I		ESP	
G	1	HDPE	250 mL	H2SO4 & wet ice	N/A	/	Nutrients - App. I		ESP	
H	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorg. App. I		ESP	
REMARKS: Heavy, Sheen on water. Difficult to fill VOCs with no bubbles due to interaction with preservative.										
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: APPP = After (Through) Peristaltic Pump; RPPP = Reverse Flow Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible 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: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (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: 4/10/19

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ronald L. Moore / Sarasota County				SAMPLER(S) SIGNATURE(S): 			SAMPLING INITIATED AT: 1215		SAMPLING ENDED AT: 1230			
PUMP OR TUBING DEPTH IN WELL (feet): 29.0				TUBING MATERIAL CODE: LDPE			FIELD-FILTERED: Y (N)		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						
A, B, C	3	CG	40 mL	HCl & wet ice	N/A	N/A	8260-vocs App. I		ESP		200	
D, E	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I		ESP			
F	1	HDPE	250 mL	HNO3 & wet ice	N/A	< 2	Metals - App. I		ESP			
G	1	HDPE	250 mL	H2SO4 & wet ice	N/A	< 2	Nutrients - App. I		ESP			
H	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorg. App. I		ESP			
REMARKS: Heavy Sheen on Water. Difficult Filling VOC with no bubbles due to interaction with preservatives.												
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; RFPF = 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: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

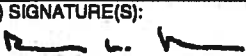
DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC		SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: MW-18R	SAMPLE ID: 29095	DATE: 4/3/19	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ronald L. Moore / Sarasota County				SAMPLER(S) SIGNATURE(S): 			SPRING INITIATED AT: 1015		SPRING ENDED AT: 1025		
PUMP OR TUBING DEPTH IN WELL (feet): 11.5				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)			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					
A, B, C	3	CG	40 mL	HCl & wet ice	N/A		8260-vocs App. I		APP		300
D, E	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I		APP		
F	1	HDPE	250 mL	HNO3 & wet ice	N/A		Metals – App. I		APP		
G	1	HDPE	250 mL	H2SO4 & wet ice	N/A		Nutrients – App. I		APP		
H	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorg. App. I		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; RFPF = Reverse Flow Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible 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:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ 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: 4/3/19

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ronald L. Moore / Sarasota County				SAMPLER(S) SIGNATURE(S): <i>R. L. Moore</i>			SAMPLING INITIATED AT: 0835		SAMPLING ENDED AT: 0850		
PUMP OR TUBING DEPTH IN WELL (feet): 12.0				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					
A, B, C	3	CG	40 mL	HCl & wet ice	N/A	/	8260-vocs App. I		APP		300
D, E	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I		APP		
F	1	HDPE	250 mL	HNO3 & wet ice	N/A	/	Metals - App. I		APP		
G	1	HDPE	250 mL	H2SO4 & wet ice	N/A	/	Nutrients - App. I		APP		
H	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorg. App. I		APP		
REMARKS: Odor in air coming from Active face of Landfill. Amb Temp 59° Wind NE @ 10 (DUP-filled from Well.) * Small particulates floating 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; RPPP = 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:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (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		DATE: 4/2/19	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ronald L. Moore / Sarasota County				SAMPLER(S) SIGNATURE(S): 			SAMPLING INITIATED AT: 1130		SAMPLING ENDED AT: 1145	
PUMP OR TUBING DEPTH IN WELL (feet): 13.0				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				
A, B, C	3	CG	40 mL	HCl & wet ice	N/A	NA	8260-vocs App. I		APP	300
D, E	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I		APP	
F	1	HDPE	250 mL	HNO3 & wet ice	N/A	22	Metals - App. I		APP	
G	1	HDPE	250 mL	H2SO4 & wet ice	N/A	22	Nutrients - App. I		APP	
H	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorg. App. I		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: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

SURVEY/PROJECT: Central County 1st Semi-Annual

METER # YSI-556

HACH 2100 G

[illegible]

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

The first part of the paper discusses the importance of understanding the local context in which a project is implemented. This includes a thorough analysis of the social, economic, and cultural factors that may influence the success or failure of the intervention. It is essential to engage with local stakeholders from the outset to ensure that the project is relevant and sustainable.

The second part of the paper explores the challenges faced by project managers in the field. These challenges often arise from a lack of resources, limited access to information, and a complex regulatory environment. Effective project management requires the ability to anticipate these challenges and develop strategies to address them.

The third part of the paper focuses on the role of the project manager as a facilitator and leader. This involves building trust, fostering collaboration, and ensuring that the team is motivated and equipped to handle the demands of the project. The project manager must also be able to communicate effectively with stakeholders and report on progress.

The fourth part of the paper discusses the importance of monitoring and evaluation. This process allows project managers to track progress, identify areas for improvement, and ensure that the project is achieving its intended goals. It is a continuous process that requires regular communication and feedback.

The fifth part of the paper concludes by emphasizing the need for a holistic approach to project management. This means considering all aspects of the project, from the initial planning stage to the final evaluation, and ensuring that each step is informed by a deep understanding of the local context.

April 10, 2019

REVIEWED

By Cesar Rodriguez-Palacios at 4:17 pm, May 06, 2019

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

RE: Project: Central Cty NAM wells
Pace Project No.: 35456869

Dear Mr. Rodriguez:

Enclosed are the analytical results for sample(s) received by the laboratory on March 27, 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



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: Central Cty NAM wells

Pace Project No.: 35456869

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
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

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Central Cty NAM wells

Pace Project No.: 35456869

Lab ID	Sample ID	Matrix	Date Collected	Date Received	
35456869001	NAM-1 (29091)	Water	03/27/19 09:00	03/27/19 16:05	
35456869002	NAM-2 (29092)	Water	03/27/19 10:25	03/27/19 16:05	
35456869003	NAM-3 (29093)	Water	03/27/19 12:00	03/27/19 16:05	
35456869004	NAM-4 (29094)	Water	03/27/19 13:15	03/27/19 16:05	
35456869005	EQUIP BLANK	Water	03/27/19 07:50	03/27/19 16:05	
35456869006	Duplicate	Water	03/27/19 10:25	03/27/19 16:05	

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Central Cty NAM wells

Pace Project No.: 35456869

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
35456869001	NAM-1 (29091)	EPA 6010	SC1	2	PASI-O
		EPA 6020	KPP	1	PASI-O
		SM 2540C	LF	1	PASI-Tp
		EPA 350.1	MAJ	1	PASI-O
35456869002	NAM-2 (29092)	EPA 6010	SC1	2	PASI-O
		EPA 6020	KPP	1	PASI-O
		SM 2540C	LF	1	PASI-Tp
		EPA 350.1	MAJ	1	PASI-O
35456869003	NAM-3 (29093)	EPA 6010	SC1	2	PASI-O
		EPA 6020	KPP	1	PASI-O
		SM 2540C	LF	1	PASI-Tp
		EPA 350.1	MAJ	1	PASI-O
35456869004	NAM-4 (29094)	EPA 6010	SC1	2	PASI-O
		EPA 6020	KPP	1	PASI-O
		SM 2540C	LF	1	PASI-Tp
		EPA 350.1	MAJ	1	PASI-O
35456869005	EQUIP BLANK	EPA 6010	SC1	2	PASI-O
		EPA 6020	KPP	1	PASI-O
		SM 2540C	LF	1	PASI-Tp
		EPA 350.1	MAJ	1	PASI-O
35456869006	Duplicate	EPA 6010	SC1	2	PASI-O
		EPA 6020	KPP	1	PASI-O
		SM 2540C	LF	1	PASI-Tp
		EPA 350.1	MAJ	1	PASI-O

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Central Cty NAM wells

Pace Project No.: 35456869

Sample: NAM-1 (29091) Lab ID: 35456869001 Collected: 03/27/19 09:00 Received: 03/27/19 16:05 Matrix: Water									
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data Analytical Method:									
Field pH	6.98	Std. Units			1		03/27/19 09:00		
Field Temperature	21.47	deg C			1		03/27/19 09:00		
Field Specific Conductance	707	umhos/cm			1		03/27/19 09:00		
Oxygen, Dissolved	0.22	mg/L			1		03/27/19 09:00	7782-44-7	
Turbidity	1.08	NTU			1		03/27/19 09:00		
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Iron	2860	ug/L	40.0	9.2	1	04/04/19 16:21	04/08/19 19:19	7439-89-6	
Manganese	5.2	ug/L	5.0	0.42	1	04/04/19 16:21	04/08/19 19:19	7439-96-5	
6020 MET ICPMS Analytical Method: EPA 6020 Preparation Method: EPA 3010									
Arsenic	3.7	ug/L	1.0	0.50	1	04/04/19 16:21	04/05/19 12:40	7440-38-2	
2540C Total Diss. Solids Tampa Analytical Method: SM 2540C									
Total Dissolved Solids	423	mg/L	5.0	5.0	1		03/28/19 15:30		
350.1 Ammonia Analytical Method: EPA 350.1									
Nitrogen, Ammonia	0.22	mg/L	0.050	0.035	1		04/08/19 18:15	7664-41-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Central Cty NAM wells

Pace Project No.: 35456869

Sample: NAM-2 (29092) Lab ID: 35456869002 Collected: 03/27/19 10:25 Received: 03/27/19 16:05 Matrix: Water									
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data Analytical Method:									
Field pH	6.73	Std. Units			1		03/27/19 10:25		
Field Temperature	21.64	deg C			1		03/27/19 10:25		
Field Specific Conductance	720	umhos/cm			1		03/27/19 10:25		
Oxygen, Dissolved	0.21	mg/L			1		03/27/19 10:25	7782-44-7	
Turbidity	1.05	NTU			1		03/27/19 10:25		
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Iron	2840	ug/L	40.0	9.2	1	04/04/19 16:21	04/08/19 19:22	7439-89-6	
Manganese	3.5 I	ug/L	5.0	0.42	1	04/04/19 16:21	04/08/19 19:22	7439-96-5	
6020 MET ICPMS Analytical Method: EPA 6020 Preparation Method: EPA 3010									
Arsenic	10.9	ug/L	1.0	0.50	1	04/04/19 16:21	04/05/19 12:44	7440-38-2	
2540C Total Diss. Solids Tampa Analytical Method: SM 2540C									
Total Dissolved Solids	418	mg/L	5.0	5.0	1		03/28/19 15:30		
350.1 Ammonia Analytical Method: EPA 350.1									
Nitrogen, Ammonia	0.19	mg/L	0.050	0.035	1		04/08/19 18:17	7664-41-7	

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ANALYTICAL RESULTS

Project: Central Cty NAM wells

Pace Project No.: 35456869

Sample: NAM-3 (29093) Lab ID: 35456869003 Collected: 03/27/19 12:00 Received: 03/27/19 16:05 Matrix: Water									
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data Analytical Method:									
Field pH	6.55	Std. Units			1		03/27/19 12:00		
Field Temperature	21.08	deg C			1		03/27/19 12:00		
Field Specific Conductance	560	umhos/cm			1		03/27/19 12:00		
Oxygen, Dissolved	0.18	mg/L			1		03/27/19 12:00	7782-44-7	
Turbidity	1.17	NTU			1		03/27/19 12:00		
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Iron	6370	ug/L	40.0	9.2	1	04/04/19 16:21	04/08/19 19:33	7439-89-6	
Manganese	8.6	ug/L	5.0	0.42	1	04/04/19 16:21	04/08/19 19:33	7439-96-5	
6020 MET ICPMS Analytical Method: EPA 6020 Preparation Method: EPA 3010									
Arsenic	3.6	ug/L	1.0	0.50	1	04/04/19 16:21	04/05/19 12:45	7440-38-2	
2540C Total Diss. Solids Tampa Analytical Method: SM 2540C									
Total Dissolved Solids	317	mg/L	5.0	5.0	1		03/28/19 15:30		
350.1 Ammonia Analytical Method: EPA 350.1									
Nitrogen, Ammonia	0.35	mg/L	0.050	0.035	1		04/08/19 18:19	7664-41-7	

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ANALYTICAL RESULTS

Project: Central Cty NAM wells

Pace Project No.: 35456869

Sample: NAM-4 (29094)		Lab ID: 35456869004		Collected: 03/27/19 13:15		Received: 03/27/19 16:05		Matrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data									
		Analytical Method:							
Field pH	5.90	Std. Units			1		03/27/19 13:15		
Field Temperature	22.05	deg C			1		03/27/19 13:15		
Field Specific Conductance	555	umhos/cm			1		03/27/19 13:15		
Oxygen, Dissolved	0.20	mg/L			1		03/27/19 13:15	7782-44-7	
Turbidity	0.73	NTU			1		03/27/19 13:15		
6010 MET ICP									
		Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron	4540	ug/L	40.0	9.2	1	04/04/19 16:21	04/08/19 19:42	7439-89-6	
Manganese	5.3	ug/L	5.0	0.42	1	04/04/19 16:21	04/08/19 19:42	7439-96-5	
6020 MET ICPMS									
		Analytical Method: EPA 6020 Preparation Method: EPA 3010							
Arsenic	5.3	ug/L	1.0	0.50	1	04/04/19 16:21	04/05/19 12:46	7440-38-2	
2540C Total Diss. Solids Tampa									
		Analytical Method: SM 2540C							
Total Dissolved Solids	313	mg/L	5.0	5.0	1		03/28/19 15:30		
350.1 Ammonia									
		Analytical Method: EPA 350.1							
Nitrogen, Ammonia	0.081	mg/L	0.050	0.035	1		04/08/19 18:20	7664-41-7	

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ANALYTICAL RESULTS



Project: Central Cty NAM wells

Pace Project No.: 35456869

Sample: EQUIP BLANK		Lab ID: 35456869005		Collected: 03/27/19 07:50		Received: 03/27/19 16:05		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	04/04/19 16:21	04/08/19 19:45	7439-89-6	
Manganese	0.42 U	ug/L	5.0	0.42	1	04/04/19 16:21	04/08/19 19:45	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	04/04/19 16:21	04/05/19 12:48	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		03/28/19 15:30		
350.1 Ammonia									
Analytical Method: EPA 350.1									
Nitrogen, Ammonia	0.035 U	mg/L	0.050	0.035	1		04/08/19 18:26	7664-41-7	

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ANALYTICAL RESULTS

Project: Central Cty NAM wells

Pace Project No.: 35456869

Sample: Duplicate		Lab ID: 35456869006		Collected: 03/27/19 10:25		Received: 03/27/19 16:05		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	2810	ug/L	40.0	9.2	1	04/04/19 16:21	04/08/19 19:48	7439-89-6	
Manganese	3.4 I	ug/L	5.0	0.42	1	04/04/19 16:21	04/08/19 19:48	7439-96-5	
6020 MET ICPMS									
Analytical Method: EPA 6020 Preparation Method: EPA 3010									
Arsenic	10.5	ug/L	1.0	0.50	1	04/04/19 16:21	04/05/19 12:51	7440-38-2	
2540C Total Diss. Solids Tampa									
Analytical Method: SM 2540C									
Total Dissolved Solids	421	mg/L	5.0	5.0	1		03/28/19 15:30		
350.1 Ammonia									
Analytical Method: EPA 350.1									
Nitrogen, Ammonia	0.18	mg/L	0.050	0.035	1		04/08/19 18:28	7664-41-7	

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QUALITY CONTROL DATA



Project: Central Cty NAM wells

Pace Project No.: 35456869

QC Batch:	528584	Analysis Method:	EPA 6010
QC Batch Method:	EPA 3010	Analysis Description:	6010 MET
Associated Lab Samples: 35456869001, 35456869002, 35456869003, 35456869004, 35456869005, 35456869006			

METHOD BLANK:	2861142	Matrix:	Water
Associated Lab Samples: 35456869001, 35456869002, 35456869003, 35456869004, 35456869005, 35456869006			

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Iron	ug/L	9.2 U	40.0	9.2	04/08/19 21:03	
Manganese	ug/L	0.42 U	5.0	0.42	04/08/19 21:03	

LABORATORY CONTROL SAMPLE: 2861143

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	2500	2540	101	80-120	
Manganese	ug/L	250	248	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2861140 2861141

Parameter	Units	35456869002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	2840	2500	2500	5470	5400	105	102	75-125	1	20	
Manganese	ug/L	3.5 I	250	250	257	255	101	101	75-125	1	20	

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QUALITY CONTROL DATA



Project: Central Cty NAM wells

Pace Project No.: 35456869

QC Batch: 528582 Analysis Method: EPA 6020
QC Batch Method: EPA 3010 Analysis Description: 6020 MET
Associated Lab Samples: 35456869001, 35456869002, 35456869003, 35456869004, 35456869005, 35456869006

METHOD BLANK: 2861133 Matrix: Water
Associated Lab Samples: 35456869001, 35456869002, 35456869003, 35456869004, 35456869005, 35456869006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	ug/L	0.50 U	1.0	0.50	04/05/19 12:37	

LABORATORY CONTROL SAMPLE: 2861134

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	50	46.8	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2861135 2861136

Parameter	Units	35456869001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	3.7	50	50	50.8	52.3	94	97	75-125	3	20	

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QUALITY CONTROL DATA



Project: Central Cty NAM wells

Pace Project No.: 35456869

QC Batch: 526703 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Diss. Solids Tampa
Associated Lab Samples: 35456869001, 35456869002, 35456869003, 35456869004, 35456869005, 35456869006

METHOD BLANK: 2849219 Matrix: Water
Associated Lab Samples: 35456869001, 35456869002, 35456869003, 35456869004, 35456869005, 35456869006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	5.0 U	5.0	5.0	03/28/19 15:30	

LABORATORY CONTROL SAMPLE: 2849220

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	300	295	98	90-110	

SAMPLE DUPLICATE: 2849221

Parameter	Units	35456768001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1600	1570	2	5	

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QUALITY CONTROL DATA



Project: Central Cty NAM wells

Pace Project No.: 35456869

QC Batch:	528811	Analysis Method:	EPA 350.1
QC Batch Method:	EPA 350.1	Analysis Description:	350.1 Ammonia
Associated Lab Samples: 35456869001, 35456869002, 35456869003, 35456869004, 35456869005, 35456869006			

METHOD BLANK:	2862443	Matrix:	Water
Associated Lab Samples: 35456869001, 35456869002, 35456869003, 35456869004, 35456869005, 35456869006			

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	0.035 U	0.050	0.035	04/08/19 18:06	

LABORATORY CONTROL SAMPLE: 2862444

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	1	1.0	102	90-110	

MATRIX SPIKE SAMPLE: 2862446

Parameter	Units	35459027007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	0.99	1	2.1	110	90-110	

SAMPLE DUPLICATE: 2862445

Parameter	Units	35459027007 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	0.99	1.0	1	20	

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QUALIFIERS

Project: Central Cty NAM wells

Pace Project No.: 35456869

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.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Central Cty NAM wells

Pace Project No.: 35456869

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
35456869001	NAM-1 (29091)				
35456869002	NAM-2 (29092)				
35456869003	NAM-3 (29093)				
35456869004	NAM-4 (29094)				
35456869001	NAM-1 (29091)	EPA 3010	528584	EPA 6010	528614
35456869002	NAM-2 (29092)	EPA 3010	528584	EPA 6010	528614
35456869003	NAM-3 (29093)	EPA 3010	528584	EPA 6010	528614
35456869004	NAM-4 (29094)	EPA 3010	528584	EPA 6010	528614
35456869005	EQUIP BLANK	EPA 3010	528584	EPA 6010	528614
35456869006	Duplicate	EPA 3010	528584	EPA 6010	528614
35456869001	NAM-1 (29091)	EPA 3010	528582	EPA 6020	528613
35456869002	NAM-2 (29092)	EPA 3010	528582	EPA 6020	528613
35456869003	NAM-3 (29093)	EPA 3010	528582	EPA 6020	528613
35456869004	NAM-4 (29094)	EPA 3010	528582	EPA 6020	528613
35456869005	EQUIP BLANK	EPA 3010	528582	EPA 6020	528613
35456869006	Duplicate	EPA 3010	528582	EPA 6020	528613
35456869001	NAM-1 (29091)	SM 2540C	526703		
35456869002	NAM-2 (29092)	SM 2540C	526703		
35456869003	NAM-3 (29093)	SM 2540C	526703		
35456869004	NAM-4 (29094)	SM 2540C	526703		
35456869005	EQUIP BLANK	SM 2540C	526703		
35456869006	Duplicate	SM 2540C	526703		
35456869001	NAM-1 (29091)	EPA 350.1	528811		
35456869002	NAM-2 (29092)	EPA 350.1	528811		
35456869003	NAM-3 (29093)	EPA 350.1	528811		
35456869004	NAM-4 (29094)	EPA 350.1	528811		
35456869005	EQUIP BLANK	EPA 350.1	528811		
35456869006	Duplicate	EPA 350.1	528811		

REPORT OF LABORATORY ANALYSIS

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Document Name:
Sample Condition Upon Receipt Form
Document No.:
F-FL-C-007 rev. 13

Document Revised:
May 30, 2018
Issuing Authority:
Pace Florida Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project #
Project Manager:
Client:

WO# : 35456869 ✓

PM: MIM Due Date: 04/10/19
CLIENT: SARCOU

Date and Initials of person:

Examining contents: all
Label: 3/27/19
Deliver: J
pH: all

Thermometer Used: T-203 Date: 3-27-19 Time: 1605 Initials: WIM

State of Origin: FL

☐ For WV projects, all containers verified to $\leq 6^\circ\text{C}$

Cooler #1 Temp. °C 2.2 (Visual) 0.0 (Correction Factor) 2.2 (Actual)

Cooler #2 Temp. °C _____ (Visual) _____ (Correction Factor) _____ (Actual)

Cooler #3 Temp. °C _____ (Visual) _____ (Correction Factor) _____ (Actual)

Cooler #4 Temp. °C _____ (Visual) _____ (Correction Factor) _____ (Actual)

Cooler #5 Temp. °C _____ (Visual) _____ (Correction Factor) _____ (Actual)

Cooler #6 Temp. °C _____ (Visual) _____ (Correction Factor) _____ (Actual)

☒ Samples on ice, cooling process has begun

☐ Samples on ice, cooling process has begun

☐ Samples on ice, cooling process has begun

☐ Samples on ice, cooling process has begun

☐ Samples on ice, cooling process has begun

☐ 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: Preservative: _____ Lot #/Trace #: _____ Date: _____ Time: _____ Initials: _____
All Containers needing preservation are found to be in compliance with EPA recommendation:	☒ Yes ☐ No ☐ N/A	
Exceptions: VOA, Coliform, TOC, O&G, Carbamates		
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: _____

April 16, 2019

REVIEWED

By Cesar Rodriguez-Palacios at 11:38 am, May 07, 2019

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

RE: Project: Central Cty MW wells Appdx 1
Pace Project No.: 35458178

Dear Mr. Rodriguez:

Enclosed are the analytical results for sample(s) received by the laboratory on April 02, 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



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CERTIFICATIONS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

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

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SAMPLE SUMMARY

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

Lab ID	Sample ID	Matrix	Date Collected	Date Received
35458178001	MW-1R (20585)	Water	04/02/19 09:35	04/02/19 15:35
35458178002	MW-20A (27141)	Water	04/02/19 11:30	04/02/19 15:35
35458178003	Equipment Blank #1	Water	04/02/19 08:30	04/02/19 15:35
35458178004	Trip Blank 8260 #1	Water	04/02/19 08:30	04/02/19 15:35
35458178005	Trip Blank 8011 #1	Water	04/02/19 08:30	04/02/19 15:35

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SAMPLE ANALYTE COUNT

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
35458178001	MW-1R (20585)	EPA 8011	LJM	2	PASI-O
		EPA 6010	SC1	15	PASI-O
		EPA 6020	FDV	3	PASI-O
		EPA 7470	AMS	1	PASI-O
		EPA 8260	SK1	48	PASI-O
		SM 2540C	KLT	1	PASI-O
		EPA 300.0	SEW	2	PASI-O
		EPA 350.1	MAJ	1	PASI-O
		EPA 353.2	CLL	1	PASI-O
35458178002	MW-20A (27141)	EPA 8011	LJM	2	PASI-O
		EPA 6010	SC1	15	PASI-O
		EPA 6020	FDV	3	PASI-O
		EPA 7470	AMS	1	PASI-O
		EPA 8260	SK1	48	PASI-O
		SM 2540C	KLT	1	PASI-O
		EPA 300.0	SEW	2	PASI-O
		EPA 350.1	MAJ	1	PASI-O
		EPA 353.2	CLL	1	PASI-O
35458178003	Equipment Blank #1	EPA 8011	LJM	2	PASI-O
		EPA 6010	SC1	15	PASI-O
		EPA 6020	FDV	3	PASI-O
		EPA 7470	AMS	1	PASI-O
		EPA 8260	SK1	48	PASI-O
		SM 2540C	KLT	1	PASI-O
		EPA 300.0	JDM	2	PASI-O
		EPA 350.1	MAJ	1	PASI-O
		EPA 353.2	CLL	1	PASI-O
35458178004	Trip Blank 8260 #1	EPA 8260	SK1	48	PASI-O
35458178005	Trip Blank 8011 #1	EPA 8011	LJM	2	PASI-O

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ANALYTICAL RESULTS



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

Sample: MW-1R (20585) Lab ID: 35458178001 Collected: 04/02/19 09:35 Received: 04/02/19 15:35 Matrix: Water									
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data Analytical Method:									
Field pH	6.59	Std. Units			1		04/02/19 09:35		
Field Temperature	21.63	deg C			1		04/02/19 09:35		
Field Specific Conductance	463	umhos/cm			1		04/02/19 09:35		
Oxygen, Dissolved	0.72	mg/L			1		04/02/19 09:35	7782-44-7	
Turbidity	3.83	NTU			1		04/02/19 09:35		
Water Level(NGVD)	18.55	feet			1		04/02/19 09:35		
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	04/05/19 08:16	04/05/19 18:32	96-12-8	
1,2-Dibromoethane (EDB)	0.0076 U	ug/L	0.010	0.0076	1	04/05/19 08:16	04/05/19 18:32	106-93-4	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Barium	33.7	ug/L	10.0	0.84	1	04/05/19 02:56	04/08/19 21:15	7440-39-3	
Beryllium	1.6 U	ug/L	4.0	1.6	1	04/05/19 02:56	04/08/19 21:15	7440-41-7	
Cadmium	0.33 U	ug/L	1.0	0.33	1	04/05/19 02:56	04/08/19 21:15	7440-43-9	
Chromium	1.7 U	ug/L	5.0	1.7	1	04/05/19 02:56	04/08/19 21:15	7440-47-3	
Cobalt	1.2 I	ug/L	10.0	0.96	1	04/05/19 02:56	04/08/19 21:15	7440-48-4	
Copper	2.6 U	ug/L	5.0	2.6	1	04/05/19 02:56	04/08/19 21:15	7440-50-8	
Iron	1730	ug/L	40.0	9.2	1	04/05/19 02:56	04/08/19 21:15	7439-89-6	
Lead	4.6 U	ug/L	10.0	4.6	1	04/05/19 02:56	04/08/19 21:15	7439-92-1	
Manganese	16.9	ug/L	5.0	0.42	1	04/05/19 02:56	04/08/19 21:15	7439-96-5	
Nickel	2.1 U	ug/L	5.0	2.1	1	04/05/19 02:56	04/08/19 21:15	7440-02-0	
Selenium	8.5 U	ug/L	15.0	8.5	1	04/05/19 02:56	04/08/19 21:15	7782-49-2	
Silver	1.0 U	ug/L	5.0	1.0	1	04/05/19 02:56	04/08/19 21:15	7440-22-4	
Sodium	16.0	mg/L	2.0	0.27	1	04/05/19 02:56	04/08/19 21:15	7440-23-5	
Vanadium	3.6 I	ug/L	10.0	1.0	1	04/05/19 02:56	04/08/19 21:15	7440-62-2	
Zinc	11.0 U	ug/L	20.0	11.0	1	04/05/19 02:56	04/08/19 21:15	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	04/05/19 02:56	04/05/19 17:22	7440-36-0	
Arsenic	2.7	ug/L	1.0	0.50	1	04/05/19 02:56	04/05/19 17:22	7440-38-2	
Thallium	0.50 U	ug/L	1.0	0.50	1	04/05/19 02:56	04/05/19 17:22	7440-28-0	
7470 Mercury Analytical Method: EPA 7470 Preparation Method: EPA 7470									
Mercury	0.10 U	ug/L	0.20	0.10	1	04/03/19 14:34	04/04/19 17:10	7439-97-6	
8260 MSV Analytical Method: EPA 8260									
Acetone	5.3 U	ug/L	20.0	5.3	1		04/12/19 03:07	67-64-1	
Acrylonitrile	3.7 U	ug/L	10.0	3.7	1		04/12/19 03:07	107-13-1	
Benzene	0.30 U	ug/L	1.0	0.30	1		04/12/19 03:07	71-43-2	
Bromochloromethane	0.37 U	ug/L	1.0	0.37	1		04/12/19 03:07	74-97-5	
Bromodichloromethane	0.19 U	ug/L	0.60	0.19	1		04/12/19 03:07	75-27-4	
Bromoform	2.6 U	ug/L	3.0	2.6	1		04/12/19 03:07	75-25-2	
Bromomethane	4.0 U	ug/L	5.0	4.0	1		04/12/19 03:07	74-83-9	
2-Butanone (MEK)	7.5 U	ug/L	10.0	7.5	1		04/12/19 03:07	78-93-3	

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

Sample: MW-1R (20585) **Lab ID: 35458178001** Collected: 04/02/19 09:35 Received: 04/02/19 15:35 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		04/12/19 03:07	75-15-0	J(v1)
Carbon tetrachloride	1.1 U	ug/L	3.0	1.1	1		04/12/19 03:07	56-23-5	
Chlorobenzene	0.35 U	ug/L	1.0	0.35	1		04/12/19 03:07	108-90-7	
Chloroethane	3.7 U	ug/L	10.0	3.7	1		04/12/19 03:07	75-00-3	
Chloroform	0.32 U	ug/L	1.0	0.32	1		04/12/19 03:07	67-66-3	
Chloromethane	0.97 U	ug/L	1.0	0.97	1		04/12/19 03:07	74-87-3	
Dibromochloromethane	0.45 U	ug/L	2.0	0.45	1		04/12/19 03:07	124-48-1	
Dibromomethane	0.68 U	ug/L	2.0	0.68	1		04/12/19 03:07	74-95-3	
1,2-Dichlorobenzene	0.29 U	ug/L	1.0	0.29	1		04/12/19 03:07	95-50-1	
1,4-Dichlorobenzene	0.28 U	ug/L	1.0	0.28	1		04/12/19 03:07	106-46-7	
trans-1,4-Dichloro-2-butene	2.5 U	ug/L	10.0	2.5	1		04/12/19 03:07	110-57-6	
1,1-Dichloroethane	0.34 U	ug/L	1.0	0.34	1		04/12/19 03:07	75-34-3	
1,2-Dichloroethane	0.27 U	ug/L	1.0	0.27	1		04/12/19 03:07	107-06-2	
1,1-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/12/19 03:07	75-35-4	
cis-1,2-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/12/19 03:07	156-59-2	
trans-1,2-Dichloroethene	0.23 U	ug/L	1.0	0.23	1		04/12/19 03:07	156-60-5	
1,2-Dichloropropane	0.23 U	ug/L	1.0	0.23	1		04/12/19 03:07	78-87-5	
cis-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/12/19 03:07	10061-01-5	
trans-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/12/19 03:07	10061-02-6	
Ethylbenzene	0.30 U	ug/L	1.0	0.30	1		04/12/19 03:07	100-41-4	
2-Hexanone	0.85 U	ug/L	10.0	0.85	1		04/12/19 03:07	591-78-6	
Iodomethane	9.3 U	ug/L	10.0	9.3	1		04/12/19 03:07	74-88-4	
Methylene Chloride	2.0 U	ug/L	5.0	2.0	1		04/12/19 03:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.32 U	ug/L	10.0	0.32	1		04/12/19 03:07	108-10-1	
Styrene	0.26 U	ug/L	1.0	0.26	1		04/12/19 03:07	100-42-5	
1,1,1,2-Tetrachloroethane	0.32 U	ug/L	1.0	0.32	1		04/12/19 03:07	630-20-6	
1,1,2,2-Tetrachloroethane	0.20 U	ug/L	0.50	0.20	1		04/12/19 03:07	79-34-5	
Tetrachloroethene	0.38 U	ug/L	1.0	0.38	1		04/12/19 03:07	127-18-4	
Toluene	0.33 U	ug/L	1.0	0.33	1		04/12/19 03:07	108-88-3	
1,1,1-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/12/19 03:07	71-55-6	
1,1,2-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/12/19 03:07	79-00-5	
Trichloroethene	0.36 U	ug/L	1.0	0.36	1		04/12/19 03:07	79-01-6	
Trichlorofluoromethane	0.35 U	ug/L	1.0	0.35	1		04/12/19 03:07	75-69-4	
1,2,3-Trichloropropane	1.1 U	ug/L	2.0	1.1	1		04/12/19 03:07	96-18-4	
Vinyl acetate	0.19 U	ug/L	10.0	0.19	1		04/12/19 03:07	108-05-4	
Vinyl chloride	0.39 U	ug/L	1.0	0.39	1		04/12/19 03:07	75-01-4	
Xylene (Total)	2.1 U	ug/L	5.0	2.1	1		04/12/19 03:07	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		04/12/19 03:07	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-130		1		04/12/19 03:07	17060-07-0	
Toluene-d8 (S)	100	%	70-130		1		04/12/19 03:07	2037-26-5	

2540C Total Dissolved Solids Analytical Method: SM 2540C

Total Dissolved Solids	307	mg/L	5.0	5.0	1	04/07/19 17:16
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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

Sample: MW-1R (20585)		Lab ID: 35458178001		Collected: 04/02/19 09:35		Received: 04/02/19 15:35		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	15.7	mg/L	5.0	2.5	1		04/12/19 02:16	16887-00-6	
Sulfate	2.5 U	mg/L	5.0	2.5	1		04/12/19 02:16	14808-79-8	
350.1 Ammonia		Analytical Method: EPA 350.1							
Nitrogen, Ammonia	0.088	mg/L	0.050	0.035	1		04/12/19 18:22	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		04/03/19 04:59	14797-55-8	

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ANALYTICAL RESULTS



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

Sample: MW-20A (27141) Lab ID: 35458178002 Collected: 04/02/19 11:30 Received: 04/02/19 15:35 Matrix: Water									
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data Analytical Method:									
Field pH	6.51	Std. Units			1		04/02/19 11:30		
Field Temperature	23.79	deg C			1		04/02/19 11:30		
Field Specific Conductance	801	umhos/cm			1		04/02/19 11:30		
Oxygen, Dissolved	0.69	mg/L			1		04/02/19 11:30	7782-44-7	
Turbidity	0.62	NTU			1		04/02/19 11:30		
Water Level(NGVD)	17.12	feet			1		04/02/19 11:30		
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	04/05/19 08:16	04/05/19 18:46	96-12-8	
1,2-Dibromoethane (EDB)	0.0075 U	ug/L	0.010	0.0075	1	04/05/19 08:16	04/05/19 18:46	106-93-4	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Barium	51.5	ug/L	10.0	0.84	1	04/05/19 02:56	04/08/19 21:26	7440-39-3	
Beryllium	1.6 U	ug/L	4.0	1.6	1	04/05/19 02:56	04/08/19 21:26	7440-41-7	
Cadmium	0.33 U	ug/L	1.0	0.33	1	04/05/19 02:56	04/08/19 21:26	7440-43-9	
Chromium	1.7 U	ug/L	5.0	1.7	1	04/05/19 02:56	04/08/19 21:26	7440-47-3	
Cobalt	1.5 I	ug/L	10.0	0.96	1	04/05/19 02:56	04/08/19 21:26	7440-48-4	
Copper	2.6 U	ug/L	5.0	2.6	1	04/05/19 02:56	04/08/19 21:26	7440-50-8	
Iron	12900	ug/L	40.0	9.2	1	04/05/19 02:56	04/08/19 21:26	7439-89-6	
Lead	4.6 U	ug/L	10.0	4.6	1	04/05/19 02:56	04/08/19 21:26	7439-92-1	
Manganese	18.0	ug/L	5.0	0.42	1	04/05/19 02:56	04/08/19 21:26	7439-96-5	
Nickel	2.1 U	ug/L	5.0	2.1	1	04/05/19 02:56	04/08/19 21:26	7440-02-0	
Selenium	8.5 U	ug/L	15.0	8.5	1	04/05/19 02:56	04/08/19 21:26	7782-49-2	
Silver	1.0 U	ug/L	5.0	1.0	1	04/05/19 02:56	04/08/19 21:26	7440-22-4	
Sodium	5.4	mg/L	2.0	0.27	1	04/05/19 02:56	04/08/19 21:26	7440-23-5	
Vanadium	8.9 I	ug/L	10.0	1.0	1	04/05/19 02:56	04/08/19 21:26	7440-62-2	
Zinc	11.0 U	ug/L	20.0	11.0	1	04/05/19 02:56	04/08/19 21:26	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	04/05/19 02:56	04/05/19 17:24	7440-36-0	
Arsenic	10.6	ug/L	1.0	0.50	1	04/05/19 02:56	04/05/19 17:24	7440-38-2	
Thallium	0.50 U	ug/L	1.0	0.50	1	04/05/19 02:56	04/05/19 17:24	7440-28-0	
7470 Mercury Analytical Method: EPA 7470 Preparation Method: EPA 7470									
Mercury	0.10 U	ug/L	0.20	0.10	1	04/03/19 14:34	04/04/19 17:13	7439-97-6	
8260 MSV Analytical Method: EPA 8260									
Acetone	5.3 U	ug/L	20.0	5.3	1		04/12/19 03:31	67-64-1	
Acrylonitrile	3.7 U	ug/L	10.0	3.7	1		04/12/19 03:31	107-13-1	
Benzene	0.30 U	ug/L	1.0	0.30	1		04/12/19 03:31	71-43-2	
Bromochloromethane	0.37 U	ug/L	1.0	0.37	1		04/12/19 03:31	74-97-5	
Bromodichloromethane	0.19 U	ug/L	0.60	0.19	1		04/12/19 03:31	75-27-4	
Bromoform	2.6 U	ug/L	3.0	2.6	1		04/12/19 03:31	75-25-2	
Bromomethane	4.0 U	ug/L	5.0	4.0	1		04/12/19 03:31	74-83-9	
2-Butanone (MEK)	7.5 U	ug/L	10.0	7.5	1		04/12/19 03:31	78-93-3	

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

Sample: MW-20A (27141) **Lab ID: 35458178002** Collected: 04/02/19 11:30 Received: 04/02/19 15:35 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		04/12/19 03:31	75-15-0	J(v1)
Carbon tetrachloride	1.1 U	ug/L	3.0	1.1	1		04/12/19 03:31	56-23-5	
Chlorobenzene	0.35 U	ug/L	1.0	0.35	1		04/12/19 03:31	108-90-7	
Chloroethane	3.7 U	ug/L	10.0	3.7	1		04/12/19 03:31	75-00-3	
Chloroform	0.32 U	ug/L	1.0	0.32	1		04/12/19 03:31	67-66-3	
Chloromethane	0.97 U	ug/L	1.0	0.97	1		04/12/19 03:31	74-87-3	
Dibromochloromethane	0.45 U	ug/L	2.0	0.45	1		04/12/19 03:31	124-48-1	
Dibromomethane	0.68 U	ug/L	2.0	0.68	1		04/12/19 03:31	74-95-3	
1,2-Dichlorobenzene	0.29 U	ug/L	1.0	0.29	1		04/12/19 03:31	95-50-1	
1,4-Dichlorobenzene	0.28 U	ug/L	1.0	0.28	1		04/12/19 03:31	106-46-7	
trans-1,4-Dichloro-2-butene	2.5 U	ug/L	10.0	2.5	1		04/12/19 03:31	110-57-6	
1,1-Dichloroethane	0.34 U	ug/L	1.0	0.34	1		04/12/19 03:31	75-34-3	
1,2-Dichloroethane	0.27 U	ug/L	1.0	0.27	1		04/12/19 03:31	107-06-2	
1,1-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/12/19 03:31	75-35-4	
cis-1,2-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/12/19 03:31	156-59-2	
trans-1,2-Dichloroethene	0.23 U	ug/L	1.0	0.23	1		04/12/19 03:31	156-60-5	
1,2-Dichloropropane	0.23 U	ug/L	1.0	0.23	1		04/12/19 03:31	78-87-5	
cis-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/12/19 03:31	10061-01-5	
trans-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/12/19 03:31	10061-02-6	
Ethylbenzene	0.30 U	ug/L	1.0	0.30	1		04/12/19 03:31	100-41-4	
2-Hexanone	0.85 U	ug/L	10.0	0.85	1		04/12/19 03:31	591-78-6	
Iodomethane	9.3 U	ug/L	10.0	9.3	1		04/12/19 03:31	74-88-4	
Methylene Chloride	2.0 U	ug/L	5.0	2.0	1		04/12/19 03:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.32 U	ug/L	10.0	0.32	1		04/12/19 03:31	108-10-1	
Styrene	0.26 U	ug/L	1.0	0.26	1		04/12/19 03:31	100-42-5	
1,1,1,2-Tetrachloroethane	0.32 U	ug/L	1.0	0.32	1		04/12/19 03:31	630-20-6	
1,1,2,2-Tetrachloroethane	0.20 U	ug/L	0.50	0.20	1		04/12/19 03:31	79-34-5	
Tetrachloroethene	0.38 U	ug/L	1.0	0.38	1		04/12/19 03:31	127-18-4	
Toluene	0.33 U	ug/L	1.0	0.33	1		04/12/19 03:31	108-88-3	
1,1,1-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/12/19 03:31	71-55-6	
1,1,2-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/12/19 03:31	79-00-5	
Trichloroethene	0.36 U	ug/L	1.0	0.36	1		04/12/19 03:31	79-01-6	
Trichlorofluoromethane	0.35 U	ug/L	1.0	0.35	1		04/12/19 03:31	75-69-4	
1,2,3-Trichloropropane	1.1 U	ug/L	2.0	1.1	1		04/12/19 03:31	96-18-4	
Vinyl acetate	0.19 U	ug/L	10.0	0.19	1		04/12/19 03:31	108-05-4	
Vinyl chloride	0.39 U	ug/L	1.0	0.39	1		04/12/19 03:31	75-01-4	
Xylene (Total)	2.1 U	ug/L	5.0	2.1	1		04/12/19 03:31	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		04/12/19 03:31	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-130		1		04/12/19 03:31	17060-07-0	
Toluene-d8 (S)	100	%	70-130		1		04/12/19 03:31	2037-26-5	

2540C Total Dissolved Solids Analytical Method: SM 2540C

Total Dissolved Solids	475	mg/L	5.0	5.0	1	04/07/19 17:16
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ANALYTICAL RESULTS



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

Sample: MW-20A (27141)		Lab ID: 35458178002		Collected: 04/02/19 11:30		Received: 04/02/19 15:35		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	6.5	mg/L	5.0	2.5	1		04/12/19 14:05	16887-00-6	
Sulfate	2.5 U	mg/L	5.0	2.5	1		04/12/19 14:05	14808-79-8	
350.1 Ammonia		Analytical Method: EPA 350.1							
Nitrogen, Ammonia	1.7	mg/L	0.050	0.035	1		04/12/19 18:24	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		04/03/19 05:31	14797-55-8	

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

Sample: Equipment Blank #1 Lab ID: 35458178003 Collected: 04/02/19 08:30 Received: 04/02/19 15:35 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	0.0063 U	ug/L	0.020	0.0063	1	04/05/19 08:16	04/05/19 19:01	96-12-8	
1,2-Dibromoethane (EDB)	0.0073 U	ug/L	0.0098	0.0073	1	04/05/19 08:16	04/05/19 19:01	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	04/05/19 02:56	04/08/19 21:35	7440-39-3	
Beryllium	1.6 U	ug/L	4.0	1.6	1	04/05/19 02:56	04/08/19 21:35	7440-41-7	
Cadmium	0.33 U	ug/L	1.0	0.33	1	04/05/19 02:56	04/08/19 21:35	7440-43-9	
Chromium	1.7 U	ug/L	5.0	1.7	1	04/05/19 02:56	04/08/19 21:35	7440-47-3	
Cobalt	0.96 U	ug/L	10.0	0.96	1	04/05/19 02:56	04/08/19 21:35	7440-48-4	
Copper	2.6 U	ug/L	5.0	2.6	1	04/05/19 02:56	04/08/19 21:35	7440-50-8	
Iron	9.2 U	ug/L	40.0	9.2	1	04/05/19 02:56	04/08/19 21:35	7439-89-6	
Lead	4.6 U	ug/L	10.0	4.6	1	04/05/19 02:56	04/08/19 21:35	7439-92-1	
Manganese	0.42 U	ug/L	5.0	0.42	1	04/05/19 02:56	04/08/19 21:35	7439-96-5	
Nickel	2.1 U	ug/L	5.0	2.1	1	04/05/19 02:56	04/08/19 21:35	7440-02-0	
Selenium	8.5 U	ug/L	15.0	8.5	1	04/05/19 02:56	04/08/19 21:35	7782-49-2	
Silver	1.0 U	ug/L	5.0	1.0	1	04/05/19 02:56	04/08/19 21:35	7440-22-4	
Sodium	0.27 U	mg/L	2.0	0.27	1	04/05/19 02:56	04/08/19 21:35	7440-23-5	
Vanadium	1.0 U	ug/L	10.0	1.0	1	04/05/19 02:56	04/08/19 21:35	7440-62-2	
Zinc	11.0 U	ug/L	20.0	11.0	1	04/05/19 02:56	04/08/19 21:35	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	04/05/19 02:56	04/05/19 17:27	7440-36-0	
Arsenic	0.50 U	ug/L	1.0	0.50	1	04/05/19 02:56	04/05/19 17:27	7440-38-2	
Thallium	0.50 U	ug/L	1.0	0.50	1	04/05/19 02:56	04/05/19 17:27	7440-28-0	
7470 Mercury Analytical Method: EPA 7470 Preparation Method: EPA 7470									
Mercury	0.10 U	ug/L	0.20	0.10	1	04/03/19 14:34	04/04/19 17:16	7439-97-6	
8260 MSV Analytical Method: EPA 8260									
Acetone	8.2 I	ug/L	20.0	5.3	1		04/11/19 23:52	67-64-1	
Acrylonitrile	3.7 U	ug/L	10.0	3.7	1		04/11/19 23:52	107-13-1	
Benzene	0.30 U	ug/L	1.0	0.30	1		04/11/19 23:52	71-43-2	
Bromochloromethane	0.37 U	ug/L	1.0	0.37	1		04/11/19 23:52	74-97-5	
Bromodichloromethane	0.19 U	ug/L	0.60	0.19	1		04/11/19 23:52	75-27-4	
Bromoform	2.6 U	ug/L	3.0	2.6	1		04/11/19 23:52	75-25-2	
Bromomethane	4.0 U	ug/L	5.0	4.0	1		04/11/19 23:52	74-83-9	
2-Butanone (MEK)	7.5 U	ug/L	10.0	7.5	1		04/11/19 23:52	78-93-3	
Carbon disulfide	0.45 U	ug/L	10.0	0.45	1		04/11/19 23:52	75-15-0	
Carbon tetrachloride	1.1 U	ug/L	3.0	1.1	1		04/11/19 23:52	56-23-5	
Chlorobenzene	0.35 U	ug/L	1.0	0.35	1		04/11/19 23:52	108-90-7	
Chloroethane	3.7 U	ug/L	10.0	3.7	1		04/11/19 23:52	75-00-3	J(v1)
Chloroform	0.32 U	ug/L	1.0	0.32	1		04/11/19 23:52	67-66-3	
Chloromethane	0.97 U	ug/L	1.0	0.97	1		04/11/19 23:52	74-87-3	
Dibromochloromethane	0.45 U	ug/L	2.0	0.45	1		04/11/19 23:52	124-48-1	
Dibromomethane	0.68 U	ug/L	2.0	0.68	1		04/11/19 23:52	74-95-3	

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

Sample: Equipment Blank #1 **Lab ID: 35458178003** Collected: 04/02/19 08:30 Received: 04/02/19 15:35 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		04/11/19 23:52	95-50-1	
1,4-Dichlorobenzene	0.28 U	ug/L	1.0	0.28	1		04/11/19 23:52	106-46-7	
trans-1,4-Dichloro-2-butene	2.5 U	ug/L	10.0	2.5	1		04/11/19 23:52	110-57-6	
1,1-Dichloroethane	0.34 U	ug/L	1.0	0.34	1		04/11/19 23:52	75-34-3	
1,2-Dichloroethane	0.27 U	ug/L	1.0	0.27	1		04/11/19 23:52	107-06-2	
1,1-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/11/19 23:52	75-35-4	
cis-1,2-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/11/19 23:52	156-59-2	
trans-1,2-Dichloroethene	0.23 U	ug/L	1.0	0.23	1		04/11/19 23:52	156-60-5	
1,2-Dichloropropane	0.23 U	ug/L	1.0	0.23	1		04/11/19 23:52	78-87-5	
cis-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/11/19 23:52	10061-01-5	
trans-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/11/19 23:52	10061-02-6	
Ethylbenzene	0.30 U	ug/L	1.0	0.30	1		04/11/19 23:52	100-41-4	
2-Hexanone	0.85 U	ug/L	10.0	0.85	1		04/11/19 23:52	591-78-6	
Iodomethane	9.3 U	ug/L	10.0	9.3	1		04/11/19 23:52	74-88-4	
Methylene Chloride	2.0 U	ug/L	5.0	2.0	1		04/11/19 23:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.32 U	ug/L	10.0	0.32	1		04/11/19 23:52	108-10-1	
Styrene	0.26 U	ug/L	1.0	0.26	1		04/11/19 23:52	100-42-5	
1,1,1,2-Tetrachloroethane	0.32 U	ug/L	1.0	0.32	1		04/11/19 23:52	630-20-6	
1,1,2,2-Tetrachloroethane	0.20 U	ug/L	0.50	0.20	1		04/11/19 23:52	79-34-5	
Tetrachloroethene	0.38 U	ug/L	1.0	0.38	1		04/11/19 23:52	127-18-4	
Toluene	0.33 U	ug/L	1.0	0.33	1		04/11/19 23:52	108-88-3	
1,1,1-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/11/19 23:52	71-55-6	
1,1,2-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/11/19 23:52	79-00-5	
Trichloroethene	0.36 U	ug/L	1.0	0.36	1		04/11/19 23:52	79-01-6	
Trichlorofluoromethane	0.35 U	ug/L	1.0	0.35	1		04/11/19 23:52	75-69-4	
1,2,3-Trichloropropane	1.1 U	ug/L	2.0	1.1	1		04/11/19 23:52	96-18-4	
Vinyl acetate	0.19 U	ug/L	10.0	0.19	1		04/11/19 23:52	108-05-4	
Vinyl chloride	0.39 U	ug/L	1.0	0.39	1		04/11/19 23:52	75-01-4	
Xylene (Total)	2.1 U	ug/L	5.0	2.1	1		04/11/19 23:52	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		04/11/19 23:52	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-130		1		04/11/19 23:52	17060-07-0	
Toluene-d8 (S)	98	%	70-130		1		04/11/19 23:52	2037-26-5	
2540C Total Dissolved Solids Analytical Method: SM 2540C									
Total Dissolved Solids	5.0 U	mg/L	5.0	5.0	1		04/07/19 17:16		
300.0 IC Anions 28 Days Analytical Method: EPA 300.0									
Chloride	2.5 U	mg/L	5.0	2.5	1		04/11/19 11:28	16887-00-6	
Sulfate	2.5 U	mg/L	5.0	2.5	1		04/11/19 11:28	14808-79-8	
350.1 Ammonia Analytical Method: EPA 350.1									
Nitrogen, Ammonia	0.035 U	mg/L	0.050	0.035	1		04/12/19 18:26	7664-41-7	

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ANALYTICAL RESULTS



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

Sample: Equipment Blank #1		Lab ID: 35458178003	Collected: 04/02/19 08:30	Received: 04/02/19 15:35	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		04/03/19 04:52	14797-55-8	

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

Sample: Trip Blank 8260 #1 **Lab ID:** 35458178004 **Collected:** 04/02/19 08:30 **Received:** 04/02/19 15:35 **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		04/12/19 00:17	67-64-1	
Acrylonitrile	3.7 U	ug/L	10.0	3.7	1		04/12/19 00:17	107-13-1	
Benzene	0.30 U	ug/L	1.0	0.30	1		04/12/19 00:17	71-43-2	
Bromochloromethane	0.37 U	ug/L	1.0	0.37	1		04/12/19 00:17	74-97-5	
Bromodichloromethane	0.19 U	ug/L	0.60	0.19	1		04/12/19 00:17	75-27-4	
Bromoform	2.6 U	ug/L	3.0	2.6	1		04/12/19 00:17	75-25-2	
Bromomethane	4.0 U	ug/L	5.0	4.0	1		04/12/19 00:17	74-83-9	
2-Butanone (MEK)	7.5 U	ug/L	10.0	7.5	1		04/12/19 00:17	78-93-3	
Carbon disulfide	0.45 U	ug/L	10.0	0.45	1		04/12/19 00:17	75-15-0	
Carbon tetrachloride	1.1 U	ug/L	3.0	1.1	1		04/12/19 00:17	56-23-5	
Chlorobenzene	0.35 U	ug/L	1.0	0.35	1		04/12/19 00:17	108-90-7	
Chloroethane	3.7 U	ug/L	10.0	3.7	1		04/12/19 00:17	75-00-3	J(v1)
Chloroform	0.32 U	ug/L	1.0	0.32	1		04/12/19 00:17	67-66-3	
Chloromethane	0.97 U	ug/L	1.0	0.97	1		04/12/19 00:17	74-87-3	
Dibromochloromethane	0.45 U	ug/L	2.0	0.45	1		04/12/19 00:17	124-48-1	
Dibromomethane	0.68 U	ug/L	2.0	0.68	1		04/12/19 00:17	74-95-3	
1,2-Dichlorobenzene	0.29 U	ug/L	1.0	0.29	1		04/12/19 00:17	95-50-1	
1,4-Dichlorobenzene	0.28 U	ug/L	1.0	0.28	1		04/12/19 00:17	106-46-7	
trans-1,4-Dichloro-2-butene	2.5 U	ug/L	10.0	2.5	1		04/12/19 00:17	110-57-6	
1,1-Dichloroethane	0.34 U	ug/L	1.0	0.34	1		04/12/19 00:17	75-34-3	
1,2-Dichloroethane	0.27 U	ug/L	1.0	0.27	1		04/12/19 00:17	107-06-2	
1,1-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/12/19 00:17	75-35-4	
cis-1,2-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/12/19 00:17	156-59-2	
trans-1,2-Dichloroethene	0.23 U	ug/L	1.0	0.23	1		04/12/19 00:17	156-60-5	
1,2-Dichloropropane	0.23 U	ug/L	1.0	0.23	1		04/12/19 00:17	78-87-5	
cis-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/12/19 00:17	10061-01-5	
trans-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/12/19 00:17	10061-02-6	
Ethylbenzene	0.30 U	ug/L	1.0	0.30	1		04/12/19 00:17	100-41-4	
2-Hexanone	0.85 U	ug/L	10.0	0.85	1		04/12/19 00:17	591-78-6	
Iodomethane	9.3 U	ug/L	10.0	9.3	1		04/12/19 00:17	74-88-4	
Methylene Chloride	2.0 U	ug/L	5.0	2.0	1		04/12/19 00:17	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.32 U	ug/L	10.0	0.32	1		04/12/19 00:17	108-10-1	
Styrene	0.26 U	ug/L	1.0	0.26	1		04/12/19 00:17	100-42-5	
1,1,1,2-Tetrachloroethane	0.32 U	ug/L	1.0	0.32	1		04/12/19 00:17	630-20-6	
1,1,2,2-Tetrachloroethane	0.20 U	ug/L	0.50	0.20	1		04/12/19 00:17	79-34-5	
Tetrachloroethene	0.38 U	ug/L	1.0	0.38	1		04/12/19 00:17	127-18-4	
Toluene	0.33 U	ug/L	1.0	0.33	1		04/12/19 00:17	108-88-3	
1,1,1-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/12/19 00:17	71-55-6	
1,1,2-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/12/19 00:17	79-00-5	
Trichloroethene	0.36 U	ug/L	1.0	0.36	1		04/12/19 00:17	79-01-6	
Trichlorofluoromethane	0.35 U	ug/L	1.0	0.35	1		04/12/19 00:17	75-69-4	
1,2,3-Trichloropropane	1.1 U	ug/L	2.0	1.1	1		04/12/19 00:17	96-18-4	
Vinyl acetate	0.19 U	ug/L	10.0	0.19	1		04/12/19 00:17	108-05-4	
Vinyl chloride	0.39 U	ug/L	1.0	0.39	1		04/12/19 00:17	75-01-4	
Xylene (Total)	2.1 U	ug/L	5.0	2.1	1		04/12/19 00:17	1330-20-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

Sample: Trip Blank 8260 #1 **Lab ID: 35458178004** Collected: 04/02/19 08:30 Received: 04/02/19 15:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Analytical Method: EPA 8260									
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		04/12/19 00:17	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130		1		04/12/19 00:17	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		04/12/19 00:17	2037-26-5	

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

Sample: Trip Blank 8011 #1		Lab ID: 35458178005	Collected: 04/02/19 08:30	Received: 04/02/19 15:35	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	0.0064 U	ug/L	0.020	0.0064	1	04/05/19 08:16	04/05/19 19:16	96-12-8	
1,2-Dibromoethane (EDB)	0.0075 U	ug/L	0.010	0.0075	1	04/05/19 08:16	04/05/19 19:16	106-93-4	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

QC Batch: 528139 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 35458178001, 35458178002, 35458178003

METHOD BLANK: 2858349 Matrix: Water

Associated Lab Samples: 35458178001, 35458178002, 35458178003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	0.10 U	0.20	0.10	04/04/19 16:09	

LABORATORY CONTROL SAMPLE: 2858350

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2	2.1	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2858351 2858352

Parameter	Units	35456959001 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	2	2	2.1	2.0	104	102	75-125	1	20	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

QC Batch: 528643 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 35458178001, 35458178002, 35458178003

METHOD BLANK: 2861643 Matrix: Water

Associated Lab Samples: 35458178001, 35458178002, 35458178003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Barium	ug/L	0.84 U	10.0	0.84	04/09/19 10:33	
Beryllium	ug/L	1.6 U	4.0	1.6	04/09/19 10:33	
Cadmium	ug/L	0.33 U	1.0	0.33	04/09/19 10:33	
Chromium	ug/L	1.7 U	5.0	1.7	04/09/19 10:33	
Cobalt	ug/L	0.96 U	10.0	0.96	04/09/19 10:33	
Copper	ug/L	2.6 U	5.0	2.6	04/09/19 10:33	
Iron	ug/L	9.2 U	40.0	9.2	04/09/19 10:33	
Lead	ug/L	4.6 U	10.0	4.6	04/09/19 10:33	
Manganese	ug/L	0.64 I	5.0	0.42	04/09/19 10:33	
Nickel	ug/L	2.1 U	5.0	2.1	04/09/19 10:33	
Selenium	ug/L	8.5 U	15.0	8.5	04/09/19 10:33	
Silver	ug/L	1.0 U	5.0	1.0	04/09/19 10:33	
Sodium	mg/L	0.27 U	2.0	0.27	04/09/19 10:33	
Vanadium	ug/L	1.0 U	10.0	1.0	04/09/19 10:33	
Zinc	ug/L	11.0 U	20.0	11.0	04/09/19 10:33	

LABORATORY CONTROL SAMPLE: 2861644

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	250	248	99	80-120	
Beryllium	ug/L	25	24.8	99	80-120	
Cadmium	ug/L	25	25.4	102	80-120	
Chromium	ug/L	250	251	100	80-120	
Cobalt	ug/L	250	250	100	80-120	
Copper	ug/L	250	240	96	80-120	
Iron	ug/L	2500	2530	101	80-120	
Lead	ug/L	250	254	102	80-120	
Manganese	ug/L	250	250	100	80-120	
Nickel	ug/L	250	255	102	80-120	
Selenium	ug/L	250	250	100	80-120	
Silver	ug/L	25	24.9	100	80-120	
Sodium	mg/L	12.5	12.5	100	80-120	
Vanadium	ug/L	250	246	98	80-120	
Zinc	ug/L	1250	1280	102	80-120	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2861645 2861646											
Parameter	Units	35458178001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Barium	ug/L	33.7	250	250	284	279	100	98	75-125	2	20
Beryllium	ug/L	1.6 U	25	25	25.5	25.1	102	100	75-125	2	20
Cadmium	ug/L	0.33 U	25	25	25.6	24.9	102	99	75-125	3	20
Chromium	ug/L	1.7 U	250	250	255	250	101	100	75-125	2	20
Cobalt	ug/L	1.2 I	250	250	254	250	101	100	75-125	1	20
Copper	ug/L	2.6 U	250	250	249	245	100	98	75-125	2	20
Iron	ug/L	1730	2500	2500	4290	4240	103	100	75-125	1	20
Lead	ug/L	4.6 U	250	250	255	250	101	99	75-125	2	20
Manganese	ug/L	16.9	250	250	268	264	100	99	75-125	1	20
Nickel	ug/L	2.1 U	250	250	256	251	102	100	75-125	2	20
Selenium	ug/L	8.5 U	250	250	248	244	98	96	75-125	2	20
Silver	ug/L	1.0 U	25	25	25.1	25.0	100	100	75-125	0	20
Sodium	mg/L	16.0	12.5	12.5	29.0	28.5	104	100	75-125	2	20
Vanadium	ug/L	3.6 I	250	250	255	251	101	99	75-125	2	20
Zinc	ug/L	11.0 U	1250	1250	1270	1260	102	100	75-125	1	20

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

QC Batch: 528644 Analysis Method: EPA 6020
QC Batch Method: EPA 3010 Analysis Description: 6020 MET
Associated Lab Samples: 35458178001, 35458178002, 35458178003

METHOD BLANK: 2861647 Matrix: Water

Associated Lab Samples: 35458178001, 35458178002, 35458178003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	0.50 U	1.0	0.50	04/05/19 17:16	
Arsenic	ug/L	0.50 U	1.0	0.50	04/05/19 17:16	
Thallium	ug/L	0.50 U	1.0	0.50	04/05/19 17:16	

LABORATORY CONTROL SAMPLE: 2861648

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	50	52.8	106	80-120	
Arsenic	ug/L	50	46.7	93	80-120	
Thallium	ug/L	50	50.1	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2861649 2861650

Parameter	Units	35458178003 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	52.9	53.9	106	107	75-125	2	20	
Arsenic	ug/L	0.50 U	50	50	52.5	51.9	105	103	75-125	1	20	
Thallium	ug/L	0.50 U	50	50	50.1	50.3	100	100	75-125	0	20	

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QUALITY CONTROL DATA

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

QC Batch: 530454 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 35458178001, 35458178002, 35458178003, 35458178004



METHOD BLANK: 2872586 Matrix: Water
Associated Lab Samples: 35458178001, 35458178002, 35458178003, 35458178004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	0.32 U	1.0	0.32	04/11/19 22:15	
1,1,1-Trichloroethane	ug/L	0.30 U	1.0	0.30	04/11/19 22:15	
1,1,2,2-Tetrachloroethane	ug/L	0.20 U	0.50	0.20	04/11/19 22:15	
1,1,2-Trichloroethane	ug/L	0.30 U	1.0	0.30	04/11/19 22:15	
1,1-Dichloroethane	ug/L	0.34 U	1.0	0.34	04/11/19 22:15	
1,1-Dichloroethene	ug/L	0.27 U	1.0	0.27	04/11/19 22:15	
1,2,3-Trichloropropane	ug/L	1.1 U	2.0	1.1	04/11/19 22:15	
1,2-Dichlorobenzene	ug/L	0.29 U	1.0	0.29	04/11/19 22:15	
1,2-Dichloroethane	ug/L	0.27 U	1.0	0.27	04/11/19 22:15	
1,2-Dichloropropane	ug/L	0.23 U	1.0	0.23	04/11/19 22:15	
1,4-Dichlorobenzene	ug/L	0.28 U	1.0	0.28	04/11/19 22:15	
2-Butanone (MEK)	ug/L	7.5 U	10.0	7.5	04/11/19 22:15	
2-Hexanone	ug/L	0.85 U	10.0	0.85	04/11/19 22:15	
4-Methyl-2-pentanone (MIBK)	ug/L	0.32 U	10.0	0.32	04/11/19 22:15	
Acetone	ug/L	5.3 U	20.0	5.3	04/11/19 22:15	
Acrylonitrile	ug/L	3.7 U	10.0	3.7	04/11/19 22:15	
Benzene	ug/L	0.30 U	1.0	0.30	04/11/19 22:15	
Bromochloromethane	ug/L	0.37 U	1.0	0.37	04/11/19 22:15	
Bromodichloromethane	ug/L	0.19 U	0.60	0.19	04/11/19 22:15	
Bromoform	ug/L	2.6 U	3.0	2.6	04/11/19 22:15	
Bromomethane	ug/L	4.0 U	5.0	4.0	04/11/19 22:15	
Carbon disulfide	ug/L	0.45 U	10.0	0.45	04/11/19 22:15	
Carbon tetrachloride	ug/L	1.1 U	3.0	1.1	04/11/19 22:15	
Chlorobenzene	ug/L	0.35 U	1.0	0.35	04/11/19 22:15	
Chloroethane	ug/L	3.7 U	10.0	3.7	04/11/19 22:15	J(v1)
Chloroform	ug/L	0.32 U	1.0	0.32	04/11/19 22:15	
Chloromethane	ug/L	0.97 U	1.0	0.97	04/11/19 22:15	
cis-1,2-Dichloroethene	ug/L	0.27 U	1.0	0.27	04/11/19 22:15	
cis-1,3-Dichloropropene	ug/L	0.17 U	0.50	0.17	04/11/19 22:15	
Dibromochloromethane	ug/L	0.45 U	2.0	0.45	04/11/19 22:15	
Dibromomethane	ug/L	0.68 U	2.0	0.68	04/11/19 22:15	
Ethylbenzene	ug/L	0.30 U	1.0	0.30	04/11/19 22:15	
Iodomethane	ug/L	9.3 U	10.0	9.3	04/11/19 22:15	
Methylene Chloride	ug/L	2.0 U	5.0	2.0	04/11/19 22:15	
Styrene	ug/L	0.26 U	1.0	0.26	04/11/19 22:15	
Tetrachloroethene	ug/L	0.38 U	1.0	0.38	04/11/19 22:15	
Toluene	ug/L	0.33 U	1.0	0.33	04/11/19 22:15	
trans-1,2-Dichloroethene	ug/L	0.23 U	1.0	0.23	04/11/19 22:15	
trans-1,3-Dichloropropene	ug/L	0.17 U	0.50	0.17	04/11/19 22:15	
trans-1,4-Dichloro-2-butene	ug/L	2.5 U	10.0	2.5	04/11/19 22:15	
Trichloroethene	ug/L	0.36 U	1.0	0.36	04/11/19 22:15	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

PACE Project No.: 35458178

METHOD BLANK: 2872586

Matrix: Water

Associated Lab Samples: 35458178001, 35458178002, 35458178003, 35458178004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Trichlorofluoromethane	ug/L	0.35 U	1.0	0.35	04/11/19 22:15	
Vinyl acetate	ug/L	0.19 U	10.0	0.19	04/11/19 22:15	
Vinyl chloride	ug/L	0.39 U	1.0	0.39	04/11/19 22:15	
Xylene (Total)	ug/L	2.1 U	5.0	2.1	04/11/19 22:15	
1,2-Dichloroethane-d4 (S)	%	100	70-130		04/11/19 22:15	
4-Bromofluorobenzene (S)	%	99	70-130		04/11/19 22:15	
Toluene-d8 (S)	%	99	70-130		04/11/19 22:15	

LABORATORY CONTROL SAMPLE: 2872587

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	21.4	107	70-130	
1,1,1-Trichloroethane	ug/L	20	20.0	100	70-130	
1,1,2,2-Tetrachloroethane	ug/L	20	21.4	107	68-125	
1,1,2-Trichloroethane	ug/L	20	21.5	107	70-130	
1,1-Dichloroethane	ug/L	20	21.4	107	70-130	
1,1-Dichloroethene	ug/L	20	19.5	98	66-133	
1,2,3-Trichloropropane	ug/L	20	21.7	108	62-127	
1,2-Dichlorobenzene	ug/L	20	20.5	102	70-130	
1,2-Dichloroethane	ug/L	20	19.4	97	70-130	
1,2-Dichloropropane	ug/L	20	21.4	107	70-130	
1,4-Dichlorobenzene	ug/L	20	20.7	103	70-130	
2-Butanone (MEK)	ug/L	40	37.1	93	47-143	
2-Hexanone	ug/L	40	38.7	97	48-145	
4-Methyl-2-pentanone (MIBK)	ug/L	40	40.1	100	57-132	
Acetone	ug/L	40	41.4	103	46-148	
Acrylonitrile	ug/L	200	194	97	60-143	
Benzene	ug/L	20	20.8	104	70-130	
Bromochloromethane	ug/L	20	21.0	105	70-130	
Bromodichloromethane	ug/L	20	20.4	102	70-130	
Bromoform	ug/L	20	20.8	104	49-126	
Bromomethane	ug/L	20	22.6	113	10-165	
Carbon disulfide	ug/L	20	22.1	111	60-141	
Carbon tetrachloride	ug/L	20	20.0	100	63-126	
Chlorobenzene	ug/L	20	20.4	102	70-130	
Chloroethane	ug/L	20	26.4	132	71-142 J(v1)	
Chloroform	ug/L	20	21.0	105	70-130	
Chloromethane	ug/L	20	19.5	98	40-140	
cis-1,2-Dichloroethene	ug/L	20	20.7	104	70-130	
cis-1,3-Dichloropropene	ug/L	20	21.9	110	70-130	
Dibromochloromethane	ug/L	20	18.2	91	62-118	
Dibromomethane	ug/L	20	20.0	100	70-130	
Ethylbenzene	ug/L	20	21.0	105	70-130	
Iodomethane	ug/L	40	42.6	106	10-164	

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QUALITY CONTROL DATA

Project: Central Cty MW wells Appdx 1
Pace Project No.: 35458178



LABORATORY CONTROL SAMPLE: 2872587

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	20	20.0	100	65-136	
Styrene	ug/L	20	20.5	102	70-130	
Tetrachloroethene	ug/L	20	20.2	101	64-134	
Toluene	ug/L	20	21.2	106	70-130	
trans-1,2-Dichloroethene	ug/L	20	20.9	104	68-127	
trans-1,3-Dichloropropene	ug/L	20	18.9	95	65-121	
trans-1,4-Dichloro-2-butene	ug/L	20	20.5	103	42-129	
Trichloroethene	ug/L	20	19.8	99	70-130	
Trichlorofluoromethane	ug/L	20	19.1	95	65-135	
Vinyl acetate	ug/L	20	22.5	112	60-144	
Vinyl chloride	ug/L	20	17.6	88	68-131	
Xylene (Total)	ug/L	60	64.8	108	70-130	
1,2-Dichloroethane-d4 (S)	%			100	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	
Toluene-d8 (S)	%			99	70-130	

MATRIX SPIKE SAMPLE: 2872589

Parameter	Units	35460162021 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	0.32 U	20	20.2	101	70-130	
1,1,1-Trichloroethane	ug/L	0.30 U	20	20.0	100	70-130	
1,1,2,2-Tetrachloroethane	ug/L	0.20 U	20	19.7	98	68-125	
1,1,2-Trichloroethane	ug/L	0.30 U	20	20.1	101	70-130	
1,1-Dichloroethane	ug/L	0.34 U	20	20.6	103	70-130	
1,1-Dichloroethene	ug/L	0.27 U	20	22.7	114	66-133	
1,2,3-Trichloropropane	ug/L	1.1 U	20	20.0	100	62-127	
1,2-Dichlorobenzene	ug/L	0.29 U	20	19.5	97	70-130	
1,2-Dichloroethane	ug/L	0.27 U	20	18.3	92	70-130	
1,2-Dichloropropane	ug/L	0.23 U	20	20.2	101	70-130	
1,4-Dichlorobenzene	ug/L	0.28 U	20	19.9	99	70-130	
2-Butanone (MEK)	ug/L	7.5 U	40	33.5	84	47-143	
2-Hexanone	ug/L	0.85 U	40	35.0	87	48-145	
4-Methyl-2-pentanone (MIBK)	ug/L	0.32 U	40	35.7	89	57-132	
Acetone	ug/L	5.3 U	40	39.1	98	46-148	
Acrylonitrile	ug/L	3.7 U	200	176	88	60-143	
Benzene	ug/L	0.30 U	20	20.3	102	70-130	
Bromochloromethane	ug/L	0.37 U	20	19.9	100	70-130	
Bromodichloromethane	ug/L	0.19 U	20	19.4	97	70-130	
Bromoform	ug/L	2.6 U	20	17.9	89	49-126	
Bromomethane	ug/L	4.0 U	20	22.8	114	10-165	
Carbon disulfide	ug/L	0.45 U	20	24.1	119	60-141	
Carbon tetrachloride	ug/L	1.1 U	20	19.9	100	63-126	
Chlorobenzene	ug/L	0.35 U	20	19.6	98	70-130	
Chloroethane	ug/L	3.7 U	20	30.1	150	71-142 J(M1),J(v1)	
Chloroform	ug/L	0.32 U	20	20.6	103	70-130	

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QUALITY CONTROL DATA

Project: Central Cty MW wells Appdx 1
Pace Project No.: 35458178



MATRIX SPIKE SAMPLE: 2872589		35460162021	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Chloromethane	ug/L	0.97 U	20	19.2	96	40-140	
cis-1,2-Dichloroethene	ug/L	0.27 U	20	20.2	101	70-130	
cis-1,3-Dichloropropene	ug/L	0.17 U	20	19.0	95	70-130	
Dibromochloromethane	ug/L	0.45 U	20	16.2	81	62-118	
Dibromomethane	ug/L	0.68 U	20	18.7	93	70-130	
Ethylbenzene	ug/L	0.30 U	20	20.5	102	70-130	
Iodomethane	ug/L	9.3 U	40	32.3	80	10-164	
Methylene Chloride	ug/L	2.0 U	20	18.5	93	65-136	
Styrene	ug/L	0.26 U	20	19.2	96	70-130	
Tetrachloroethene	ug/L	0.38 U	20	22.1	109	64-134	
Toluene	ug/L	0.33 U	20	20.5	103	70-130	
trans-1,2-Dichloroethene	ug/L	0.23 U	20	20.3	101	68-127	
trans-1,3-Dichloropropene	ug/L	0.17 U	20	16.5	82	65-121	
trans-1,4-Dichloro-2-butene	ug/L	2.5 U	20	16.0	80	42-129	
Trichloroethene	ug/L	0.36 U	20	19.6	98	70-130	
Trichlorofluoromethane	ug/L	0.35 U	20	21.4	107	65-135	
Vinyl acetate	ug/L	0.19 U	20	17.7	89	60-144	
Vinyl chloride	ug/L	0.39 U	20	17.4	87	68-131	
Xylene (Total)	ug/L	2.1 U	60	62.2	104	70-130	
1,2-Dichloroethane-d4 (S)	%				100	70-130	
4-Bromofluorobenzene (S)	%				98	70-130	
Toluene-d8 (S)	%				98	70-130	

SAMPLE DUPLICATE: 2872588

Parameter	Units	35460162020	Dup	RPD	Max	
		Result	Result		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	
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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QUALITY CONTROL DATA

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178



SAMPLE DUPLICATE: 2872588

Parameter	Units	35460162020 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	
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	J(v1)
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	1.0	0.96 I		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	312	324	4	40	L
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	14.9	14.9	0	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	
Xylene (Total)	ug/L	2.1 U	2.1 U		40	
1,2-Dichloroethane-d4 (S)	%	98	99		40	
4-Bromofluorobenzene (S)	%	98	99		40	
Toluene-d8 (S)	%	97	97		40	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

QC Batch: 528667 Analysis Method: EPA 8011
QC Batch Method: EPA 8011 Analysis Description: 8011 EDB DBCP
Associated Lab Samples: 35458178001, 35458178002, 35458178003, 35458178005

METHOD BLANK: 2861709 Matrix: Water
Associated Lab Samples: 35458178001, 35458178002, 35458178003, 35458178005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.0064 U	0.020	0.0064	04/05/19 12:22	
1,2-Dibromoethane (EDB)	ug/L	0.0075 U	0.010	0.0075	04/05/19 12:22	

LABORATORY CONTROL SAMPLE: 2861710

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.25	99	60-140	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.26	104	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2861711 2861712

Parameter	Units	35459032005 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	0.0062 U	0.44	0.44	0.47	0.49	107	111	60-140	4	40	
1,2-Dibromoethane (EDB)	ug/L	0.0072 U	0.44	0.44	0.51	0.53	116	122	60-140	5	40	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

QC Batch: 529100 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 35458178001, 35458178002, 35458178003

METHOD BLANK: 2864535 Matrix: Water

Associated Lab Samples: 35458178001, 35458178002, 35458178003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	5.0 U	5.0	5.0	04/07/19 17:15	

LABORATORY CONTROL SAMPLE: 2864536

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	300	289	96	90-110	

SAMPLE DUPLICATE: 2864537

Parameter	Units	35457865003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	652	660	1	5	

SAMPLE DUPLICATE: 2864538

Parameter	Units	35458403002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	23500	22900	3	5	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1
Pace Project No.: 35458178

QC Batch:	530190	Analysis Method:	EPA 300.0
QC Batch Method:	EPA 300.0	Analysis Description:	300.0 IC Anions
Associated Lab Samples:	35458178003		

METHOD BLANK: 2870610 Matrix: Water
Associated Lab Samples: 35458178003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	2.5 U	5.0	2.5	04/11/19 10:49	
Sulfate	mg/L	2.5 U	5.0	2.5	04/11/19 10:49	

LABORATORY CONTROL SAMPLE: 2870611

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.4	103	90-110	
Sulfate	mg/L	50	50.5	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2870980 2870981

Parameter	Units	35458830001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	43.6	50	50	95.0	95.0	103	103	90-110	0	20	
Sulfate	mg/L	12.6	50	50	64.5	64.6	104	104	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2870982 2870983

Parameter	Units	35458830003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	50.7	50	50	102	102	103	103	90-110	0	20	
Sulfate	mg/L	12.8	50	50	65.1	65.3	105	105	90-110	0	20	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

QC Batch: 530203

Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0

Analysis Description: 300.0 IC Anions

Associated Lab Samples: 35458178001, 35458178002

METHOD BLANK: 2870645

Matrix: Water

Associated Lab Samples: 35458178001, 35458178002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	2.5 U	5.0	2.5	04/11/19 18:53	
Sulfate	mg/L	2.5 U	5.0	2.5	04/11/19 18:53	

LABORATORY CONTROL SAMPLE: 2870646

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.4	103	90-110	
Sulfate	mg/L	50	51.4	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2871435 2871436

Parameter	Units	35457679001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	22.7	50	50	78.8	78.9	112	112	90-110	0	20	J(M1)
Sulfate	mg/L	215	50	50	282	283	134	134	90-110	0	20	J(M1), L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2871437 2871438

Parameter	Units	35458214001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	55.1	50	50	113	115	115	119	90-110	2	20	J(M1), L
Sulfate	mg/L	19.2	50	50	71.0	73.1	104	108	90-110	3	20	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

QC Batch: 530257 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 35458178001, 35458178002, 35458178003

METHOD BLANK: 2870862 Matrix: Water

Associated Lab Samples: 35458178001, 35458178002, 35458178003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	0.035 U	0.050	0.035	04/12/19 17:38	

LABORATORY CONTROL SAMPLE: 2870863

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	1	1.1	106	90-110	

MATRIX SPIKE SAMPLE: 2870865

Parameter	Units	35459825002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	0.23	1	1.3	109	90-110	

SAMPLE DUPLICATE: 2870864

Parameter	Units	35459825002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	0.23	0.24	3	20	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

QC Batch: 527949

Analysis Method: EPA 353.2

QC Batch Method: EPA 353.2

Analysis Description: 353.2 Nitrate + Nitrite, Unpres.

Associated Lab Samples: 35458178001, 35458178003

METHOD BLANK: 2857546

Matrix: Water

Associated Lab Samples: 35458178001, 35458178003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.050	0.025	04/03/19 04:35	

SAMPLE DUPLICATE: 2857548

Parameter	Units	75105636001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.086	0.089	3	20	

SAMPLE DUPLICATE: 2857550

Parameter	Units	35458240002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	1.1	1.3	14	20	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

QC Batch: 527950

Analysis Method: EPA 353.2

QC Batch Method: EPA 353.2

Analysis Description: 353.2 Nitrate + Nitrite, Unpres.

Associated Lab Samples: 35458178002

METHOD BLANK: 2857552

Matrix: Water

Associated Lab Samples: 35458178002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.050	0.025	04/03/19 05:08	

SAMPLE DUPLICATE: 2857554

Parameter	Units	35458179003 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.025 U		20	

SAMPLE DUPLICATE: 2857556

Parameter	Units	35458178002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.025 U		20	

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QUALIFIERS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

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(M1) Estimated Value. Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

J(v1) The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

L Off-scale high. Actual value is known to be greater than value given.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458178

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
35458178001	MW-1R (20585)				
35458178002	MW-20A (27141)				
35458178001	MW-1R (20585)	EPA 8011	528667	EPA 8011	528724
35458178002	MW-20A (27141)	EPA 8011	528667	EPA 8011	528724
35458178003	Equipment Blank #1	EPA 8011	528667	EPA 8011	528724
35458178005	Trip Blank 8011 #1	EPA 8011	528667	EPA 8011	528724
35458178001	MW-1R (20585)	EPA 3010	528643	EPA 6010	528647
35458178002	MW-20A (27141)	EPA 3010	528643	EPA 6010	528647
35458178003	Equipment Blank #1	EPA 3010	528643	EPA 6010	528647
35458178001	MW-1R (20585)	EPA 3010	528644	EPA 6020	528648
35458178002	MW-20A (27141)	EPA 3010	528644	EPA 6020	528648
35458178003	Equipment Blank #1	EPA 3010	528644	EPA 6020	528648
35458178001	MW-1R (20585)	EPA 7470	528139	EPA 7470	528237
35458178002	MW-20A (27141)	EPA 7470	528139	EPA 7470	528237
35458178003	Equipment Blank #1	EPA 7470	528139	EPA 7470	528237
35458178001	MW-1R (20585)	EPA 8260	530454		
35458178002	MW-20A (27141)	EPA 8260	530454		
35458178003	Equipment Blank #1	EPA 8260	530454		
35458178004	Trip Blank 8260 #1	EPA 8260	530454		
35458178001	MW-1R (20585)	SM 2540C	529100		
35458178002	MW-20A (27141)	SM 2540C	529100		
35458178003	Equipment Blank #1	SM 2540C	529100		
35458178001	MW-1R (20585)	EPA 300.0	530203		
35458178002	MW-20A (27141)	EPA 300.0	530203		
35458178003	Equipment Blank #1	EPA 300.0	530190		
35458178001	MW-1R (20585)	EPA 350.1	530257		
35458178002	MW-20A (27141)	EPA 350.1	530257		
35458178003	Equipment Blank #1	EPA 350.1	530257		
35458178001	MW-1R (20585)	EPA 353.2	527949		
35458178002	MW-20A (27141)	EPA 353.2	527950		
35458178003	Equipment Blank #1	EPA 353.2	527949		

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Section A

Section B

Section C

Required Client Information:

Required Project Information:

Invoice Information:

Company: Sarasota County

Report To: Mr. Cesar Rodriguez

Attention:

Address: 1255 T. Mabry Carlton Parkway

Copy To:

Attention:	
Company Name:	

Venice, FL 34292

[illegible]

Address:

Email: _____

Purchase Order #:	181191
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Page Quote:

Phone: 941-650-9834

Project Name:	Central City MW wells Appdx 1
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Pace Project Manager: martha.montero@pacelabs.com

Requested Due Date:

Project #:

Pace Profile #:	833 #1
-----------------	--------

Page : 1 Of 1

Regulatory Agency

State / Location

FL

[illegible]

	Document Name:	Document Revised:
	Sample Condition Upon Receipt Form	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# : 35458178**
Project Manager: PM: MIM **Due Date:** 04/16/19
Client: CLIENT: SARCOU

Date and Initials of person:

Examining contents: DS
 Label: 4-2-19
 Deliver: ✓
 pH: ✓

Thermometer Used: T-203 Date: 4-2-19 Time: 1535 Initials: WIM

State of Origin: FL

☐ For WV projects, all containers verified to ≤6 °C

Cooler #1 Temp.°C <u>2.4</u> (Visual) <u>0.0</u> (Correction Factor) <u>2.4</u> (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	Preservation Information: Preservative: _____ Lot #/Trace #: _____ Date: _____ Time: _____ Initials: _____
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	
All Containers needing preservation are found to be in compliance with EPA recommendation:	☒ Yes ☐ No ☐ N/A	
Exceptions: VOA, Coliform, TOC, O&G, Carbamates		
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: _____

REVIEWED

By Cesar Rodriguez-Palacios at 3:37 pm, May 07, 2019

April 18, 2019

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

RE: Project: Central Cty MW wells Appdx 1
Pace Project No.: 35458668

Dear Mr. Rodriguez:

Enclosed are the analytical results for sample(s) received by the laboratory on April 03, 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



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

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

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SAMPLE SUMMARY

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

Lab ID	Sample ID	Matrix	Date Collected	Date Received
35458668001	MW-8A (21453)	Water	04/03/19 11:35	04/03/19 15:45
35458668002	MW-18R (29095)	Water	04/03/19 10:15	04/03/19 15:45
35458668003	MW-19A (27140)	Water	04/03/19 08:35	04/03/19 15:45
35458668004	Duplicate #1	Water	04/03/19 08:35	04/03/19 15:45
35458668005	Trip Blank-8260	Water	04/03/19 08:35	04/03/19 15:45
35458668006	Trip Blank-8011	Water	04/03/19 08:35	04/03/19 15:45

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SAMPLE ANALYTE COUNT

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
35458668001	MW-8A (21453)	EPA 8011	LJM	2	PASI-O
		EPA 6010	SC1	15	PASI-O
		EPA 6020	FDV	3	PASI-O
		EPA 7470	AMS	1	PASI-O
		EPA 8260	BTN	48	PASI-O
		SM 2540C	KLT	1	PASI-O
		EPA 300.0	ALD	2	PASI-O
		EPA 350.1	MAJ	1	PASI-O
		EPA 353.2	CLL	1	PASI-O
35458668002	MW-18R (29095)	EPA 8011	LJM	2	PASI-O
		EPA 6010	SC1	15	PASI-O
		EPA 6020	FDV	3	PASI-O
		EPA 7470	AMS	1	PASI-O
		EPA 8260	BTN	48	PASI-O
		SM 2540C	KLT	1	PASI-O
		EPA 300.0	ALD	2	PASI-O
		EPA 350.1	MAJ	1	PASI-O
		EPA 353.2	CLL	1	PASI-O
35458668003	MW-19A (27140)	EPA 8011	LJM	2	PASI-O
		EPA 6010	SC1	15	PASI-O
		EPA 6020	FDV	3	PASI-O
		EPA 7470	AMS	1	PASI-O
		EPA 8260	BTN	48	PASI-O
		SM 2540C	KLT	1	PASI-O
		EPA 300.0	ALD	2	PASI-O
		EPA 350.1	MAJ	1	PASI-O
		EPA 353.2	CLL	1	PASI-O
35458668004	Duplicate #1	EPA 8011	LJM	2	PASI-O
		EPA 6010	SC1	15	PASI-O
		EPA 6020	FDV	3	PASI-O
		EPA 7470	AMS	1	PASI-O
		EPA 8260	BTN	48	PASI-O
		SM 2540C	KLT	1	PASI-O
		EPA 300.0	ALD	2	PASI-O
		EPA 350.1	MAJ	1	PASI-O
		EPA 353.2	CLL	1	PASI-O
35458668005	Trip Blank-8260	EPA 8260	BTN	48	PASI-O

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SAMPLE ANALYTE COUNT

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
35458668006	Trip Blank-8011	EPA 8011	LJM	2	PASI-O

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

Sample: MW-8A (21453) Lab ID: 35458668001 Collected: 04/03/19 11:35 Received: 04/03/19 15:45 Matrix: Water									
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data Analytical Method:									
Field pH	5.98	Std. Units			1		04/03/19 11:35		
Field Temperature	24.04	deg C			1		04/03/19 11:35		
Field Specific Conductance	1045	umhos/cm			1		04/03/19 11:35		
Oxygen, Dissolved	0.31	mg/L			1		04/03/19 11:35	7782-44-7	
Turbidity	1.55	NTU			1		04/03/19 11:35		
Water Level(NGVD)	19.31	feet			1		04/03/19 11:35		
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	04/05/19 08:16	04/05/19 19:30	96-12-8	
1,2-Dibromoethane (EDB)	0.0077 U	ug/L	0.010	0.0077	1	04/05/19 08:16	04/05/19 19:30	106-93-4	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Barium	38.3	ug/L	10.0	0.84	1	04/05/19 02:56	04/08/19 21:58	7440-39-3	
Beryllium	1.6 U	ug/L	4.0	1.6	1	04/05/19 02:56	04/08/19 21:58	7440-41-7	
Cadmium	0.33 U	ug/L	1.0	0.33	1	04/05/19 02:56	04/08/19 21:58	7440-43-9	
Chromium	1.7 U	ug/L	5.0	1.7	1	04/05/19 02:56	04/08/19 21:58	7440-47-3	
Cobalt	2.8 I	ug/L	10.0	0.96	1	04/05/19 02:56	04/08/19 21:58	7440-48-4	
Copper	2.6 U	ug/L	5.0	2.6	1	04/05/19 02:56	04/08/19 21:58	7440-50-8	
Iron	9550	ug/L	40.0	9.2	1	04/05/19 02:56	04/08/19 21:58	7439-89-6	
Lead	4.6 U	ug/L	10.0	4.6	1	04/05/19 02:56	04/08/19 21:58	7439-92-1	
Manganese	36.0	ug/L	5.0	0.42	1	04/05/19 02:56	04/08/19 21:58	7439-96-5	
Nickel	2.1 U	ug/L	5.0	2.1	1	04/05/19 02:56	04/08/19 21:58	7440-02-0	
Selenium	8.5 U	ug/L	15.0	8.5	1	04/05/19 02:56	04/08/19 21:58	7782-49-2	
Silver	1.0 U	ug/L	5.0	1.0	1	04/05/19 02:56	04/08/19 21:58	7440-22-4	
Sodium	16.0	mg/L	2.0	0.27	1	04/05/19 02:56	04/08/19 21:58	7440-23-5	
Vanadium	2.8 I	ug/L	10.0	1.0	1	04/05/19 02:56	04/08/19 21:58	7440-62-2	
Zinc	11.0 U	ug/L	20.0	11.0	1	04/05/19 02:56	04/08/19 21:58	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	04/05/19 02:56	04/05/19 17:54	7440-36-0	
Arsenic	11.9	ug/L	1.0	0.50	1	04/05/19 02:56	04/05/19 17:54	7440-38-2	
Thallium	0.50 U	ug/L	1.0	0.50	1	04/05/19 02:56	04/05/19 17:54	7440-28-0	
7470 Mercury Analytical Method: EPA 7470 Preparation Method: EPA 7470									
Mercury	0.10 U	ug/L	0.20	0.10	1	04/07/19 18:18	04/08/19 15:31	7439-97-6	
8260 MSV Analytical Method: EPA 8260									
Acetone	5.3 U	ug/L	20.0	5.3	1		04/12/19 14:14	67-64-1	
Acrylonitrile	3.7 U	ug/L	10.0	3.7	1		04/12/19 14:14	107-13-1	
Benzene	0.30 U	ug/L	1.0	0.30	1		04/12/19 14:14	71-43-2	
Bromochloromethane	0.37 U	ug/L	1.0	0.37	1		04/12/19 14:14	74-97-5	
Bromodichloromethane	0.19 U	ug/L	0.60	0.19	1		04/12/19 14:14	75-27-4	
Bromoform	2.6 U	ug/L	3.0	2.6	1		04/12/19 14:14	75-25-2	
Bromomethane	4.0 U	ug/L	5.0	4.0	1		04/12/19 14:14	74-83-9	
2-Butanone (MEK)	7.5 U	ug/L	10.0	7.5	1		04/12/19 14:14	78-93-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

Sample: MW-8A (21453) Lab ID: 35458668001 Collected: 04/03/19 11:35 Received: 04/03/19 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		04/12/19 14:14	75-15-0	J(v2)
Carbon tetrachloride	1.1 U	ug/L	3.0	1.1	1		04/12/19 14:14	56-23-5	
Chlorobenzene	0.35 U	ug/L	1.0	0.35	1		04/12/19 14:14	108-90-7	
Chloroethane	3.7 U	ug/L	10.0	3.7	1		04/12/19 14:14	75-00-3	J(v1)
Chloroform	0.32 U	ug/L	1.0	0.32	1		04/12/19 14:14	67-66-3	
Chloromethane	0.97 U	ug/L	1.0	0.97	1		04/12/19 14:14	74-87-3	J(v2)
Dibromochloromethane	0.45 U	ug/L	2.0	0.45	1		04/12/19 14:14	124-48-1	
Dibromomethane	0.68 U	ug/L	2.0	0.68	1		04/12/19 14:14	74-95-3	
1,2-Dichlorobenzene	0.29 U	ug/L	1.0	0.29	1		04/12/19 14:14	95-50-1	
1,4-Dichlorobenzene	0.28 U	ug/L	1.0	0.28	1		04/12/19 14:14	106-46-7	
trans-1,4-Dichloro-2-butene	2.5 U	ug/L	10.0	2.5	1		04/12/19 14:14	110-57-6	J(v2)
1,1-Dichloroethane	0.34 U	ug/L	1.0	0.34	1		04/12/19 14:14	75-34-3	
1,2-Dichloroethane	0.27 U	ug/L	1.0	0.27	1		04/12/19 14:14	107-06-2	
1,1-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/12/19 14:14	75-35-4	
cis-1,2-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/12/19 14:14	156-59-2	
trans-1,2-Dichloroethene	0.23 U	ug/L	1.0	0.23	1		04/12/19 14:14	156-60-5	
1,2-Dichloropropane	0.23 U	ug/L	1.0	0.23	1		04/12/19 14:14	78-87-5	
cis-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/12/19 14:14	10061-01-5	
trans-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/12/19 14:14	10061-02-6	
Ethylbenzene	0.30 U	ug/L	1.0	0.30	1		04/12/19 14:14	100-41-4	
2-Hexanone	0.85 U	ug/L	10.0	0.85	1		04/12/19 14:14	591-78-6	
Iodomethane	9.3 U	ug/L	10.0	9.3	1		04/12/19 14:14	74-88-4	
Methylene Chloride	2.0 U	ug/L	5.0	2.0	1		04/12/19 14:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.32 U	ug/L	10.0	0.32	1		04/12/19 14:14	108-10-1	
Styrene	0.26 U	ug/L	1.0	0.26	1		04/12/19 14:14	100-42-5	
1,1,1,2-Tetrachloroethane	0.32 U	ug/L	1.0	0.32	1		04/12/19 14:14	630-20-6	
1,1,2,2-Tetrachloroethane	0.20 U	ug/L	0.50	0.20	1		04/12/19 14:14	79-34-5	
Tetrachloroethene	0.38 U	ug/L	1.0	0.38	1		04/12/19 14:14	127-18-4	
Toluene	0.33 U	ug/L	1.0	0.33	1		04/12/19 14:14	108-88-3	
1,1,1-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/12/19 14:14	71-55-6	
1,1,2-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/12/19 14:14	79-00-5	
Trichloroethene	0.36 U	ug/L	1.0	0.36	1		04/12/19 14:14	79-01-6	
Trichlorofluoromethane	0.35 U	ug/L	1.0	0.35	1		04/12/19 14:14	75-69-4	
1,2,3-Trichloropropane	1.1 U	ug/L	2.0	1.1	1		04/12/19 14:14	96-18-4	
Vinyl acetate	0.19 U	ug/L	10.0	0.19	1		04/12/19 14:14	108-05-4	
Vinyl chloride	0.39 U	ug/L	1.0	0.39	1		04/12/19 14:14	75-01-4	
Xylene (Total)	2.1 U	ug/L	5.0	2.1	1		04/12/19 14:14	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		04/12/19 14:14	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-130		1		04/12/19 14:14	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		04/12/19 14:14	2037-26-5	

2540C Total Dissolved Solids Analytical Method: SM 2540C

Total Dissolved Solids	620	mg/L	10.0	10.0	1	04/09/19 20:39
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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

Sample: MW-8A (21453)		Lab ID: 35458668001		Collected: 04/03/19 11:35		Received: 04/03/19 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	6.0	mg/L	5.0	2.5	1		04/13/19 11:31	16887-00-6	
Sulfate	2.5 U	mg/L	5.0	2.5	1		04/13/19 11:31	14808-79-8	
350.1 Ammonia		Analytical Method: EPA 350.1							
Nitrogen, Ammonia	9.5	mg/L	0.050	0.035	1		04/16/19 19:35	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres		Analytical Method: EPA 353.2							
Nitrogen, Nitrate	0.089	mg/L	0.050	0.025	1		04/04/19 09:02	14797-55-8	

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

Sample: MW-18R (29095) Lab ID: 35458668002 Collected: 04/03/19 10:15 Received: 04/03/19 15:45 Matrix: Water									
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data Analytical Method:									
Field pH	5.70	Std. Units			1		04/03/19 10:15		
Field Temperature	23.68	deg C			1		04/03/19 10:15		
Field Specific Conductance	525	umhos/cm			1		04/03/19 10:15		
Oxygen, Dissolved	0.38	mg/L			1		04/03/19 10:15	7782-44-7	
Turbidity	2.86	NTU			1		04/03/19 10:15		
Water Level(NGVD)	17.83	feet			1		04/03/19 10:15		
8011 GCS EDB and DBCP Analytical Method: EPA 8011 Preparation Method: EPA 8011									
1,2-Dibromo-3-chloropropane	0.0063 U	ug/L	0.020	0.0063	1	04/05/19 08:16	04/05/19 19:45	96-12-8	
1,2-Dibromoethane (EDB)	0.0074 U	ug/L	0.0099	0.0074	1	04/05/19 08:16	04/05/19 19:45	106-93-4	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Barium	18.0	ug/L	10.0	0.84	1	04/05/19 02:56	04/08/19 22:00	7440-39-3	
Beryllium	1.6 U	ug/L	4.0	1.6	1	04/05/19 02:56	04/08/19 22:00	7440-41-7	
Cadmium	0.33 U	ug/L	1.0	0.33	1	04/05/19 02:56	04/08/19 22:00	7440-43-9	
Chromium	1.7 U	ug/L	5.0	1.7	1	04/05/19 02:56	04/08/19 22:00	7440-47-3	
Cobalt	2.2 I	ug/L	10.0	0.96	1	04/05/19 02:56	04/08/19 22:00	7440-48-4	
Copper	2.6 U	ug/L	5.0	2.6	1	04/05/19 02:56	04/08/19 22:00	7440-50-8	
Iron	11700	ug/L	40.0	9.2	1	04/05/19 02:56	04/08/19 22:00	7439-89-6	
Lead	4.6 U	ug/L	10.0	4.6	1	04/05/19 02:56	04/08/19 22:00	7439-92-1	
Manganese	7.8	ug/L	5.0	0.42	1	04/05/19 02:56	04/08/19 22:00	7439-96-5	
Nickel	2.1 U	ug/L	5.0	2.1	1	04/05/19 02:56	04/08/19 22:00	7440-02-0	
Selenium	8.5 U	ug/L	15.0	8.5	1	04/05/19 02:56	04/08/19 22:00	7782-49-2	
Silver	1.0 U	ug/L	5.0	1.0	1	04/05/19 02:56	04/08/19 22:00	7440-22-4	
Sodium	7.0	mg/L	2.0	0.27	1	04/05/19 02:56	04/08/19 22:00	7440-23-5	
Vanadium	6.5 I	ug/L	10.0	1.0	1	04/05/19 02:56	04/08/19 22:00	7440-62-2	
Zinc	11.0 U	ug/L	20.0	11.0	1	04/05/19 02:56	04/08/19 22:00	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	04/05/19 02:56	04/05/19 17:56	7440-36-0	
Arsenic	9.8	ug/L	1.0	0.50	1	04/05/19 02:56	04/05/19 17:56	7440-38-2	
Thallium	0.50 U	ug/L	1.0	0.50	1	04/05/19 02:56	04/05/19 17:56	7440-28-0	
7470 Mercury Analytical Method: EPA 7470 Preparation Method: EPA 7470									
Mercury	0.10 U	ug/L	0.20	0.10	1	04/07/19 18:18	04/08/19 15:38	7439-97-6	
8260 MSV Analytical Method: EPA 8260									
Acetone	5.3 U	ug/L	20.0	5.3	1		04/12/19 14:39	67-64-1	
Acrylonitrile	3.7 U	ug/L	10.0	3.7	1		04/12/19 14:39	107-13-1	
Benzene	0.30 U	ug/L	1.0	0.30	1		04/12/19 14:39	71-43-2	
Bromochloromethane	0.37 U	ug/L	1.0	0.37	1		04/12/19 14:39	74-97-5	
Bromodichloromethane	0.19 U	ug/L	0.60	0.19	1		04/12/19 14:39	75-27-4	
Bromoform	2.6 U	ug/L	3.0	2.6	1		04/12/19 14:39	75-25-2	
Bromomethane	4.0 U	ug/L	5.0	4.0	1		04/12/19 14:39	74-83-9	
2-Butanone (MEK)	7.5 U	ug/L	10.0	7.5	1		04/12/19 14:39	78-93-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

Sample: MW-18R (29095) Lab ID: 35458668002 Collected: 04/03/19 10:15 Received: 04/03/19 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		04/12/19 14:39	75-15-0	J(v2)
Carbon tetrachloride	1.1 U	ug/L	3.0	1.1	1		04/12/19 14:39	56-23-5	
Chlorobenzene	0.35 U	ug/L	1.0	0.35	1		04/12/19 14:39	108-90-7	
Chloroethane	3.7 U	ug/L	10.0	3.7	1		04/12/19 14:39	75-00-3	J(v1)
Chloroform	0.32 U	ug/L	1.0	0.32	1		04/12/19 14:39	67-66-3	
Chloromethane	0.97 U	ug/L	1.0	0.97	1		04/12/19 14:39	74-87-3	J(v2)
Dibromochloromethane	0.45 U	ug/L	2.0	0.45	1		04/12/19 14:39	124-48-1	
Dibromomethane	0.68 U	ug/L	2.0	0.68	1		04/12/19 14:39	74-95-3	
1,2-Dichlorobenzene	0.29 U	ug/L	1.0	0.29	1		04/12/19 14:39	95-50-1	
1,4-Dichlorobenzene	0.28 U	ug/L	1.0	0.28	1		04/12/19 14:39	106-46-7	
trans-1,4-Dichloro-2-butene	2.5 U	ug/L	10.0	2.5	1		04/12/19 14:39	110-57-6	J(v2)
1,1-Dichloroethane	0.34 U	ug/L	1.0	0.34	1		04/12/19 14:39	75-34-3	
1,2-Dichloroethane	0.27 U	ug/L	1.0	0.27	1		04/12/19 14:39	107-06-2	
1,1-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/12/19 14:39	75-35-4	
cis-1,2-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/12/19 14:39	156-59-2	
trans-1,2-Dichloroethene	0.23 U	ug/L	1.0	0.23	1		04/12/19 14:39	156-60-5	
1,2-Dichloropropane	0.23 U	ug/L	1.0	0.23	1		04/12/19 14:39	78-87-5	
cis-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/12/19 14:39	10061-01-5	
trans-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/12/19 14:39	10061-02-6	
Ethylbenzene	0.30 U	ug/L	1.0	0.30	1		04/12/19 14:39	100-41-4	
2-Hexanone	0.85 U	ug/L	10.0	0.85	1		04/12/19 14:39	591-78-6	
Iodomethane	9.3 U	ug/L	10.0	9.3	1		04/12/19 14:39	74-88-4	
Methylene Chloride	2.0 U	ug/L	5.0	2.0	1		04/12/19 14:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.32 U	ug/L	10.0	0.32	1		04/12/19 14:39	108-10-1	
Styrene	0.26 U	ug/L	1.0	0.26	1		04/12/19 14:39	100-42-5	
1,1,1,2-Tetrachloroethane	0.32 U	ug/L	1.0	0.32	1		04/12/19 14:39	630-20-6	
1,1,2,2-Tetrachloroethane	0.20 U	ug/L	0.50	0.20	1		04/12/19 14:39	79-34-5	
Tetrachloroethene	0.38 U	ug/L	1.0	0.38	1		04/12/19 14:39	127-18-4	
Toluene	0.33 U	ug/L	1.0	0.33	1		04/12/19 14:39	108-88-3	
1,1,1-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/12/19 14:39	71-55-6	
1,1,2-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/12/19 14:39	79-00-5	
Trichloroethene	0.36 U	ug/L	1.0	0.36	1		04/12/19 14:39	79-01-6	
Trichlorofluoromethane	0.35 U	ug/L	1.0	0.35	1		04/12/19 14:39	75-69-4	
1,2,3-Trichloropropane	1.1 U	ug/L	2.0	1.1	1		04/12/19 14:39	96-18-4	
Vinyl acetate	0.19 U	ug/L	10.0	0.19	1		04/12/19 14:39	108-05-4	
Vinyl chloride	0.39 U	ug/L	1.0	0.39	1		04/12/19 14:39	75-01-4	
Xylene (Total)	2.1 U	ug/L	5.0	2.1	1		04/12/19 14:39	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		04/12/19 14:39	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-130		1		04/12/19 14:39	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		04/12/19 14:39	2037-26-5	

2540C Total Dissolved Solids Analytical Method: SM 2540C

Total Dissolved Solids	329	mg/L	5.0	5.0	1	04/09/19 20:39
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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

Sample: MW-18R (29095)		Lab ID: 35458668002		Collected: 04/03/19 10:15		Received: 04/03/19 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	7.0	mg/L	5.0	2.5	1		04/13/19 02:17	16887-00-6	
Sulfate	2.5 U	mg/L	5.0	2.5	1		04/13/19 02:17	14808-79-8	
350.1 Ammonia		Analytical Method: EPA 350.1							
Nitrogen, Ammonia	10.7	mg/L	0.050	0.035	1		04/16/19 19:37	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres		Analytical Method: EPA 353.2							
Nitrogen, Nitrate	0.063	mg/L	0.050	0.025	1		04/04/19 08:04	14797-55-8	

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

Sample: MW-19A (27140) Lab ID: 35458668003 Collected: 04/03/19 08:35 Received: 04/03/19 15:45 Matrix: Water									
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data Analytical Method:									
Field pH	6.80	Std. Units			1		04/03/19 08:35		
Field Temperature	22.29	deg C			1		04/03/19 08:35		
Field Specific Conductance	1070	umhos/cm			1		04/03/19 08:35		
Oxygen, Dissolved	0.22	mg/L			1		04/03/19 08:35	7782-44-7	
Turbidity	1.91	NTU			1		04/03/19 08:35		
Water Level(NGVD)	17.44	feet			1		04/03/19 08:35		
8011 GCS EDB and DBCP Analytical Method: EPA 8011 Preparation Method: EPA 8011									
1,2-Dibromo-3-chloropropane	0.0063 U	ug/L	0.020	0.0063	1	04/05/19 08:16	04/05/19 20:00	96-12-8	
1,2-Dibromoethane (EDB)	0.0074 U	ug/L	0.0099	0.0074	1	04/05/19 08:16	04/05/19 20:00	106-93-4	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Barium	57.2	ug/L	10.0	0.84	1	04/05/19 02:56	04/08/19 22:09	7440-39-3	
Beryllium	1.6 U	ug/L	4.0	1.6	1	04/05/19 02:56	04/08/19 22:09	7440-41-7	
Cadmium	0.33 U	ug/L	1.0	0.33	1	04/05/19 02:56	04/08/19 22:09	7440-43-9	
Chromium	1.7 U	ug/L	5.0	1.7	1	04/05/19 02:56	04/08/19 22:09	7440-47-3	
Cobalt	2.2 I	ug/L	10.0	0.96	1	04/05/19 02:56	04/08/19 22:09	7440-48-4	
Copper	2.6 U	ug/L	5.0	2.6	1	04/05/19 02:56	04/08/19 22:09	7440-50-8	
Iron	27400	ug/L	40.0	9.2	1	04/05/19 02:56	04/08/19 22:09	7439-89-6	
Lead	4.6 U	ug/L	10.0	4.6	1	04/05/19 02:56	04/08/19 22:09	7439-92-1	
Manganese	34.7	ug/L	5.0	0.42	1	04/05/19 02:56	04/08/19 22:09	7439-96-5	
Nickel	2.1 U	ug/L	5.0	2.1	1	04/05/19 02:56	04/08/19 22:09	7440-02-0	
Selenium	8.5 U	ug/L	15.0	8.5	1	04/05/19 02:56	04/08/19 22:09	7782-49-2	
Silver	1.0 U	ug/L	5.0	1.0	1	04/05/19 02:56	04/08/19 22:09	7440-22-4	
Sodium	8.9	mg/L	2.0	0.27	1	04/05/19 02:56	04/08/19 22:09	7440-23-5	
Vanadium	2.8 I	ug/L	10.0	1.0	1	04/05/19 02:56	04/08/19 22:09	7440-62-2	
Zinc	11.0 U	ug/L	20.0	11.0	1	04/05/19 02:56	04/08/19 22:09	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	04/05/19 02:56	04/05/19 17:59	7440-36-0	
Arsenic	21.1	ug/L	1.0	0.50	1	04/05/19 02:56	04/05/19 17:59	7440-38-2	
Thallium	0.50 U	ug/L	1.0	0.50	1	04/05/19 02:56	04/05/19 17:59	7440-28-0	
7470 Mercury Analytical Method: EPA 7470 Preparation Method: EPA 7470									
Mercury	0.10 U	ug/L	0.20	0.10	1	04/07/19 18:18	04/08/19 15:40	7439-97-6	
8260 MSV Analytical Method: EPA 8260									
Acetone	5.3 U	ug/L	20.0	5.3	1		04/12/19 15:04	67-64-1	
Acrylonitrile	3.7 U	ug/L	10.0	3.7	1		04/12/19 15:04	107-13-1	
Benzene	0.30 U	ug/L	1.0	0.30	1		04/12/19 15:04	71-43-2	
Bromochloromethane	0.37 U	ug/L	1.0	0.37	1		04/12/19 15:04	74-97-5	
Bromodichloromethane	0.19 U	ug/L	0.60	0.19	1		04/12/19 15:04	75-27-4	
Bromoform	2.6 U	ug/L	3.0	2.6	1		04/12/19 15:04	75-25-2	
Bromomethane	4.0 U	ug/L	5.0	4.0	1		04/12/19 15:04	74-83-9	
2-Butanone (MEK)	7.5 U	ug/L	10.0	7.5	1		04/12/19 15:04	78-93-3	

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

Sample: MW-19A (27140) Lab ID: 35458668003 Collected: 04/03/19 08:35 Received: 04/03/19 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		04/12/19 15:04	75-15-0	J(v2)
Carbon tetrachloride	1.1 U	ug/L	3.0	1.1	1		04/12/19 15:04	56-23-5	
Chlorobenzene	0.35 U	ug/L	1.0	0.35	1		04/12/19 15:04	108-90-7	
Chloroethane	3.7 U	ug/L	10.0	3.7	1		04/12/19 15:04	75-00-3	J(v1)
Chloroform	0.32 U	ug/L	1.0	0.32	1		04/12/19 15:04	67-66-3	
Chloromethane	0.97 U	ug/L	1.0	0.97	1		04/12/19 15:04	74-87-3	J(v2)
Dibromochloromethane	0.45 U	ug/L	2.0	0.45	1		04/12/19 15:04	124-48-1	
Dibromomethane	0.68 U	ug/L	2.0	0.68	1		04/12/19 15:04	74-95-3	
1,2-Dichlorobenzene	0.29 U	ug/L	1.0	0.29	1		04/12/19 15:04	95-50-1	
1,4-Dichlorobenzene	0.28 U	ug/L	1.0	0.28	1		04/12/19 15:04	106-46-7	
trans-1,4-Dichloro-2-butene	2.5 U	ug/L	10.0	2.5	1		04/12/19 15:04	110-57-6	J(v2)
1,1-Dichloroethane	0.34 U	ug/L	1.0	0.34	1		04/12/19 15:04	75-34-3	
1,2-Dichloroethane	0.27 U	ug/L	1.0	0.27	1		04/12/19 15:04	107-06-2	
1,1-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/12/19 15:04	75-35-4	
cis-1,2-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/12/19 15:04	156-59-2	
trans-1,2-Dichloroethene	0.23 U	ug/L	1.0	0.23	1		04/12/19 15:04	156-60-5	
1,2-Dichloropropane	0.23 U	ug/L	1.0	0.23	1		04/12/19 15:04	78-87-5	
cis-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/12/19 15:04	10061-01-5	
trans-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/12/19 15:04	10061-02-6	
Ethylbenzene	0.30 U	ug/L	1.0	0.30	1		04/12/19 15:04	100-41-4	
2-Hexanone	0.85 U	ug/L	10.0	0.85	1		04/12/19 15:04	591-78-6	
Iodomethane	9.3 U	ug/L	10.0	9.3	1		04/12/19 15:04	74-88-4	
Methylene Chloride	2.0 U	ug/L	5.0	2.0	1		04/12/19 15:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.32 U	ug/L	10.0	0.32	1		04/12/19 15:04	108-10-1	
Styrene	0.26 U	ug/L	1.0	0.26	1		04/12/19 15:04	100-42-5	
1,1,1,2-Tetrachloroethane	0.32 U	ug/L	1.0	0.32	1		04/12/19 15:04	630-20-6	
1,1,2,2-Tetrachloroethane	0.20 U	ug/L	0.50	0.20	1		04/12/19 15:04	79-34-5	
Tetrachloroethene	0.38 U	ug/L	1.0	0.38	1		04/12/19 15:04	127-18-4	
Toluene	0.33 U	ug/L	1.0	0.33	1		04/12/19 15:04	108-88-3	
1,1,1-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/12/19 15:04	71-55-6	
1,1,2-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/12/19 15:04	79-00-5	
Trichloroethene	0.36 U	ug/L	1.0	0.36	1		04/12/19 15:04	79-01-6	
Trichlorofluoromethane	0.35 U	ug/L	1.0	0.35	1		04/12/19 15:04	75-69-4	
1,2,3-Trichloropropane	1.1 U	ug/L	2.0	1.1	1		04/12/19 15:04	96-18-4	
Vinyl acetate	0.19 U	ug/L	10.0	0.19	1		04/12/19 15:04	108-05-4	
Vinyl chloride	0.39 U	ug/L	1.0	0.39	1		04/12/19 15:04	75-01-4	
Xylene (Total)	2.1 U	ug/L	5.0	2.1	1		04/12/19 15:04	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		04/12/19 15:04	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-130		1		04/12/19 15:04	17060-07-0	
Toluene-d8 (S)	98	%	70-130		1		04/12/19 15:04	2037-26-5	

2540C Total Dissolved Solids Analytical Method: SM 2540C

Total Dissolved Solids	600	mg/L	10.0	10.0	1	04/09/19 20:39
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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

Sample: MW-19A (27140) Lab ID: 35458668003 Collected: 04/03/19 08:35 Received: 04/03/19 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	6.6	mg/L	5.0	2.5	1		04/13/19 11:53	16887-00-6	
Sulfate	6.4	mg/L	5.0	2.5	1		04/13/19 11:53	14808-79-8	
350.1 Ammonia Analytical Method: EPA 350.1									
Nitrogen, Ammonia	2.0	mg/L	0.050	0.035	1		04/16/19 19:39	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres Analytical Method: EPA 353.2									
Nitrogen, Nitrate	0.049 I	mg/L	0.050	0.025	1		04/04/19 06:45	14797-55-8	

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

Sample: Duplicate #1 Lab ID: 35458668004 Collected: 04/03/19 08:35 Received: 04/03/19 15:45 Matrix: Water									
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data Analytical Method:									
Field pH	6.80	Std. Units			1		04/03/19 08:35		
Field Temperature	22.29	deg C			1		04/03/19 08:35		
Field Specific Conductance	1070	umhos/cm			1		04/03/19 08:35		
Oxygen, Dissolved	0.22	mg/L			1		04/03/19 08:35	7782-44-7	
Turbidity	1.91	NTU			1		04/03/19 08:35		
Water Level(NGVD)	17.44	feet			1		04/03/19 08:35		
8011 GCS EDB and DBCP Analytical Method: EPA 8011 Preparation Method: EPA 8011									
1,2-Dibromo-3-chloropropane	0.0062 U	ug/L	0.019	0.0062	1	04/05/19 08:16	04/05/19 20:14	96-12-8	
1,2-Dibromoethane (EDB)	0.0073 U	ug/L	0.0097	0.0073	1	04/05/19 08:16	04/05/19 20:14	106-93-4	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Barium	58.5	ug/L	10.0	0.84	1	04/05/19 02:56	04/08/19 22:12	7440-39-3	
Beryllium	1.6 U	ug/L	4.0	1.6	1	04/05/19 02:56	04/08/19 22:12	7440-41-7	
Cadmium	0.33 U	ug/L	1.0	0.33	1	04/05/19 02:56	04/08/19 22:12	7440-43-9	
Chromium	1.7 U	ug/L	5.0	1.7	1	04/05/19 02:56	04/08/19 22:12	7440-47-3	
Cobalt	2.4 I	ug/L	10.0	0.96	1	04/05/19 02:56	04/08/19 22:12	7440-48-4	
Copper	2.6 U	ug/L	5.0	2.6	1	04/05/19 02:56	04/08/19 22:12	7440-50-8	
Iron	28300	ug/L	40.0	9.2	1	04/05/19 02:56	04/08/19 22:12	7439-89-6	
Lead	4.6 U	ug/L	10.0	4.6	1	04/05/19 02:56	04/08/19 22:12	7439-92-1	
Manganese	35.2	ug/L	5.0	0.42	1	04/05/19 02:56	04/08/19 22:12	7439-96-5	
Nickel	2.1 U	ug/L	5.0	2.1	1	04/05/19 02:56	04/08/19 22:12	7440-02-0	
Selenium	8.5 U	ug/L	15.0	8.5	1	04/05/19 02:56	04/08/19 22:12	7782-49-2	
Silver	1.0 U	ug/L	5.0	1.0	1	04/05/19 02:56	04/08/19 22:12	7440-22-4	
Sodium	9.0	mg/L	2.0	0.27	1	04/05/19 02:56	04/08/19 22:12	7440-23-5	
Vanadium	3.0 I	ug/L	10.0	1.0	1	04/05/19 02:56	04/08/19 22:12	7440-62-2	
Zinc	11.0 U	ug/L	20.0	11.0	1	04/05/19 02:56	04/08/19 22:12	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	04/05/19 02:56	04/05/19 18:07	7440-36-0	
Arsenic	24.4	ug/L	1.0	0.50	1	04/05/19 02:56	04/06/19 14:14	7440-38-2	
Thallium	0.50 U	ug/L	1.0	0.50	1	04/05/19 02:56	04/05/19 18:07	7440-28-0	
7470 Mercury Analytical Method: EPA 7470 Preparation Method: EPA 7470									
Mercury	0.10 U	ug/L	0.20	0.10	1	04/07/19 18:18	04/08/19 15:42	7439-97-6	
8260 MSV Analytical Method: EPA 8260									
Acetone	5.3 U	ug/L	20.0	5.3	1		04/12/19 15:29	67-64-1	
Acrylonitrile	3.7 U	ug/L	10.0	3.7	1		04/12/19 15:29	107-13-1	
Benzene	0.30 U	ug/L	1.0	0.30	1		04/12/19 15:29	71-43-2	
Bromochloromethane	0.37 U	ug/L	1.0	0.37	1		04/12/19 15:29	74-97-5	
Bromodichloromethane	0.19 U	ug/L	0.60	0.19	1		04/12/19 15:29	75-27-4	
Bromoform	2.6 U	ug/L	3.0	2.6	1		04/12/19 15:29	75-25-2	
Bromomethane	4.0 U	ug/L	5.0	4.0	1		04/12/19 15:29	74-83-9	
2-Butanone (MEK)	7.5 U	ug/L	10.0	7.5	1		04/12/19 15:29	78-93-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

Sample: Duplicate #1 Lab ID: 35458668004 Collected: 04/03/19 08:35 Received: 04/03/19 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		04/12/19 15:29	75-15-0	J(v2)
Carbon tetrachloride	1.1 U	ug/L	3.0	1.1	1		04/12/19 15:29	56-23-5	
Chlorobenzene	0.35 U	ug/L	1.0	0.35	1		04/12/19 15:29	108-90-7	
Chloroethane	3.7 U	ug/L	10.0	3.7	1		04/12/19 15:29	75-00-3	J(v1)
Chloroform	0.32 U	ug/L	1.0	0.32	1		04/12/19 15:29	67-66-3	
Chloromethane	0.97 U	ug/L	1.0	0.97	1		04/12/19 15:29	74-87-3	J(v2)
Dibromochloromethane	0.45 U	ug/L	2.0	0.45	1		04/12/19 15:29	124-48-1	
Dibromomethane	0.68 U	ug/L	2.0	0.68	1		04/12/19 15:29	74-95-3	
1,2-Dichlorobenzene	0.29 U	ug/L	1.0	0.29	1		04/12/19 15:29	95-50-1	
1,4-Dichlorobenzene	0.28 U	ug/L	1.0	0.28	1		04/12/19 15:29	106-46-7	
trans-1,4-Dichloro-2-butene	2.5 U	ug/L	10.0	2.5	1		04/12/19 15:29	110-57-6	J(v2)
1,1-Dichloroethane	0.34 U	ug/L	1.0	0.34	1		04/12/19 15:29	75-34-3	
1,2-Dichloroethane	0.27 U	ug/L	1.0	0.27	1		04/12/19 15:29	107-06-2	
1,1-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/12/19 15:29	75-35-4	
cis-1,2-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/12/19 15:29	156-59-2	
trans-1,2-Dichloroethene	0.23 U	ug/L	1.0	0.23	1		04/12/19 15:29	156-60-5	
1,2-Dichloropropane	0.23 U	ug/L	1.0	0.23	1		04/12/19 15:29	78-87-5	
cis-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/12/19 15:29	10061-01-5	
trans-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/12/19 15:29	10061-02-6	
Ethylbenzene	0.30 U	ug/L	1.0	0.30	1		04/12/19 15:29	100-41-4	
2-Hexanone	0.85 U	ug/L	10.0	0.85	1		04/12/19 15:29	591-78-6	
Iodomethane	9.3 U	ug/L	10.0	9.3	1		04/12/19 15:29	74-88-4	
Methylene Chloride	2.0 U	ug/L	5.0	2.0	1		04/12/19 15:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.32 U	ug/L	10.0	0.32	1		04/12/19 15:29	108-10-1	
Styrene	0.26 U	ug/L	1.0	0.26	1		04/12/19 15:29	100-42-5	
1,1,1,2-Tetrachloroethane	0.32 U	ug/L	1.0	0.32	1		04/12/19 15:29	630-20-6	
1,1,2,2-Tetrachloroethane	0.20 U	ug/L	0.50	0.20	1		04/12/19 15:29	79-34-5	
Tetrachloroethene	0.38 U	ug/L	1.0	0.38	1		04/12/19 15:29	127-18-4	
Toluene	0.33 U	ug/L	1.0	0.33	1		04/12/19 15:29	108-88-3	
1,1,1-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/12/19 15:29	71-55-6	
1,1,2-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/12/19 15:29	79-00-5	
Trichloroethene	0.36 U	ug/L	1.0	0.36	1		04/12/19 15:29	79-01-6	
Trichlorofluoromethane	0.35 U	ug/L	1.0	0.35	1		04/12/19 15:29	75-69-4	
1,2,3-Trichloropropane	1.1 U	ug/L	2.0	1.1	1		04/12/19 15:29	96-18-4	
Vinyl acetate	0.19 U	ug/L	10.0	0.19	1		04/12/19 15:29	108-05-4	
Vinyl chloride	0.39 U	ug/L	1.0	0.39	1		04/12/19 15:29	75-01-4	
Xylene (Total)	2.1 U	ug/L	5.0	2.1	1		04/12/19 15:29	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	70-130		1		04/12/19 15:29	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130		1		04/12/19 15:29	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		04/12/19 15:29	2037-26-5	

2540C Total Dissolved Solids Analytical Method: SM 2540C

Total Dissolved Solids	600	mg/L	10.0	10.0	1	04/09/19 20:39
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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

Sample: Duplicate #1		Lab ID: 35458668004		Collected: 04/03/19 08:35		Received: 04/03/19 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	6.6	mg/L	5.0	2.5	1		04/13/19 12:16	16887-00-6	
Sulfate	5.8	mg/L	5.0	2.5	1		04/13/19 12:16	14808-79-8	
350.1 Ammonia		Analytical Method: EPA 350.1							
Nitrogen, Ammonia	2.0	mg/L	0.050	0.035	1		04/16/19 19:41	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres		Analytical Method: EPA 353.2							
Nitrogen, Nitrate	0.044 I	mg/L	0.050	0.025	1		04/04/19 06:49	14797-55-8	

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

Sample: Trip Blank-8260 **Lab ID:** 35458668005 **Collected:** 04/03/19 08:35 **Received:** 04/03/19 15:45 **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		04/12/19 13:24	67-64-1	
Acrylonitrile	3.7 U	ug/L	10.0	3.7	1		04/12/19 13:24	107-13-1	
Benzene	0.30 U	ug/L	1.0	0.30	1		04/12/19 13:24	71-43-2	
Bromochloromethane	0.37 U	ug/L	1.0	0.37	1		04/12/19 13:24	74-97-5	
Bromodichloromethane	0.19 U	ug/L	0.60	0.19	1		04/12/19 13:24	75-27-4	
Bromoform	2.6 U	ug/L	3.0	2.6	1		04/12/19 13:24	75-25-2	
Bromomethane	4.0 U	ug/L	5.0	4.0	1		04/12/19 13:24	74-83-9	
2-Butanone (MEK)	7.5 U	ug/L	10.0	7.5	1		04/12/19 13:24	78-93-3	
Carbon disulfide	0.45 U	ug/L	10.0	0.45	1		04/12/19 13:24	75-15-0	J(v2)
Carbon tetrachloride	1.1 U	ug/L	3.0	1.1	1		04/12/19 13:24	56-23-5	
Chlorobenzene	0.35 U	ug/L	1.0	0.35	1		04/12/19 13:24	108-90-7	
Chloroethane	3.7 U	ug/L	10.0	3.7	1		04/12/19 13:24	75-00-3	J(v1)
Chloroform	0.32 U	ug/L	1.0	0.32	1		04/12/19 13:24	67-66-3	
Chloromethane	0.97 U	ug/L	1.0	0.97	1		04/12/19 13:24	74-87-3	J(v2)
Dibromochloromethane	0.45 U	ug/L	2.0	0.45	1		04/12/19 13:24	124-48-1	
Dibromomethane	0.68 U	ug/L	2.0	0.68	1		04/12/19 13:24	74-95-3	
1,2-Dichlorobenzene	0.29 U	ug/L	1.0	0.29	1		04/12/19 13:24	95-50-1	
1,4-Dichlorobenzene	0.28 U	ug/L	1.0	0.28	1		04/12/19 13:24	106-46-7	
trans-1,4-Dichloro-2-butene	2.5 U	ug/L	10.0	2.5	1		04/12/19 13:24	110-57-6	J(v2)
1,1-Dichloroethane	0.34 U	ug/L	1.0	0.34	1		04/12/19 13:24	75-34-3	
1,2-Dichloroethane	0.27 U	ug/L	1.0	0.27	1		04/12/19 13:24	107-06-2	
1,1-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/12/19 13:24	75-35-4	
cis-1,2-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/12/19 13:24	156-59-2	
trans-1,2-Dichloroethene	0.23 U	ug/L	1.0	0.23	1		04/12/19 13:24	156-60-5	
1,2-Dichloropropane	0.23 U	ug/L	1.0	0.23	1		04/12/19 13:24	78-87-5	
cis-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/12/19 13:24	10061-01-5	
trans-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/12/19 13:24	10061-02-6	
Ethylbenzene	0.30 U	ug/L	1.0	0.30	1		04/12/19 13:24	100-41-4	
2-Hexanone	0.85 U	ug/L	10.0	0.85	1		04/12/19 13:24	591-78-6	
Iodomethane	9.3 U	ug/L	10.0	9.3	1		04/12/19 13:24	74-88-4	
Methylene Chloride	2.0 U	ug/L	5.0	2.0	1		04/12/19 13:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.32 U	ug/L	10.0	0.32	1		04/12/19 13:24	108-10-1	
Styrene	0.26 U	ug/L	1.0	0.26	1		04/12/19 13:24	100-42-5	
1,1,1,2-Tetrachloroethane	0.32 U	ug/L	1.0	0.32	1		04/12/19 13:24	630-20-6	
1,1,2,2-Tetrachloroethane	0.20 U	ug/L	0.50	0.20	1		04/12/19 13:24	79-34-5	
Tetrachloroethene	0.38 U	ug/L	1.0	0.38	1		04/12/19 13:24	127-18-4	
Toluene	0.33 U	ug/L	1.0	0.33	1		04/12/19 13:24	108-88-3	
1,1,1-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/12/19 13:24	71-55-6	
1,1,2-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/12/19 13:24	79-00-5	
Trichloroethene	0.36 U	ug/L	1.0	0.36	1		04/12/19 13:24	79-01-6	
Trichlorofluoromethane	0.35 U	ug/L	1.0	0.35	1		04/12/19 13:24	75-69-4	
1,2,3-Trichloropropane	1.1 U	ug/L	2.0	1.1	1		04/12/19 13:24	96-18-4	
Vinyl acetate	0.19 U	ug/L	10.0	0.19	1		04/12/19 13:24	108-05-4	
Vinyl chloride	0.39 U	ug/L	1.0	0.39	1		04/12/19 13:24	75-01-4	
Xylene (Total)	2.1 U	ug/L	5.0	2.1	1		04/12/19 13:24	1330-20-7	

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

Sample: Trip Blank-8260		Lab ID: 35458668005		Collected: 04/03/19 08:35		Received: 04/03/19 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)	100	%	70-130		1		04/12/19 13:24	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-130		1		04/12/19 13:24	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		04/12/19 13:24	2037-26-5	

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

Sample: Trip Blank-8011		Lab ID: 35458668006	Collected: 04/03/19 08:35	Received: 04/03/19 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	0.0063 U	ug/L	0.020	0.0063	1	04/05/19 08:16	04/05/19 20:29	96-12-8	
1,2-Dibromoethane (EDB)	0.0074 U	ug/L	0.0098	0.0074	1	04/05/19 08:16	04/05/19 20:29	106-93-4	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

QC Batch: 529082 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 35458668001, 35458668002, 35458668003, 35458668004

METHOD BLANK: 2864490 Matrix: Water
Associated Lab Samples: 35458668001, 35458668002, 35458668003, 35458668004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	0.10 U	0.20	0.10	04/08/19 15:27	

LABORATORY CONTROL SAMPLE: 2864491

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2	2.1	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2864492 2864493

Parameter	Units	35458668001 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	2.0	2.0	98	102	75-125	5	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.

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QUALITY CONTROL DATA

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668



QC Batch: 528643 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 35458668001, 35458668002, 35458668003, 35458668004

METHOD BLANK: 2861643 Matrix: Water
Associated Lab Samples: 35458668001, 35458668002, 35458668003, 35458668004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Barium	ug/L	0.84 U	10.0	0.84	04/09/19 10:33	
Beryllium	ug/L	1.6 U	4.0	1.6	04/09/19 10:33	
Cadmium	ug/L	0.33 U	1.0	0.33	04/09/19 10:33	
Chromium	ug/L	1.7 U	5.0	1.7	04/09/19 10:33	
Cobalt	ug/L	0.96 U	10.0	0.96	04/09/19 10:33	
Copper	ug/L	2.6 U	5.0	2.6	04/09/19 10:33	
Iron	ug/L	9.2 U	40.0	9.2	04/09/19 10:33	
Lead	ug/L	4.6 U	10.0	4.6	04/09/19 10:33	
Manganese	ug/L	0.64 I	5.0	0.42	04/09/19 10:33	
Nickel	ug/L	2.1 U	5.0	2.1	04/09/19 10:33	
Selenium	ug/L	8.5 U	15.0	8.5	04/09/19 10:33	
Silver	ug/L	1.0 U	5.0	1.0	04/09/19 10:33	
Sodium	mg/L	0.27 U	2.0	0.27	04/09/19 10:33	
Vanadium	ug/L	1.0 U	10.0	1.0	04/09/19 10:33	
Zinc	ug/L	11.0 U	20.0	11.0	04/09/19 10:33	

LABORATORY CONTROL SAMPLE: 2861644

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	250	248	99	80-120	
Beryllium	ug/L	25	24.8	99	80-120	
Cadmium	ug/L	25	25.4	102	80-120	
Chromium	ug/L	250	251	100	80-120	
Cobalt	ug/L	250	250	100	80-120	
Copper	ug/L	250	240	96	80-120	
Iron	ug/L	2500	2530	101	80-120	
Lead	ug/L	250	254	102	80-120	
Manganese	ug/L	250	250	100	80-120	
Nickel	ug/L	250	255	102	80-120	
Selenium	ug/L	250	250	100	80-120	
Silver	ug/L	25	24.9	100	80-120	
Sodium	mg/L	12.5	12.5	100	80-120	
Vanadium	ug/L	250	246	98	80-120	
Zinc	ug/L	1250	1280	102	80-120	

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QUALITY CONTROL DATA

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668



MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2861645 2861646											
Parameter	Units	35458178001		MS	MSD	MS		MSD	% Rec		Max
		Result		Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits	RPD
Barium	ug/L	33.7		250	250	284	279	100	98	75-125	2
Beryllium	ug/L	1.6 U		25	25	25.5	25.1	102	100	75-125	2
Cadmium	ug/L	0.33 U		25	25	25.6	24.9	102	99	75-125	3
Chromium	ug/L	1.7 U		250	250	255	250	101	100	75-125	2
Cobalt	ug/L	1.2 I		250	250	254	250	101	100	75-125	1
Copper	ug/L	2.6 U		250	250	249	245	100	98	75-125	2
Iron	ug/L	1730		2500	2500	4290	4240	103	100	75-125	1
Lead	ug/L	4.6 U		250	250	255	250	101	99	75-125	2
Manganese	ug/L	16.9		250	250	268	264	100	99	75-125	1
Nickel	ug/L	2.1 U		250	250	256	251	102	100	75-125	2
Selenium	ug/L	8.5 U		250	250	248	244	98	96	75-125	2
Silver	ug/L	1.0 U		25	25	25.1	25.0	100	100	75-125	0
Sodium	mg/L	16.0		12.5	12.5	29.0	28.5	104	100	75-125	2
Vanadium	ug/L	3.6 I		250	250	255	251	101	99	75-125	2
Zinc	ug/L	11.0 U		1250	1250	1270	1260	102	100	75-125	1

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QUALITY CONTROL DATA

Project: Central Cty MW wells Appdx 1
Pace Project No.: 35458668



QC Batch: 528644 Analysis Method: EPA 6020
QC Batch Method: EPA 3010 Analysis Description: 6020 MET
Associated Lab Samples: 35458668001, 35458668002, 35458668003, 35458668004

METHOD BLANK: 2861647 Matrix: Water
Associated Lab Samples: 35458668001, 35458668002, 35458668003, 35458668004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	0.50 U	1.0	0.50	04/05/19 17:16	
Arsenic	ug/L	0.50 U	1.0	0.50	04/05/19 17:16	
Thallium	ug/L	0.50 U	1.0	0.50	04/05/19 17:16	

LABORATORY CONTROL SAMPLE: 2861648

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	50	52.8	106	80-120	
Arsenic	ug/L	50	46.7	93	80-120	
Thallium	ug/L	50	50.1	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2861649 2861650

Parameter	Units	35458178003 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	52.9	53.9	106	107	75-125	2	20	
Arsenic	ug/L	0.50 U	50	50	52.5	51.9	105	103	75-125	1	20	
Thallium	ug/L	0.50 U	50	50	50.1	50.3	100	100	75-125	0	20	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1
Pace Project No.: 35458668

QC Batch: 530614 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 35458668001, 35458668002, 35458668003, 35458668004, 35458668005

METHOD BLANK: 2873350 Matrix: Water
Associated Lab Samples: 35458668001, 35458668002, 35458668003, 35458668004, 35458668005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	0.32 U	1.0	0.32	04/12/19 12:09	
1,1,1-Trichloroethane	ug/L	0.30 U	1.0	0.30	04/12/19 12:09	
1,1,2,2-Tetrachloroethane	ug/L	0.20 U	0.50	0.20	04/12/19 12:09	
1,1,2-Trichloroethane	ug/L	0.30 U	1.0	0.30	04/12/19 12:09	
1,1-Dichloroethane	ug/L	0.34 U	1.0	0.34	04/12/19 12:09	
1,1-Dichloroethene	ug/L	0.27 U	1.0	0.27	04/12/19 12:09	
1,2,3-Trichloropropane	ug/L	1.1 U	2.0	1.1	04/12/19 12:09	
1,2-Dichlorobenzene	ug/L	0.29 U	1.0	0.29	04/12/19 12:09	
1,2-Dichloroethane	ug/L	0.27 U	1.0	0.27	04/12/19 12:09	
1,2-Dichloropropane	ug/L	0.23 U	1.0	0.23	04/12/19 12:09	
1,4-Dichlorobenzene	ug/L	0.28 U	1.0	0.28	04/12/19 12:09	
2-Butanone (MEK)	ug/L	7.5 U	10.0	7.5	04/12/19 12:09	
2-Hexanone	ug/L	0.85 U	10.0	0.85	04/12/19 12:09	
4-Methyl-2-pentanone (MIBK)	ug/L	0.32 U	10.0	0.32	04/12/19 12:09	
Acetone	ug/L	5.3 U	20.0	5.3	04/12/19 12:09	
Acrylonitrile	ug/L	3.7 U	10.0	3.7	04/12/19 12:09	
Benzene	ug/L	0.30 U	1.0	0.30	04/12/19 12:09	
Bromochloromethane	ug/L	0.37 U	1.0	0.37	04/12/19 12:09	
Bromodichloromethane	ug/L	0.19 U	0.60	0.19	04/12/19 12:09	
Bromoform	ug/L	2.6 U	3.0	2.6	04/12/19 12:09	
Bromomethane	ug/L	4.0 U	5.0	4.0	04/12/19 12:09	
Carbon disulfide	ug/L	0.45 U	10.0	0.45	04/12/19 12:09	J(v2)
Carbon tetrachloride	ug/L	1.1 U	3.0	1.1	04/12/19 12:09	
Chlorobenzene	ug/L	0.35 U	1.0	0.35	04/12/19 12:09	
Chloroethane	ug/L	3.7 U	10.0	3.7	04/12/19 12:09	J(v1)
Chloroform	ug/L	0.32 U	1.0	0.32	04/12/19 12:09	
Chloromethane	ug/L	0.97 U	1.0	0.97	04/12/19 12:09	J(v2)
cis-1,2-Dichloroethene	ug/L	0.27 U	1.0	0.27	04/12/19 12:09	
cis-1,3-Dichloropropene	ug/L	0.17 U	0.50	0.17	04/12/19 12:09	
Dibromochloromethane	ug/L	0.45 U	2.0	0.45	04/12/19 12:09	
Dibromomethane	ug/L	0.68 U	2.0	0.68	04/12/19 12:09	
Ethylbenzene	ug/L	0.30 U	1.0	0.30	04/12/19 12:09	
Iodomethane	ug/L	9.3 U	10.0	9.3	04/12/19 12:09	
Methylene Chloride	ug/L	2.0 U	5.0	2.0	04/12/19 12:09	
Styrene	ug/L	0.26 U	1.0	0.26	04/12/19 12:09	
Tetrachloroethene	ug/L	0.38 U	1.0	0.38	04/12/19 12:09	
Toluene	ug/L	0.33 U	1.0	0.33	04/12/19 12:09	
trans-1,2-Dichloroethene	ug/L	0.23 U	1.0	0.23	04/12/19 12:09	
trans-1,3-Dichloropropene	ug/L	0.17 U	0.50	0.17	04/12/19 12:09	
trans-1,4-Dichloro-2-butene	ug/L	2.5 U	10.0	2.5	04/12/19 12:09	J(v2)
Trichloroethene	ug/L	0.36 U	1.0	0.36	04/12/19 12:09	

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QUALITY CONTROL DATA

Project: Central Cty MW wells Appdx 1
Pace Project No.: 35458668



METHOD BLANK: 2873350

Matrix: Water

Associated Lab Samples: 35458668001, 35458668002, 35458668003, 35458668004, 35458668005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Trichlorofluoromethane	ug/L	0.35 U	1.0	0.35	04/12/19 12:09	
Vinyl acetate	ug/L	0.19 U	10.0	0.19	04/12/19 12:09	
Vinyl chloride	ug/L	0.39 U	1.0	0.39	04/12/19 12:09	
Xylene (Total)	ug/L	2.1 U	5.0	2.1	04/12/19 12:09	
1,2-Dichloroethane-d4 (S)	%	98	70-130		04/12/19 12:09	
4-Bromofluorobenzene (S)	%	100	70-130		04/12/19 12:09	
Toluene-d8 (S)	%	100	70-130		04/12/19 12:09	

LABORATORY CONTROL SAMPLE: 2873351

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	17.2	86	70-130	
1,1,1-Trichloroethane	ug/L	20	15.4	77	70-130	
1,1,2,2-Tetrachloroethane	ug/L	20	17.2	86	68-125	
1,1,2-Trichloroethane	ug/L	20	16.8	84	70-130	
1,1-Dichloroethane	ug/L	20	16.3	81	70-130	
1,1-Dichloroethene	ug/L	20	16.2	81	66-133	
1,2,3-Trichloropropane	ug/L	20	17.9	90	62-127	
1,2-Dichlorobenzene	ug/L	20	16.8	84	70-130	
1,2-Dichloroethane	ug/L	20	14.9	75	70-130	
1,2-Dichloropropane	ug/L	20	16.2	81	70-130	
1,4-Dichlorobenzene	ug/L	20	16.3	81	70-130	
2-Butanone (MEK)	ug/L	40	29.8	74	47-143	
2-Hexanone	ug/L	40	32.3	81	48-145	
4-Methyl-2-pentanone (MIBK)	ug/L	40	33.5	84	57-132	
Acetone	ug/L	40	29.5	74	46-148	
Acrylonitrile	ug/L	200	150	75	60-143	
Benzene	ug/L	20	15.9	80	70-130	
Bromochloromethane	ug/L	20	16.5	83	70-130	
Bromodichloromethane	ug/L	20	15.0	75	70-130	
Bromoform	ug/L	20	13.3	67	49-126	
Bromomethane	ug/L	20	15.0	75	10-165	
Carbon disulfide	ug/L	20	13.1	66	60-141 J(v3)	
Carbon tetrachloride	ug/L	20	15.7	78	63-126	
Chlorobenzene	ug/L	20	16.0	80	70-130	
Chloroethane	ug/L	20	17.3	86	71-142 J(v1)	
Chloroform	ug/L	20	15.4	77	70-130	
Chloromethane	ug/L	20	13.9	70	40-140 J(v3)	
cis-1,2-Dichloroethene	ug/L	20	16.1	80	70-130	
cis-1,3-Dichloropropene	ug/L	20	16.9	85	70-130	
Dibromochloromethane	ug/L	20	13.5	68	62-118	
Dibromomethane	ug/L	20	16.4	82	70-130	
Ethylbenzene	ug/L	20	16.5	82	70-130	
Iodomethane	ug/L	40	33.0	82	10-164	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

LABORATORY CONTROL SAMPLE: 2873351

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	20	15.9	80	65-136	
Styrene	ug/L	20	16.9	84	70-130	
Tetrachloroethene	ug/L	20	14.8	74	64-134	
Toluene	ug/L	20	16.4	82	70-130	
trans-1,2-Dichloroethene	ug/L	20	15.6	78	68-127	
trans-1,3-Dichloropropene	ug/L	20	15.3	76	65-121	
trans-1,4-Dichloro-2-butene	ug/L	20	12.4	62	42-129 J(v3)	
Trichloroethene	ug/L	20	15.3	76	70-130	
Trichlorofluoromethane	ug/L	20	15.0	75	65-135	
Vinyl acetate	ug/L	20	16.4	82	60-144	
Vinyl chloride	ug/L	20	14.0	70	68-131	
Xylene (Total)	ug/L	60	52.3	87	70-130	
1,2-Dichloroethane-d4 (S)	%			90	70-130	
4-Bromofluorobenzene (S)	%			100	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE SAMPLE: 2873392

Parameter	Units	35459748002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	0.32 U	20	19.3	96	70-130	
1,1,1-Trichloroethane	ug/L	0.30 U	20	19.3	97	70-130	
1,1,2,2-Tetrachloroethane	ug/L	0.20 U	20	19.1	96	68-125	
1,1,2-Trichloroethane	ug/L	0.30 U	20	19.4	97	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	19.9	100	66-133	
1,2,3-Trichloropropane	ug/L	1.1 U	20	18.4	92	62-127	
1,2-Dichlorobenzene	ug/L	0.29 U	20	17.0	85	70-130	
1,2-Dichloroethane	ug/L	0.27 U	20	19.5	97	70-130	
1,2-Dichloropropane	ug/L	0.23 U	20	19.2	96	70-130	
1,4-Dichlorobenzene	ug/L	0.28 U	20	16.3	82	70-130	
2-Butanone (MEK)	ug/L	7.5 U	40	34.1	85	47-143	
2-Hexanone	ug/L	0.85 U	40	36.3	91	48-145	
4-Methyl-2-pentanone (MIBK)	ug/L	0.32 U	40	36.0	90	57-132	
Acetone	ug/L	5.3 U	40	37.1	84	46-148	
Acrylonitrile	ug/L	3.7 U	200	179	89	60-143	
Benzene	ug/L	0.30 U	20	18.9	95	70-130	
Bromochloromethane	ug/L	0.37 U	20	19.9	100	70-130	
Bromodichloromethane	ug/L	0.19 U	20	18.4	92	70-130	
Bromoform	ug/L	2.6 U	20	14.5	72	49-126	
Bromomethane	ug/L	4.0 U	20	19.2	96	10-165	
Carbon disulfide	ug/L	0.45 U	20	18.7	93	60-141 J(v3)	
Carbon tetrachloride	ug/L	1.1 U	20	18.4	92	63-126	
Chlorobenzene	ug/L	0.35 U	20	17.8	89	70-130	
Chloroethane	ug/L	3.7 U	20	33.6	168	71-142 J(M1),J(v1)	
Chloroform	ug/L	0.32 U	20	19.2	96	70-130	

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QUALITY CONTROL DATA

Project: Central Cty MW wells Appdx 1
Pace Project No.: 35458668



MATRIX SPIKE SAMPLE: 2873392		35459748002	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Chloromethane	ug/L	0.97 U	20	19.2	96	40-140	J(v3)
cis-1,2-Dichloroethene	ug/L	0.27 U	20	19.3	96	70-130	
cis-1,3-Dichloropropene	ug/L	0.17 U	20	18.4	92	70-130	
Dibromochloromethane	ug/L	0.45 U	20	15.1	76	62-118	
Dibromomethane	ug/L	0.68 U	20	18.9	95	70-130	
Ethylbenzene	ug/L	0.30 U	20	17.7	89	70-130	
Iodomethane	ug/L	9.3 U	40	29.3	73	10-164	
Methylene Chloride	ug/L	2.0 U	20	18.6	92	65-136	
Styrene	ug/L	0.26 U	20	17.3	87	70-130	
Tetrachloroethene	ug/L	0.38 U	20	14.0	70	64-134	
Toluene	ug/L	0.33 U	20	18.2	91	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	16.7	83	65-121	
trans-1,4-Dichloro-2-butene	ug/L	2.5 U	20	15.6	78	42-129	J(v3)
Trichloroethene	ug/L	0.36 U	20	17.4	87	70-130	
Trichlorofluoromethane	ug/L	0.35 U	20	23.6	118	65-135	
Vinyl acetate	ug/L	0.19 U	20	18.2	91	60-144	
Vinyl chloride	ug/L	0.39 U	20	21.8	109	68-131	
Xylene (Total)	ug/L	2.1 U	60	55.2	92	70-130	
1,2-Dichloroethane-d4 (S)	%				105	70-130	
4-Bromofluorobenzene (S)	%				99	70-130	
Toluene-d8 (S)	%				101	70-130	

SAMPLE DUPLICATE: 2873391

Parameter	Units	35459748001	Dup	RPD	Max	
		Result	Result		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	
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	1.24	1.2	0	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	1.16	1.2	2	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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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

SAMPLE DUPLICATE: 2873391

Parameter	Units	35459748001 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	2.17	2.2	1	40	
Chloroethane	ug/L	3.7 U	3.7 U		40	J(v1)
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	
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	
Xylene (Total)	ug/L	2.1 U	2.1 U		40	
1,2-Dichloroethane-d4 (S)	%	104	103		40	
4-Bromofluorobenzene (S)	%	99	100		40	
Toluene-d8 (S)	%	98	99		40	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1
Pace Project No.: 35458668

QC Batch: 528667 Analysis Method: EPA 8011
QC Batch Method: EPA 8011 Analysis Description: 8011 EDB DBCP
Associated Lab Samples: 35458668001, 35458668002, 35458668003, 35458668004, 35458668006

METHOD BLANK: 2861709 Matrix: Water
Associated Lab Samples: 35458668001, 35458668002, 35458668003, 35458668004, 35458668006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.0064 U	0.020	0.0064	04/05/19 12:22	
1,2-Dibromoethane (EDB)	ug/L	0.0075 U	0.010	0.0075	04/05/19 12:22	

LABORATORY CONTROL SAMPLE: 2861710

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.25	99	60-140	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.26	104	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2861711 2861712

Parameter	Units	35459032005 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	0.0062 U	0.44	0.44	0.47	0.49	107	111	60-140	4	40	
1,2-Dibromoethane (EDB)	ug/L	0.0072 U	0.44	0.44	0.51	0.53	116	122	60-140	5	40	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

QC Batch: 529378 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 35458668001, 35458668002, 35458668003, 35458668004

METHOD BLANK: 2865853 Matrix: Water
Associated Lab Samples: 35458668001, 35458668002, 35458668003, 35458668004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	5.0 U	5.0	5.0	04/09/19 20:39	

LABORATORY CONTROL SAMPLE: 2865854

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	300	297	99	90-110	

SAMPLE DUPLICATE: 2865855

Parameter	Units	35458421001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	7020	6940	1	5	

SAMPLE DUPLICATE: 2865856

Parameter	Units	35458993003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	357	358	0	5	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1
Pace Project No.: 35458668

QC Batch: 530535 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 35458668001, 35458668002, 35458668003, 35458668004

METHOD BLANK: 2872907 Matrix: Water
Associated Lab Samples: 35458668001, 35458668002, 35458668003, 35458668004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	2.5 U	5.0	2.5	04/12/19 22:58	
Sulfate	mg/L	2.5 U	5.0	2.5	04/12/19 22:58	

LABORATORY CONTROL SAMPLE: 2872908

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.4	103	90-110	
Sulfate	mg/L	50	51.8	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2873494 2873495

Parameter	Units	35458661005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	32.1	50	50	90.2	90.4	116	117	90-110	0	20	J(M1)
Sulfate	mg/L	4.7 I	50	50	55.7	56.0	102	103	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2873496 2873497

Parameter	Units	35458754001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	138	100	100	266	257	128	119	90-110	4	20	J(M1), L
Sulfate	mg/L	76.6	100	100	192	186	116	110	90-110	3	20	J(M1)

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QUALITY CONTROL DATA

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

QC Batch:	531443	Analysis Method:	EPA 350.1
QC Batch Method:	EPA 350.1	Analysis Description:	350.1 Ammonia
Associated Lab Samples:	35458668001, 35458668002, 35458668003, 35458668004		

METHOD BLANK: 2878077 Matrix: Water
Associated Lab Samples: 35458668001, 35458668002, 35458668003, 35458668004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	0.035 U	0.050	0.035	04/16/19 19:00	

LABORATORY CONTROL SAMPLE: 2878078

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	1	0.96	94	90-110	

MATRIX SPIKE SAMPLE: 2878080

Parameter	Units	35458423001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	27.2	10.2	36.6	93	90-110	

SAMPLE DUPLICATE: 2878079

Parameter	Units	35458423001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	27.2	27.5	1	20	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

QC Batch: 528299

Analysis Method: EPA 353.2

QC Batch Method: EPA 353.2

Analysis Description: 353.2 Nitrate + Nitrite, Unpres.

Associated Lab Samples: 35458668003

METHOD BLANK: 2859525

Matrix: Water

Associated Lab Samples: 35458668003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.050	0.025	04/04/19 06:03	

SAMPLE DUPLICATE: 2859527

Parameter	Units	35458676002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.025 U		20	

SAMPLE DUPLICATE: 2859529

Parameter	Units	35458406002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.66	0.65	1	20	

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QUALITY CONTROL DATA

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

QC Batch:	528300	Analysis Method:	EPA 353.2
QC Batch Method:	EPA 353.2	Analysis Description:	353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples:	35458668004		

METHOD BLANK: 2859531 Matrix: Water

Associated Lab Samples: 35458668004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.050	0.025	04/04/19 06:47	

SAMPLE DUPLICATE: 2859533

Parameter	Units	35458668004 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.044 I	0.050 I		20	

SAMPLE DUPLICATE: 2859535

Parameter	Units	35458753012 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 I	0.025 U		20	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

QC Batch: 528301

Analysis Method: EPA 353.2

QC Batch Method: EPA 353.2

Analysis Description: 353.2 Nitrate + Nitrite, Unpres.

Associated Lab Samples: 35458668002

METHOD BLANK: 2859537

Matrix: Water

Associated Lab Samples: 35458668002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.050	0.025	04/04/19 07:30	

SAMPLE DUPLICATE: 2859539

Parameter	Units	35458753001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.028 I	0.030 I		20	

SAMPLE DUPLICATE: 2859541

Parameter	Units	35458639002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.025 U		20	

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QUALITY CONTROL DATA

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

QC Batch:	528303	Analysis Method:	EPA 353.2
QC Batch Method:	EPA 353.2	Analysis Description:	353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples:	35458668001		

METHOD BLANK: 2859549 Matrix: Water

Associated Lab Samples: 35458668001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.050	0.025	04/04/19 08:49	

SAMPLE DUPLICATE: 2859551

Parameter	Units	35458675002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.025 U		20	

SAMPLE DUPLICATE: 2859553

Parameter	Units	35458675003 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.41	0.41	0	20	

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QUALIFIERS

Project: Central Cty MW wells Appdx 1
Pace Project No.: 35458668

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(M1)	Estimated Value. Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
✓ J(v1)	The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.
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.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458668

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
35458668001	MW-8A (21453)				
35458668002	MW-18R (29095)				
35458668003	MW-19A (27140)				
35458668004	Duplicate #1				
35458668001	MW-8A (21453)	EPA 8011	528667	EPA 8011	528724
35458668002	MW-18R (29095)	EPA 8011	528667	EPA 8011	528724
35458668003	MW-19A (27140)	EPA 8011	528667	EPA 8011	528724
35458668004	Duplicate #1	EPA 8011	528667	EPA 8011	528724
35458668006	Trip Blank-8011	EPA 8011	528667	EPA 8011	528724
35458668001	MW-8A (21453)	EPA 3010	528643	EPA 6010	528647
35458668002	MW-18R (29095)	EPA 3010	528643	EPA 6010	528647
35458668003	MW-19A (27140)	EPA 3010	528643	EPA 6010	528647
35458668004	Duplicate #1	EPA 3010	528643	EPA 6010	528647
35458668001	MW-8A (21453)	EPA 3010	528644	EPA 6020	528648
35458668002	MW-18R (29095)	EPA 3010	528644	EPA 6020	528648
35458668003	MW-19A (27140)	EPA 3010	528644	EPA 6020	528648
35458668004	Duplicate #1	EPA 3010	528644	EPA 6020	528648
35458668001	MW-8A (21453)	EPA 7470	529082	EPA 7470	529121
35458668002	MW-18R (29095)	EPA 7470	529082	EPA 7470	529121
35458668003	MW-19A (27140)	EPA 7470	529082	EPA 7470	529121
35458668004	Duplicate #1	EPA 7470	529082	EPA 7470	529121
35458668001	MW-8A (21453)	EPA 8260	530614		
35458668002	MW-18R (29095)	EPA 8260	530614		
35458668003	MW-19A (27140)	EPA 8260	530614		
35458668004	Duplicate #1	EPA 8260	530614		
35458668005	Trip Blank-8260	EPA 8260	530614		
35458668001	MW-8A (21453)	SM 2540C	529378		
35458668002	MW-18R (29095)	SM 2540C	529378		
35458668003	MW-19A (27140)	SM 2540C	529378		
35458668004	Duplicate #1	SM 2540C	529378		
35458668001	MW-8A (21453)	EPA 300.0	530535		
35458668002	MW-18R (29095)	EPA 300.0	530535		
35458668003	MW-19A (27140)	EPA 300.0	530535		
35458668004	Duplicate #1	EPA 300.0	530535		
35458668001	MW-8A (21453)	EPA 350.1	531443		
35458668002	MW-18R (29095)	EPA 350.1	531443		
35458668003	MW-19A (27140)	EPA 350.1	531443		
35458668004	Duplicate #1	EPA 350.1	531443		
35458668001	MW-8A (21453)	EPA 353.2	528303		
35458668002	MW-18R (29095)	EPA 353.2	528301		
35458668003	MW-19A (27140)	EPA 353.2	528299		
35458668004	Duplicate #1	EPA 353.2	528300		

REPORT OF LABORATORY ANALYSIS

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Section A

Required Client Information:

Company:	Seminole County
Address:	1255 T. Mabry Carlton Parkway
Venue:	FL 34292

Email:	
Phone: 941-650-9834	Fax:

Requested Due Date:

Section B

Required Project Information:

Report To: Mr. Cesar Rodriguez

Copy To:

Purchase Order #:	181191
-------------------	--------

Project Name:	Central Cty MW wells Appdx 1
---------------	------------------------------

Project #:

Section C

Invoice Information:

Attention:

Company Name:

Address:

Pace Quote:

Pace Project Manager: martha.montero@pacelabs.com

Pace Profile #:	833 #1
-----------------	--------

Page : 1 Of 1

Regulatory Agency

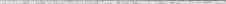
State / Location

FL

[illegible]

Please use ADAPT, analyze all compounds on App 1

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Central county Monitoring wells Adapt	Ronald L. Moore, Sarasota County	4/3/19	1400	[Signature]	4/8/19	1400	T203
	[Signature]	4/3/19	1545	MURPHY PAUL	4/3/19	1545	1.2 y ~ x

SAMPLER NAME AND SIGNATURE PRINT Name of SAMPLER: Ron Moore SIGNATURE of SAMPLER: 		TEMP in C Received on ce (Y/N) Custody Sealed Cooler (Y/N) Samples intact (Y/N)
DATE Signed: 4/3/19		

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

Sample Condition Upon Receipt Form (SCUR)

Project # **W0# : 35458668**
Project Manager: PM: MIM **Due Date:** 04/17/19
Client: CLIENT: SARCOU

Date and Initials of person:

Examining contents: MUG
 Label: 4/31/19
 Deliver: ✓
 pH: ✓

Thermometer Used: T-203 Date: 4-3-19 Time: 1545 Initials: NOM

State of Origin: FL

☐ For WV projects, all containers verified to ≤6 °C

Cooler #1 Temp.°C 1.2 (Visual) 0.0 (Correction Factor) 1.2 (Actual)
 Cooler #2 Temp.°C _____ (Visual) _____ (Correction Factor) _____ (Actual)
 Cooler #3 Temp.°C _____ (Visual) _____ (Correction Factor) _____ (Actual)
 Cooler #4 Temp.°C _____ (Visual) _____ (Correction Factor) _____ (Actual)
 Cooler #5 Temp.°C _____ (Visual) _____ (Correction Factor) _____ (Actual)
 Cooler #6 Temp.°C _____ (Visual) _____ (Correction Factor) _____ (Actual)

☒ Samples on ice, cooling process has begun
☐ Samples on ice, cooling process has begun
☐ Samples on ice, cooling process has begun
☐ Samples on ice, cooling process has begun
☐ Samples on ice, cooling process has begun
☐ 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	Preservation Information: Preservative: _____ Lot #/Trace #: _____ Date: _____ Time: _____ Initials: _____
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	
All Containers needing preservation are found to be in compliance with EPA recommendation:	☒ Yes ☐ No ☐ N/A	
Exceptions: VOA, Coliform, TOC, O&G, Carbamates		
Headspace in VOA Vials? (>6mm):	☐ Yes ☒ No ☐ N/A	
Trip Blank Present:	☒ Yes ☐ No ☐ N/A	

Both 8011 & 8260

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution (use back for additional comments):

Project Manager Review: _____

Date: _____ Page 42 of 45

April 25, 2019

REVIEWED

By Cesar Rodriguez-Palacios at 2:17 pm, May 24, 2019

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

RE: Project: Central Cty MW wells Appdx 1
Pace Project No.: 35460400

Dear Mr. Rodriguez:

Enclosed are the analytical results for sample(s) received by the laboratory on April 10, 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



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35460400

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

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35460400

Lab ID	Sample ID	Matrix	Date Collected	Date Received
35460400001	MW-15 (23031)	Water	04/10/19 08:35	04/10/19 16:55
35460400002	MW-16 (23032)	Water	04/10/19 10:25	04/10/19 16:55
35460400003	MW-17 (23033)	Water	04/10/19 12:15	04/10/19 16:55
35460400004	Trip Blank 8260 #4	Water	04/10/19 08:35	04/10/19 16:55
35460400005	Trip Blank 8011 #4	Water	04/10/19 08:35	04/10/19 16:55

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SAMPLE ANALYTE COUNT

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35460400

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
35460400001	MW-15 (23031)	EPA 8011	LJM	2	PASI-O
		EPA 6010	JWP	15	PASI-O
		EPA 6020	FDV	3	PASI-O
		EPA 7470	AMS	1	PASI-O
		EPA 8260	BTN	48	PASI-O
		SM 2540C	KLT	1	PASI-O
		EPA 300.0	SEW	2	PASI-O
		EPA 350.1	AMP	1	PASI-O
		EPA 353.2	CLL	1	PASI-O
35460400002	MW-16 (23032)	EPA 8011	LJM	2	PASI-O
		EPA 6010	JWP	15	PASI-O
		EPA 6020	FDV	3	PASI-O
		EPA 7470	AMS	1	PASI-O
		EPA 8260	BTN	48	PASI-O
		SM 2540C	KLT	1	PASI-O
		EPA 300.0	SEW	2	PASI-O
		EPA 350.1	AMP	1	PASI-O
		EPA 353.2	CLL	1	PASI-O
35460400003	MW-17 (23033)	EPA 8011	LJM	2	PASI-O
		EPA 6010	JWP	15	PASI-O
		EPA 6020	FDV	3	PASI-O
		EPA 7470	AMS	1	PASI-O
		EPA 8260	BTN	48	PASI-O
		SM 2540C	KLT	1	PASI-O
		EPA 300.0	SEW	2	PASI-O
		EPA 350.1	AMP	1	PASI-O
		EPA 353.2	CLL	1	PASI-O
35460400004	Trip Blank 8260 #4	EPA 8260	BTN	48	PASI-O
35460400005	Trip Blank 8011 #4	EPA 8011	LJM	2	PASI-O

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35460400

Sample: MW-15 (23031) Lab ID: 35460400001 Collected: 04/10/19 08:35 Received: 04/10/19 16:55 Matrix: Water									
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data Analytical Method:									
Field pH	6.74	Std. Units			1		04/10/19 08:35		
Field Temperature	26.75	deg C			1		04/10/19 08:35		
Field Specific Conductance	3219	umhos/cm			1		04/10/19 08:35		
Oxygen, Dissolved	0.20	mg/L			1		04/10/19 08:35	7782-44-7	
Turbidity	2.04	NTU			1		04/10/19 08:35		
Water Level(NGVD)	19.65	feet			1		04/10/19 08:35		
8011 GCS EDB and DBCP Analytical Method: EPA 8011 Preparation Method: EPA 8011									
1,2-Dibromo-3-chloropropane	0.0063 U	ug/L	0.020	0.0063	1	04/21/19 10:45	04/22/19 06:06	96-12-8	
1,2-Dibromoethane (EDB)	0.0073 U	ug/L	0.0098	0.0073	1	04/21/19 10:45	04/22/19 06:06	106-93-4	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Barium	289	ug/L	10.0	0.84	1	04/13/19 02:45	04/16/19 13:18	7440-39-3	
Beryllium	1.6 U	ug/L	4.0	1.6	1	04/13/19 02:45	04/16/19 13:18	7440-41-7	
Cadmium	0.77 I	ug/L	1.0	0.33	1	04/13/19 02:45	04/16/19 13:18	7440-43-9	
Chromium	2.1 I	ug/L	5.0	1.7	1	04/13/19 02:45	04/16/19 13:18	7440-47-3	
Cobalt	2.7 I	ug/L	10.0	0.96	1	04/13/19 02:45	04/16/19 13:18	7440-48-4	
Copper	2.6 U	ug/L	5.0	2.6	1	04/13/19 02:45	04/16/19 13:18	7440-50-8	
Iron	72800	ug/L	800	184	20	04/13/19 02:45	04/17/19 00:19	7439-89-6	
Lead	4.6 U	ug/L	10.0	4.6	1	04/13/19 02:45	04/16/19 13:18	7439-92-1	
Manganese	417	ug/L	5.0	0.42	1	04/13/19 02:45	04/16/19 13:18	7439-96-5	
Nickel	2.2 I	ug/L	5.0	2.1	1	04/13/19 02:45	04/16/19 13:18	7440-02-0	
Selenium	8.5 U	ug/L	15.0	8.5	1	04/13/19 02:45	04/16/19 13:18	7782-49-2	
Silver	1.0 U	ug/L	5.0	1.0	1	04/13/19 02:45	04/16/19 13:18	7440-22-4	
Sodium	73.6	mg/L	2.0	0.27	1	04/13/19 02:45	04/16/19 13:18	7440-23-5	
Vanadium	5.2 I	ug/L	10.0	1.0	1	04/13/19 02:45	04/16/19 13:18	7440-62-2	
Zinc	11.0 U	ug/L	20.0	11.0	1	04/13/19 02:45	04/16/19 13:18	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	04/13/19 02:45	04/15/19 11:09	7440-36-0	
Arsenic	65.4	ug/L	1.0	0.50	1	04/13/19 02:45	04/15/19 11:09	7440-38-2	
Thallium	0.50 U	ug/L	1.0	0.50	1	04/13/19 02:45	04/15/19 11:09	7440-28-0	
7470 Mercury Analytical Method: EPA 7470 Preparation Method: EPA 7470									
Mercury	0.10 U	ug/L	0.20	0.10	1	04/11/19 13:48	04/12/19 15:53	7439-97-6	
8260 MSV Analytical Method: EPA 8260									
Acetone	5.3 U	ug/L	20.0	5.3	1		04/17/19 11:49	67-64-1	
Acrylonitrile	3.7 U	ug/L	10.0	3.7	1		04/17/19 11:49	107-13-1	
Benzene	0.30 U	ug/L	1.0	0.30	1		04/17/19 11:49	71-43-2	
Bromochloromethane	0.37 U	ug/L	1.0	0.37	1		04/17/19 11:49	74-97-5	
Bromodichloromethane	0.19 U	ug/L	0.60	0.19	1		04/17/19 11:49	75-27-4	
Bromoform	2.6 U	ug/L	3.0	2.6	1		04/17/19 11:49	75-25-2	
Bromomethane	4.0 U	ug/L	5.0	4.0	1		04/17/19 11:49	74-83-9	
2-Butanone (MEK)	7.5 U	ug/L	10.0	7.5	1		04/17/19 11:49	78-93-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35460400

Sample: MW-15 (23031) Lab ID: 35460400001 Collected: 04/10/19 08:35 Received: 04/10/19 16:55 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		04/17/19 11:49	75-15-0	
Carbon tetrachloride	1.1 U	ug/L	3.0	1.1	1		04/17/19 11:49	56-23-5	
Chlorobenzene	0.35 U	ug/L	1.0	0.35	1		04/17/19 11:49	108-90-7	
Chloroethane	3.7 U	ug/L	10.0	3.7	1		04/17/19 11:49	75-00-3	J(L1), J(v1)
Chloroform	0.32 U	ug/L	1.0	0.32	1		04/17/19 11:49	67-66-3	
Chloromethane	0.97 U	ug/L	1.0	0.97	1		04/17/19 11:49	74-87-3	
Dibromochloromethane	0.45 U	ug/L	2.0	0.45	1		04/17/19 11:49	124-48-1	
Dibromomethane	0.68 U	ug/L	2.0	0.68	1		04/17/19 11:49	74-95-3	
1,2-Dichlorobenzene	0.29 U	ug/L	1.0	0.29	1		04/17/19 11:49	95-50-1	
1,4-Dichlorobenzene	0.28 U	ug/L	1.0	0.28	1		04/17/19 11:49	106-46-7	
trans-1,4-Dichloro-2-butene	2.5 U	ug/L	10.0	2.5	1		04/17/19 11:49	110-57-6	
1,1-Dichloroethane	0.34 U	ug/L	1.0	0.34	1		04/17/19 11:49	75-34-3	
1,2-Dichloroethane	0.27 U	ug/L	1.0	0.27	1		04/17/19 11:49	107-06-2	
1,1-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/17/19 11:49	75-35-4	
cis-1,2-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/17/19 11:49	156-59-2	
trans-1,2-Dichloroethene	0.23 U	ug/L	1.0	0.23	1		04/17/19 11:49	156-60-5	
1,2-Dichloropropane	0.23 U	ug/L	1.0	0.23	1		04/17/19 11:49	78-87-5	
cis-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/17/19 11:49	10061-01-5	
trans-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/17/19 11:49	10061-02-6	
Ethylbenzene	0.30 U	ug/L	1.0	0.30	1		04/17/19 11:49	100-41-4	
2-Hexanone	0.85 U	ug/L	10.0	0.85	1		04/17/19 11:49	591-78-6	
Iodomethane	9.3 U	ug/L	10.0	9.3	1		04/17/19 11:49	74-88-4	
Methylene Chloride	2.0 U	ug/L	5.0	2.0	1		04/17/19 11:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.32 U	ug/L	10.0	0.32	1		04/17/19 11:49	108-10-1	
Styrene	0.26 U	ug/L	1.0	0.26	1		04/17/19 11:49	100-42-5	
1,1,1,2-Tetrachloroethane	0.32 U	ug/L	1.0	0.32	1		04/17/19 11:49	630-20-6	
1,1,2,2-Tetrachloroethane	0.20 U	ug/L	0.50	0.20	1		04/17/19 11:49	79-34-5	J(v1)
Tetrachloroethene	0.38 U	ug/L	1.0	0.38	1		04/17/19 11:49	127-18-4	
Toluene	0.33 U	ug/L	1.0	0.33	1		04/17/19 11:49	108-88-3	
1,1,1-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/17/19 11:49	71-55-6	
1,1,2-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/17/19 11:49	79-00-5	
Trichloroethene	0.36 U	ug/L	1.0	0.36	1		04/17/19 11:49	79-01-6	
Trichlorofluoromethane	0.35 U	ug/L	1.0	0.35	1		04/17/19 11:49	75-69-4	
1,2,3-Trichloropropane	1.1 U	ug/L	2.0	1.1	1		04/17/19 11:49	96-18-4	
Vinyl acetate	0.19 U	ug/L	10.0	0.19	1		04/17/19 11:49	108-05-4	
Vinyl chloride	0.39 U	ug/L	1.0	0.39	1		04/17/19 11:49	75-01-4	
Xylene (Total)	2.1 U	ug/L	5.0	2.1	1		04/17/19 11:49	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		04/17/19 11:49	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-130		1		04/17/19 11:49	17060-07-0	
Toluene-d8 (S)	100	%	70-130		1		04/17/19 11:49	2037-26-5	
2540C Total Dissolved Solids Analytical Method: SM 2540C									
Total Dissolved Solids	1810	mg/L	20.0	20.0	1		04/17/19 19:26		

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35460400

Sample: MW-15 (23031)		Lab ID: 35460400001		Collected: 04/10/19 08:35		Received: 04/10/19 16:55		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	137	mg/L	50.0	25.0	10		04/23/19 17:18	16887-00-6	
Sulfate	2.5 U	mg/L	5.0	2.5	1		04/24/19 05:31	14808-79-8	
350.1 Ammonia		Analytical Method: EPA 350.1							
Nitrogen, Ammonia	24.4	mg/L	0.50	0.35	10		04/22/19 19:08	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres		Analytical Method: EPA 353.2							
Nitrogen, Nitrate	0.052	mg/L	0.050	0.025	1		04/11/19 07:48	14797-55-8	

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ANALYTICAL RESULTS



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35460400

Sample: MW-16 (23032) **Lab ID: 35460400002** Collected: 04/10/19 10:25 Received: 04/10/19 16:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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Field Data

Analytical Method:

Field pH	6.30	Std. Units			1		04/10/19 10:25		
Field Temperature	27.17	deg C			1		04/10/19 10:25		
Field Specific Conductance	2412	umhos/cm			1		04/10/19 10:25		
Oxygen, Dissolved	0.21	mg/L			1		04/10/19 10:25	7782-44-7	
Turbidity	2.45	NTU			1		04/10/19 10:25		
Water Level(NGVD)	18.92	feet			1		04/10/19 10:25		

8011 GCS EDB and DBCP

Analytical Method: EPA 8011 Preparation Method: EPA 8011

1,2-Dibromo-3-chloropropane	0.0061 U	ug/L	0.019	0.0061	1	04/21/19 10:45	04/22/19 06:21	96-12-8	
1,2-Dibromoethane (EDB)	0.0072 U	ug/L	0.0096	0.0072	1	04/21/19 10:45	04/22/19 06:21	106-93-4	

6010 MET ICP

Analytical Method: EPA 6010 Preparation Method: EPA 3010

Barium	92.1	ug/L	10.0	0.84	1	04/13/19 02:45	04/16/19 13:22	7440-39-3	
Beryllium	1.6 U	ug/L	4.0	1.6	1	04/13/19 02:45	04/16/19 13:22	7440-41-7	
Cadmium	0.33 U	ug/L	1.0	0.33	1	04/13/19 02:45	04/16/19 13:22	7440-43-9	
Chromium	2.9 I	ug/L	5.0	1.7	1	04/13/19 02:45	04/16/19 13:22	7440-47-3	
Cobalt	2.6 I	ug/L	10.0	0.96	1	04/13/19 02:45	04/16/19 13:22	7440-48-4	
Copper	2.6 U	ug/L	5.0	2.6	1	04/13/19 02:45	04/16/19 13:22	7440-50-8	
Iron	57300	ug/L	800	184	20	04/13/19 02:45	04/17/19 00:23	7439-89-6	
Lead	4.6 U	ug/L	10.0	4.6	1	04/13/19 02:45	04/16/19 13:22	7439-92-1	
Manganese	23.6	ug/L	5.0	0.42	1	04/13/19 02:45	04/16/19 13:22	7439-96-5	
Nickel	2.1 U	ug/L	5.0	2.1	1	04/13/19 02:45	04/16/19 13:22	7440-02-0	
Selenium	8.5 U	ug/L	15.0	8.5	1	04/13/19 02:45	04/16/19 13:22	7782-49-2	
Silver	1.0 U	ug/L	5.0	1.0	1	04/13/19 02:45	04/16/19 13:22	7440-22-4	
Sodium	156	mg/L	2.0	0.27	1	04/13/19 02:45	04/16/19 13:22	7440-23-5	
Vanadium	6.2 I	ug/L	10.0	1.0	1	04/13/19 02:45	04/16/19 13:22	7440-62-2	
Zinc	11.0 U	ug/L	20.0	11.0	1	04/13/19 02:45	04/16/19 13:22	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	04/13/19 02:45	04/15/19 11:12	7440-36-0	
Arsenic	46.7	ug/L	1.0	0.50	1	04/13/19 02:45	04/15/19 11:12	7440-38-2	
Thallium	0.50 U	ug/L	1.0	0.50	1	04/13/19 02:45	04/15/19 11:12	7440-28-0	

7470 Mercury

Analytical Method: EPA 7470 Preparation Method: EPA 7470

Mercury	0.10 U	ug/L	0.20	0.10	1	04/11/19 13:48	04/12/19 15:55	7439-97-6	
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8260 MSV

Analytical Method: EPA 8260

Acetone	5.8 I	ug/L	20.0	5.3	1		04/17/19 12:36	67-64-1	
Acrylonitrile	3.7 U	ug/L	10.0	3.7	1		04/17/19 12:36	107-13-1	
Benzene	0.30 U	ug/L	1.0	0.30	1		04/17/19 12:36	71-43-2	
Bromochloromethane	0.37 U	ug/L	1.0	0.37	1		04/17/19 12:36	74-97-5	
Bromodichloromethane	0.19 U	ug/L	0.60	0.19	1		04/17/19 12:36	75-27-4	
Bromoform	2.6 U	ug/L	3.0	2.6	1		04/17/19 12:36	75-25-2	
Bromomethane	4.0 U	ug/L	5.0	4.0	1		04/17/19 12:36	74-83-9	
2-Butanone (MEK)	7.5 U	ug/L	10.0	7.5	1		04/17/19 12:36	78-93-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35460400

Sample: MW-16 (23032)			Lab ID: 35460400002		Collected: 04/10/19 10:25		Received: 04/10/19 16:55		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		04/17/19 12:36	75-15-0	J(L1), J(M0), J(v1)	
Carbon tetrachloride	1.1 U	ug/L	3.0	1.1	1		04/17/19 12:36	56-23-5		
Chlorobenzene	0.35 U	ug/L	1.0	0.35	1		04/17/19 12:36	108-90-7		
Chloroethane	3.7 U	ug/L	10.0	3.7	1		04/17/19 12:36	75-00-3		
Chloroform	0.32 U	ug/L	1.0	0.32	1		04/17/19 12:36	67-66-3	J(L1), J(M0), J(v1)	
Chloromethane	0.97 U	ug/L	1.0	0.97	1		04/17/19 12:36	74-87-3		
Dibromochloromethane	0.45 U	ug/L	2.0	0.45	1		04/17/19 12:36	124-48-1		
Dibromomethane	0.68 U	ug/L	2.0	0.68	1		04/17/19 12:36	74-95-3		
1,2-Dichlorobenzene	0.29 U	ug/L	1.0	0.29	1		04/17/19 12:36	95-50-1	J(L1), J(M0), J(v1)	
1,4-Dichlorobenzene	0.28 U	ug/L	1.0	0.28	1		04/17/19 12:36	106-46-7		
trans-1,4-Dichloro-2-butene	2.5 U	ug/L	10.0	2.5	1		04/17/19 12:36	110-57-6		
1,1-Dichloroethane	0.34 U	ug/L	1.0	0.34	1		04/17/19 12:36	75-34-3		
1,2-Dichloroethane	0.27 U	ug/L	1.0	0.27	1		04/17/19 12:36	107-06-2	J(L1), J(M0), J(v1)	
1,1-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/17/19 12:36	75-35-4		
cis-1,2-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/17/19 12:36	156-59-2		
trans-1,2-Dichloroethene	0.23 U	ug/L	1.0	0.23	1		04/17/19 12:36	156-60-5		
1,2-Dichloropropane	0.23 U	ug/L	1.0	0.23	1		04/17/19 12:36	78-87-5	J(L1), J(M0), J(v1)	
cis-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/17/19 12:36	10061-01-5		
trans-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/17/19 12:36	10061-02-6		
Ethylbenzene	0.30 U	ug/L	1.0	0.30	1		04/17/19 12:36	100-41-4		
2-Hexanone	0.85 U	ug/L	10.0	0.85	1		04/17/19 12:36	591-78-6	J(L1), J(M0), J(v1)	
Iodomethane	9.3 U	ug/L	10.0	9.3	1		04/17/19 12:36	74-88-4		
Methylene Chloride	2.0 U	ug/L	5.0	2.0	1		04/17/19 12:36	75-09-2		
4-Methyl-2-pentanone (MIBK)	0.32 U	ug/L	10.0	0.32	1		04/17/19 12:36	108-10-1		
Styrene	0.26 U	ug/L	1.0	0.26	1		04/17/19 12:36	100-42-5	J(L1), J(M0), J(v1)	
1,1,1,2-Tetrachloroethane	0.32 U	ug/L	1.0	0.32	1		04/17/19 12:36	630-20-6		
1,1,2,2-Tetrachloroethane	0.20 U	ug/L	0.50	0.20	1		04/17/19 12:36	79-34-5		
Tetrachloroethene	0.38 U	ug/L	1.0	0.38	1		04/17/19 12:36	127-18-4		
Toluene	0.33 U	ug/L	1.0	0.33	1		04/17/19 12:36	108-88-3	J(L1), J(M0), J(v1)	
1,1,1-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/17/19 12:36	71-55-6		
1,1,2-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/17/19 12:36	79-00-5		
Trichloroethene	0.36 U	ug/L	1.0	0.36	1		04/17/19 12:36	79-01-6		
Trichlorofluoromethane	0.35 U	ug/L	1.0	0.35	1		04/17/19 12:36	75-69-4	J(L1), J(M0), J(v1)	
1,2,3-Trichloropropane	1.1 U	ug/L	2.0	1.1	1		04/17/19 12:36	96-18-4		
Vinyl acetate	0.19 U	ug/L	10.0	0.19	1		04/17/19 12:36	108-05-4		
Vinyl chloride	0.39 U	ug/L	1.0	0.39	1		04/17/19 12:36	75-01-4		
Xylene (Total)	2.1 U	ug/L	5.0	2.1	1		04/17/19 12:36	1330-20-7	J(L1), J(M0), J(v1)	
Surrogates										
4-Bromofluorobenzene (S)	98	%	70-130		1		04/17/19 12:36	460-00-4		
1,2-Dichloroethane-d4 (S)	98	%	70-130		1		04/17/19 12:36	17060-07-0		
Toluene-d8 (S)	101	%	70-130		1		04/17/19 12:36	2037-26-5		
2540C Total Dissolved Solids Analytical Method: SM 2540C										
Total Dissolved Solids	1220	mg/L	20.0	20.0	1		04/17/19 19:26			

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35460400

Sample: MW-16 (23032)		Lab ID: 35460400002		Collected: 04/10/19 10:25		Received: 04/10/19 16:55		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	126	mg/L	50.0	25.0	10		04/23/19 17:40	16887-00-6	
Sulfate	2.5 U	mg/L	5.0	2.5	1		04/24/19 05:53	14808-79-8	
350.1 Ammonia		Analytical Method: EPA 350.1							
Nitrogen, Ammonia	34.8	mg/L	0.50	0.35	10		04/22/19 19:10	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		04/11/19 06:19	14797-55-8	

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35460400

Sample: MW-17 (23033) **Lab ID: 35460400003** Collected: 04/10/19 12:15 Received: 04/10/19 16:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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Field Data

Analytical Method:

Field pH	6.25	Std. Units			1		04/10/19 12:15		
Field Temperature	27.81	deg C			1		04/10/19 12:15		
Field Specific Conductance	1794	umhos/cm			1		04/10/19 12:15		
Oxygen, Dissolved	0.13	mg/L			1		04/10/19 12:15	7782-44-7	
Turbidity	2.30	NTU			1		04/10/19 12:15		
Water Level(NGVD)	18.05	feet			1		04/10/19 12:15		

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	04/21/19 10:45	04/22/19 06:35	96-12-8	
1,2-Dibromoethane (EDB)	0.0075 U	ug/L	0.010	0.0075	1	04/21/19 10:45	04/22/19 06:35	106-93-4	

6010 MET ICP

Analytical Method: EPA 6010 Preparation Method: EPA 3010

Barium	93.5	ug/L	10.0	0.84	1	04/13/19 02:45	04/16/19 13:26	7440-39-3	
Beryllium	1.6 U	ug/L	4.0	1.6	1	04/13/19 02:45	04/16/19 13:26	7440-41-7	
Cadmium	0.33 U	ug/L	1.0	0.33	1	04/13/19 02:45	04/16/19 13:26	7440-43-9	
Chromium	3.3 I	ug/L	5.0	1.7	1	04/13/19 02:45	04/16/19 13:26	7440-47-3	
Cobalt	1.2 I	ug/L	10.0	0.96	1	04/13/19 02:45	04/16/19 13:26	7440-48-4	
Copper	3.9 I	ug/L	5.0	2.6	1	04/13/19 02:45	04/16/19 13:26	7440-50-8	
Iron	94100	ug/L	800	184	20	04/13/19 02:45	04/17/19 00:27	7439-89-6	
Lead	4.6 U	ug/L	10.0	4.6	1	04/13/19 02:45	04/16/19 13:26	7439-92-1	
Manganese	10.6	ug/L	5.0	0.42	1	04/13/19 02:45	04/16/19 13:26	7439-96-5	
Nickel	2.1 U	ug/L	5.0	2.1	1	04/13/19 02:45	04/16/19 13:26	7440-02-0	
Selenium	8.5 U	ug/L	15.0	8.5	1	04/13/19 02:45	04/16/19 13:26	7782-49-2	
Silver	1.0 U	ug/L	5.0	1.0	1	04/13/19 02:45	04/16/19 13:26	7440-22-4	
Sodium	64.2	mg/L	2.0	0.27	1	04/13/19 02:45	04/16/19 13:26	7440-23-5	
Vanadium	4.2 I	ug/L	10.0	1.0	1	04/13/19 02:45	04/16/19 13:26	7440-62-2	
Zinc	11.0 U	ug/L	20.0	11.0	1	04/13/19 02:45	04/16/19 13:26	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	04/13/19 02:45	04/15/19 11:31	7440-36-0	
Arsenic	64.8	ug/L	1.0	0.50	1	04/13/19 02:45	04/15/19 11:31	7440-38-2	
Thallium	0.50 U	ug/L	1.0	0.50	1	04/13/19 02:45	04/15/19 11:31	7440-28-0	

7470 Mercury

Analytical Method: EPA 7470 Preparation Method: EPA 7470

Mercury	0.10 U	ug/L	0.20	0.10	1	04/11/19 13:48	04/12/19 15:57	7439-97-6	
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8260 MSV

Analytical Method: EPA 8260

Acetone	7.1 I	ug/L	20.0	5.3	1		04/17/19 13:00	67-64-1	
Acrylonitrile	3.7 U	ug/L	10.0	3.7	1		04/17/19 13:00	107-13-1	
Benzene	0.30 U	ug/L	1.0	0.30	1		04/17/19 13:00	71-43-2	
Bromochloromethane	0.37 U	ug/L	1.0	0.37	1		04/17/19 13:00	74-97-5	
Bromodichloromethane	0.19 U	ug/L	0.60	0.19	1		04/17/19 13:00	75-27-4	
Bromoform	2.6 U	ug/L	3.0	2.6	1		04/17/19 13:00	75-25-2	
Bromomethane	4.0 U	ug/L	5.0	4.0	1		04/17/19 13:00	74-83-9	
2-Butanone (MEK)	7.5 U	ug/L	10.0	7.5	1		04/17/19 13:00	78-93-3	

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35460400

Sample: MW-17 (23033)		Lab ID: 35460400003		Collected: 04/10/19 12:15		Received: 04/10/19 16:55		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		04/17/19 13:00	75-15-0	J(L1), J(v1)	
Carbon tetrachloride	1.1 U	ug/L	3.0	1.1	1		04/17/19 13:00	56-23-5		
Chlorobenzene	0.35 U	ug/L	1.0	0.35	1		04/17/19 13:00	108-90-7		
Chloroethane	3.7 U	ug/L	10.0	3.7	1		04/17/19 13:00	75-00-3		
Chloroform	0.32 U	ug/L	1.0	0.32	1		04/17/19 13:00	67-66-3	J(v1)	
Chloromethane	0.97 U	ug/L	1.0	0.97	1		04/17/19 13:00	74-87-3		
Dibromochloromethane	0.45 U	ug/L	2.0	0.45	1		04/17/19 13:00	124-48-1		
Dibromomethane	0.68 U	ug/L	2.0	0.68	1		04/17/19 13:00	74-95-3		
1,2-Dichlorobenzene	0.29 U	ug/L	1.0	0.29	1		04/17/19 13:00	95-50-1	J(v1)	
1,4-Dichlorobenzene	0.28 U	ug/L	1.0	0.28	1		04/17/19 13:00	106-46-7		
trans-1,4-Dichloro-2-butene	2.5 U	ug/L	10.0	2.5	1		04/17/19 13:00	110-57-6		
1,1-Dichloroethane	0.34 U	ug/L	1.0	0.34	1		04/17/19 13:00	75-34-3		
1,2-Dichloroethane	0.27 U	ug/L	1.0	0.27	1		04/17/19 13:00	107-06-2	J(v1)	
1,1-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/17/19 13:00	75-35-4		
cis-1,2-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/17/19 13:00	156-59-2		
trans-1,2-Dichloroethene	0.23 U	ug/L	1.0	0.23	1		04/17/19 13:00	156-60-5		
1,2-Dichloropropane	0.23 U	ug/L	1.0	0.23	1		04/17/19 13:00	78-87-5	J(v1)	
cis-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/17/19 13:00	10061-01-5		
trans-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/17/19 13:00	10061-02-6		
Ethylbenzene	0.30 U	ug/L	1.0	0.30	1		04/17/19 13:00	100-41-4		
2-Hexanone	0.85 U	ug/L	10.0	0.85	1		04/17/19 13:00	591-78-6	J(v1)	
Iodomethane	9.3 U	ug/L	10.0	9.3	1		04/17/19 13:00	74-88-4		
Methylene Chloride	2.0 U	ug/L	5.0	2.0	1		04/17/19 13:00	75-09-2		
4-Methyl-2-pentanone (MIBK)	0.32 U	ug/L	10.0	0.32	1		04/17/19 13:00	108-10-1		
Styrene	0.26 U	ug/L	1.0	0.26	1		04/17/19 13:00	100-42-5	J(v1)	
1,1,1,2-Tetrachloroethane	0.32 U	ug/L	1.0	0.32	1		04/17/19 13:00	630-20-6		
1,1,2,2-Tetrachloroethane	0.20 U	ug/L	0.50	0.20	1		04/17/19 13:00	79-34-5		
Tetrachloroethene	0.38 U	ug/L	1.0	0.38	1		04/17/19 13:00	127-18-4		
Toluene	0.33 U	ug/L	1.0	0.33	1		04/17/19 13:00	108-88-3	J(v1)	
1,1,1-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/17/19 13:00	71-55-6		
1,1,2-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/17/19 13:00	79-00-5		
Trichloroethene	0.36 U	ug/L	1.0	0.36	1		04/17/19 13:00	79-01-6		
Trichlorofluoromethane	0.35 U	ug/L	1.0	0.35	1		04/17/19 13:00	75-69-4	J(v1)	
1,2,3-Trichloropropane	1.1 U	ug/L	2.0	1.1	1		04/17/19 13:00	96-18-4		
Vinyl acetate	0.19 U	ug/L	10.0	0.19	1		04/17/19 13:00	108-05-4		
Vinyl chloride	0.39 U	ug/L	1.0	0.39	1		04/17/19 13:00	75-01-4		
Xylene (Total)	2.1 U	ug/L	5.0	2.1	1		04/17/19 13:00	1330-20-7	J(v1)	
Surrogates										
4-Bromofluorobenzene (S)	98	%	70-130		1		04/17/19 13:00	460-00-4		
1,2-Dichloroethane-d4 (S)	100	%	70-130		1		04/17/19 13:00	17060-07-0		
Toluene-d8 (S)	101	%	70-130		1		04/17/19 13:00	2037-26-5		
2540C Total Dissolved Solids Analytical Method: SM 2540C										
Total Dissolved Solids	960	mg/L	10.0	10.0	1		04/17/19 19:26			

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35460400

Sample: MW-17 (23033)		Lab ID: 35460400003		Collected: 04/10/19 12:15		Received: 04/10/19 16:55		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	87.2	mg/L	5.0	2.5	1		04/24/19 06:16	16887-00-6	
Sulfate	2.5 U	mg/L	5.0	2.5	1		04/24/19 06:16	14808-79-8	
350.1 Ammonia		Analytical Method: EPA 350.1							
Nitrogen, Ammonia	31.8	mg/L	0.50	0.35	10		04/22/19 19:12	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres		Analytical Method: EPA 353.2							
Nitrogen, Nitrate	0.25 U	mg/L	0.50	0.25	10		04/11/19 09:19	14797-55-8	

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ANALYTICAL RESULTS



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35460400

Sample: Trip Blank 8260 #4 **Lab ID: 35460400004** Collected: 04/10/19 08:35 Received: 04/10/19 16:55 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		04/17/19 11:25	67-64-1	
Acrylonitrile	3.7 U	ug/L	10.0	3.7	1		04/17/19 11:25	107-13-1	
Benzene	0.30 U	ug/L	1.0	0.30	1		04/17/19 11:25	71-43-2	
Bromochloromethane	0.37 U	ug/L	1.0	0.37	1		04/17/19 11:25	74-97-5	
Bromodichloromethane	0.19 U	ug/L	0.60	0.19	1		04/17/19 11:25	75-27-4	
Bromoform	2.6 U	ug/L	3.0	2.6	1		04/17/19 11:25	75-25-2	
Bromomethane	4.0 U	ug/L	5.0	4.0	1		04/17/19 11:25	74-83-9	
2-Butanone (MEK)	7.5 U	ug/L	10.0	7.5	1		04/17/19 11:25	78-93-3	
Carbon disulfide	0.45 U	ug/L	10.0	0.45	1		04/17/19 11:25	75-15-0	
Carbon tetrachloride	1.1 U	ug/L	3.0	1.1	1		04/17/19 11:25	56-23-5	
Chlorobenzene	0.35 U	ug/L	1.0	0.35	1		04/17/19 11:25	108-90-7	
Chloroethane	3.7 U	ug/L	10.0	3.7	1		04/17/19 11:25	75-00-3	J(L1), J(v1)
Chloroform	0.32 U	ug/L	1.0	0.32	1		04/17/19 11:25	67-66-3	
Chloromethane	0.97 U	ug/L	1.0	0.97	1		04/17/19 11:25	74-87-3	
Dibromochloromethane	0.45 U	ug/L	2.0	0.45	1		04/17/19 11:25	124-48-1	
Dibromomethane	0.68 U	ug/L	2.0	0.68	1		04/17/19 11:25	74-95-3	
1,2-Dichlorobenzene	0.29 U	ug/L	1.0	0.29	1		04/17/19 11:25	95-50-1	
1,4-Dichlorobenzene	0.28 U	ug/L	1.0	0.28	1		04/17/19 11:25	106-46-7	
trans-1,4-Dichloro-2-butene	2.5 U	ug/L	10.0	2.5	1		04/17/19 11:25	110-57-6	
1,1-Dichloroethane	0.34 U	ug/L	1.0	0.34	1		04/17/19 11:25	75-34-3	
1,2-Dichloroethane	0.27 U	ug/L	1.0	0.27	1		04/17/19 11:25	107-06-2	
1,1-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/17/19 11:25	75-35-4	
cis-1,2-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/17/19 11:25	156-59-2	
trans-1,2-Dichloroethene	0.23 U	ug/L	1.0	0.23	1		04/17/19 11:25	156-60-5	
1,2-Dichloropropane	0.23 U	ug/L	1.0	0.23	1		04/17/19 11:25	78-87-5	
cis-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/17/19 11:25	10061-01-5	
trans-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/17/19 11:25	10061-02-6	
Ethylbenzene	0.30 U	ug/L	1.0	0.30	1		04/17/19 11:25	100-41-4	
2-Hexanone	0.85 U	ug/L	10.0	0.85	1		04/17/19 11:25	591-78-6	
Iodomethane	9.3 U	ug/L	10.0	9.3	1		04/17/19 11:25	74-88-4	
Methylene Chloride	2.0 U	ug/L	5.0	2.0	1		04/17/19 11:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.32 U	ug/L	10.0	0.32	1		04/17/19 11:25	108-10-1	
Styrene	0.26 U	ug/L	1.0	0.26	1		04/17/19 11:25	100-42-5	
1,1,1,2-Tetrachloroethane	0.32 U	ug/L	1.0	0.32	1		04/17/19 11:25	630-20-6	
1,1,2,2-Tetrachloroethane	0.20 U	ug/L	0.50	0.20	1		04/17/19 11:25	79-34-5	J(v1)
Tetrachloroethene	0.38 U	ug/L	1.0	0.38	1		04/17/19 11:25	127-18-4	
Toluene	0.33 U	ug/L	1.0	0.33	1		04/17/19 11:25	108-88-3	
1,1,1-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/17/19 11:25	71-55-6	
1,1,2-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/17/19 11:25	79-00-5	
Trichloroethene	0.36 U	ug/L	1.0	0.36	1		04/17/19 11:25	79-01-6	
Trichlorofluoromethane	0.35 U	ug/L	1.0	0.35	1		04/17/19 11:25	75-69-4	
1,2,3-Trichloropropane	1.1 U	ug/L	2.0	1.1	1		04/17/19 11:25	96-18-4	
Vinyl acetate	0.19 U	ug/L	10.0	0.19	1		04/17/19 11:25	108-05-4	
Vinyl chloride	0.39 U	ug/L	1.0	0.39	1		04/17/19 11:25	75-01-4	
Xylene (Total)	2.1 U	ug/L	5.0	2.1	1		04/17/19 11:25	1330-20-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35460400

Sample: Trip Blank 8260 #4 **Lab ID: 35460400004** Collected: 04/10/19 08:35 Received: 04/10/19 16:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Analytical Method: EPA 8260									
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		04/17/19 11:25	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-130		1		04/17/19 11:25	17060-07-0	
Toluene-d8 (S)	100	%	70-130		1		04/17/19 11:25	2037-26-5	

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35460400

Sample: Trip Blank 8011 #4		Lab ID: 35460400005	Collected: 04/10/19 08:35	Received: 04/10/19 16:55	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	0.0062 U	ug/L	0.019	0.0062	1	04/21/19 10:45	04/22/19 07:04	96-12-8	
1,2-Dibromoethane (EDB)	0.0072 U	ug/L	0.0096	0.0072	1	04/21/19 10:45	04/22/19 07:04	106-93-4	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35460400

QC Batch: 530245 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 35460400001, 35460400002, 35460400003

METHOD BLANK: 2870798 Matrix: Water

Associated Lab Samples: 35460400001, 35460400002, 35460400003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	0.10 U	0.20	0.10	04/12/19 15:34	

LABORATORY CONTROL SAMPLE: 2870799

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2	1.9	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2870800 2870801

Parameter	Units	35460049001 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	2.0	2.1	98	106	75-125	7	20	

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QUALITY CONTROL DATA

Project: Central Cty MW wells Appdx 1
Pace Project No.: 35460400



QC Batch: 530773 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 35460400001, 35460400002, 35460400003

METHOD BLANK: 2874713 Matrix: Water
Associated Lab Samples: 35460400001, 35460400002, 35460400003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Barium	ug/L	0.84 U	10.0	0.84	04/16/19 13:10	
Beryllium	ug/L	1.6 U	4.0	1.6	04/16/19 13:10	
Cadmium	ug/L	0.33 U	1.0	0.33	04/16/19 13:10	
Chromium	ug/L	1.7 U	5.0	1.7	04/16/19 13:10	
Cobalt	ug/L	0.96 U	10.0	0.96	04/16/19 13:10	
Copper	ug/L	2.6 U	5.0	2.6	04/16/19 13:10	
Iron	ug/L	9.2 U	40.0	9.2	04/16/19 13:10	
Lead	ug/L	4.6 U	10.0	4.6	04/16/19 13:10	
Manganese	ug/L	0.42 U	5.0	0.42	04/16/19 13:10	
Nickel	ug/L	2.1 U	5.0	2.1	04/16/19 13:10	
Selenium	ug/L	8.5 U	15.0	8.5	04/16/19 13:10	
Silver	ug/L	1.0 U	5.0	1.0	04/16/19 13:10	
Sodium	mg/L	0.30 I	2.0	0.27	04/16/19 13:10	
Vanadium	ug/L	1.0 U	10.0	1.0	04/16/19 13:10	
Zinc	ug/L	11.0 U	20.0	11.0	04/16/19 13:10	

LABORATORY CONTROL SAMPLE: 2874714

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	250	244	98	80-120	
Beryllium	ug/L	25	25.9	104	80-120	
Cadmium	ug/L	25	25.1	100	80-120	
Chromium	ug/L	250	255	102	80-120	
Cobalt	ug/L	250	246	98	80-120	
Copper	ug/L	250	252	101	80-120	
Iron	ug/L	2500	2540	101	80-120	
Lead	ug/L	250	249	100	80-120	
Manganese	ug/L	250	251	100	80-120	
Nickel	ug/L	250	248	99	80-120	
Selenium	ug/L	250	245	98	80-120	
Silver	ug/L	25	25.8	103	80-120	
Sodium	mg/L	12.5	12.9	103	80-120	
Vanadium	ug/L	250	243	97	80-120	
Zinc	ug/L	1250	1220	98	80-120	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35460400

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2874715 2874716											
Parameter	Units	35461078004		MS		MSD		MS		MSD	
		Result	Conc.	Spike	Conc.	Result	Conc.	% Rec	% Rec	% Rec	Max
								Limits	RPD	RPD	Qual
Barium	ug/L	210	250	250	498	481	115	108	75-125	4	20
Beryllium	ug/L	1.6 U	25	25	27.5	26.4	105	101	75-125	4	20
Cadmium	ug/L	0.90 I	25	25	24.6	24.5	95	94	75-125	1	20
Chromium	ug/L	66.8	250	250	354	344	115	111	75-125	3	20
Cobalt	ug/L	10.8	250	250	250	247	96	95	75-125	1	20
Copper	ug/L	30.8	250	250	298	285	107	102	75-125	5	20
Iron	ug/L	8700	2500	2500	14800	14400	244	230	75-125	2	20 J(M1)
Lead	ug/L	48.5	250	250	288	286	96	95	75-125	1	20
Manganese	ug/L	61.5	250	250	321	310	104	99	75-125	3	20
Nickel	ug/L	19.2	250	250	272	269	101	100	75-125	1	20
Selenium	ug/L	8.5 U	250	250	245	230	96	90	75-125	7	20
Silver	ug/L	32.0	25	25	61.0	59.4	116	110	75-125	3	20
Sodium	mg/L	497	12.5	12.5	475	464	-176	-267	75-125	2	20 J(M1), L
Vanadium	ug/L	44.2	250	250	323	314	111	108	75-125	3	20
Zinc	ug/L	88.5	1250	1250	1320	1300	98	97	75-125	1	20

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QUALITY CONTROL DATA

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35460400

QC Batch: 530772 Analysis Method: EPA 6020
QC Batch Method: EPA 3010 Analysis Description: 6020 MET
Associated Lab Samples: 35460400001, 35460400002, 35460400003

METHOD BLANK: 2874709 Matrix: Water

Associated Lab Samples: 35460400001, 35460400002, 35460400003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	0.50 U	1.0	0.50	04/15/19 11:03	
Arsenic	ug/L	0.50 U	1.0	0.50	04/15/19 11:03	
Thallium	ug/L	0.50 U	1.0	0.50	04/15/19 11:03	

LABORATORY CONTROL SAMPLE: 2874710

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	50	46.1	92	80-120	
Arsenic	ug/L	50	48.1	96	80-120	
Thallium	ug/L	50	50.2	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2874711 2874712

Parameter	Units	35460400002 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	45.5	45.3	91	91	75-125	0	20	
Arsenic	ug/L	46.7	50	50	94.6	96.3	96	99	75-125	2	20	
Thallium	ug/L	0.50 U	50	50	47.6	48.7	95	97	75-125	2	20	

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QUALITY CONTROL DATA

Project: Central Cty MW wells Appdx 1
Pace Project No.: 35460400



QC Batch: 531664 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 35460400001, 35460400002, 35460400003, 35460400004

METHOD BLANK: 2879455 Matrix: Water
Associated Lab Samples: 35460400001, 35460400002, 35460400003, 35460400004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	0.32 U	1.0	0.32	04/17/19 09:50	
1,1,1-Trichloroethane	ug/L	0.30 U	1.0	0.30	04/17/19 09:50	
1,1,2,2-Tetrachloroethane	ug/L	0.20 U	0.50	0.20	04/17/19 09:50	J(v1)
1,1,2-Trichloroethane	ug/L	0.30 U	1.0	0.30	04/17/19 09:50	
1,1-Dichloroethane	ug/L	0.34 U	1.0	0.34	04/17/19 09:50	
1,1-Dichloroethene	ug/L	0.27 U	1.0	0.27	04/17/19 09:50	
1,2,3-Trichloropropane	ug/L	1.1 U	2.0	1.1	04/17/19 09:50	
1,2-Dichlorobenzene	ug/L	0.29 U	1.0	0.29	04/17/19 09:50	
1,2-Dichloroethane	ug/L	0.27 U	1.0	0.27	04/17/19 09:50	
1,2-Dichloropropane	ug/L	0.23 U	1.0	0.23	04/17/19 09:50	
1,4-Dichlorobenzene	ug/L	0.28 U	1.0	0.28	04/17/19 09:50	
2-Butanone (MEK)	ug/L	7.5 U	10.0	7.5	04/17/19 09:50	
2-Hexanone	ug/L	0.85 U	10.0	0.85	04/17/19 09:50	
4-Methyl-2-pentanone (MIBK)	ug/L	0.32 U	10.0	0.32	04/17/19 09:50	
Acetone	ug/L	5.3 U	20.0	5.3	04/17/19 09:50	
Acrylonitrile	ug/L	3.7 U	10.0	3.7	04/17/19 09:50	
Benzene	ug/L	0.30 U	1.0	0.30	04/17/19 09:50	
Bromochloromethane	ug/L	0.37 U	1.0	0.37	04/17/19 09:50	
Bromodichloromethane	ug/L	0.19 U	0.60	0.19	04/17/19 09:50	
Bromoform	ug/L	2.6 U	3.0	2.6	04/17/19 09:50	
Bromomethane	ug/L	4.0 U	5.0	4.0	04/17/19 09:50	
Carbon disulfide	ug/L	0.45 U	10.0	0.45	04/17/19 09:50	
Carbon tetrachloride	ug/L	1.1 U	3.0	1.1	04/17/19 09:50	
Chlorobenzene	ug/L	0.35 U	1.0	0.35	04/17/19 09:50	
Chloroethane	ug/L	3.7 U	10.0	3.7	04/17/19 09:50	J(v1)
Chloroform	ug/L	0.32 U	1.0	0.32	04/17/19 09:50	
Chloromethane	ug/L	0.97 U	1.0	0.97	04/17/19 09:50	
cis-1,2-Dichloroethene	ug/L	0.27 U	1.0	0.27	04/17/19 09:50	
cis-1,3-Dichloropropene	ug/L	0.17 U	0.50	0.17	04/17/19 09:50	
Dibromochloromethane	ug/L	0.45 U	2.0	0.45	04/17/19 09:50	
Dibromomethane	ug/L	0.68 U	2.0	0.68	04/17/19 09:50	
Ethylbenzene	ug/L	0.30 U	1.0	0.30	04/17/19 09:50	
Iodomethane	ug/L	9.3 U	10.0	9.3	04/17/19 09:50	
Methylene Chloride	ug/L	2.0 U	5.0	2.0	04/17/19 09:50	
Styrene	ug/L	0.26 U	1.0	0.26	04/17/19 09:50	
Tetrachloroethene	ug/L	0.38 U	1.0	0.38	04/17/19 09:50	
Toluene	ug/L	0.33 U	1.0	0.33	04/17/19 09:50	
trans-1,2-Dichloroethene	ug/L	0.23 U	1.0	0.23	04/17/19 09:50	
trans-1,3-Dichloropropene	ug/L	0.17 U	0.50	0.17	04/17/19 09:50	
trans-1,4-Dichloro-2-butene	ug/L	2.5 U	10.0	2.5	04/17/19 09:50	
Trichloroethene	ug/L	0.36 U	1.0	0.36	04/17/19 09:50	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

PACE Project No.: 35460400

METHOD BLANK: 2879455

Matrix: Water

Associated Lab Samples: 35460400001, 35460400002, 35460400003, 35460400004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Trichlorofluoromethane	ug/L	0.35 U	1.0	0.35	04/17/19 09:50	
Vinyl acetate	ug/L	0.19 U	10.0	0.19	04/17/19 09:50	
Vinyl chloride	ug/L	0.39 U	1.0	0.39	04/17/19 09:50	
Xylene (Total)	ug/L	2.1 U	5.0	2.1	04/17/19 09:50	
1,2-Dichloroethane-d4 (S)	%	98	70-130		04/17/19 09:50	
4-Bromofluorobenzene (S)	%	98	70-130		04/17/19 09:50	
Toluene-d8 (S)	%	100	70-130		04/17/19 09:50	

LABORATORY CONTROL SAMPLE: 2879456

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	17.0	85	70-130	
1,1,2,2-Tetrachloroethane	ug/L	20	20.2	101	68-125 J(v1)	
1,1,2-Trichloroethane	ug/L	20	19.8	99	70-130	
1,1-Dichloroethane	ug/L	20	18.2	91	70-130	
1,1-Dichloroethene	ug/L	20	19.8	99	66-133	
1,2,3-Trichloropropane	ug/L	20	19.4	97	62-127	
1,2-Dichlorobenzene	ug/L	20	18.5	93	70-130	
1,2-Dichloroethane	ug/L	20	17.8	89	70-130	
1,2-Dichloropropane	ug/L	20	18.6	93	70-130	
1,4-Dichlorobenzene	ug/L	20	18.5	92	70-130	
2-Butanone (MEK)	ug/L	40	43.2	108	47-143	
2-Hexanone	ug/L	40	42.7	107	48-145	
4-Methyl-2-pentanone (MIBK)	ug/L	40	45.4	113	57-132	
Acetone	ug/L	40	49.1	123	46-148	
Acrylonitrile	ug/L	200	221	111	60-143	
Benzene	ug/L	20	18.5	92	70-130	
Bromochloromethane	ug/L	20	19.2	96	70-130	
Bromodichloromethane	ug/L	20	18.5	93	70-130	
Bromoform	ug/L	20	18.9	95	49-126	
Bromomethane	ug/L	20	17.8	89	10-165	
Carbon disulfide	ug/L	20	23.2	116	60-141	
Carbon tetrachloride	ug/L	20	16.7	84	63-126	
Chlorobenzene	ug/L	20	18.6	93	70-130	
Chloroethane	ug/L	20	29.7	149	71-142 J(L1),J(v1)	
Chloroform	ug/L	20	18.4	92	70-130	
Chloromethane	ug/L	20	19.1	95	40-140	
cis-1,2-Dichloroethene	ug/L	20	17.6	88	70-130	
cis-1,3-Dichloropropene	ug/L	20	18.8	94	70-130	
Dibromochloromethane	ug/L	20	16.4	82	62-118	
Dibromomethane	ug/L	20	19.1	95	70-130	
Ethylbenzene	ug/L	20	18.6	93	70-130	
Iodomethane	ug/L	40	45.0	112	10-164	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1
Pace Project No.: 35460400

LABORATORY CONTROL SAMPLE: 2879456

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	20	17.5	87	65-136	
Styrene	ug/L	20	17.9	89	70-130	
Tetrachloroethene	ug/L	20	18.9	94	64-134	
Toluene	ug/L	20	19.0	95	70-130	
trans-1,2-Dichloroethene	ug/L	20	17.5	87	68-127	
trans-1,3-Dichloropropene	ug/L	20	16.8	84	65-121	
trans-1,4-Dichloro-2-butene	ug/L	20	19.4	97	42-129	
Trichloroethene	ug/L	20	17.7	89	70-130	
Trichlorofluoromethane	ug/L	20	18.1	91	65-135	
Vinyl acetate	ug/L	20	22.4	112	60-144	
Vinyl chloride	ug/L	20	16.6	83	68-131	
Xylene (Total)	ug/L	60	56.8	95	70-130	
1,2-Dichloroethane-d4 (S)	%			99	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE SAMPLE: 2879458

Parameter	Units	35460400002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	0.32 U	20	19.0	95	70-130	
1,1,1-Trichloroethane	ug/L	0.30 U	20	18.0	90	70-130	
1,1,2,2-Tetrachloroethane	ug/L	0.20 U	20	19.2	96	68-125 J(v1)	
1,1,2-Trichloroethane	ug/L	0.30 U	20	19.2	96	70-130	
1,1-Dichloroethane	ug/L	0.34 U	20	18.6	93	70-130	
1,1-Dichloroethene	ug/L	0.27 U	20	22.4	112	66-133	
1,2,3-Trichloropropane	ug/L	1.1 U	20	19.2	96	62-127	
1,2-Dichlorobenzene	ug/L	0.29 U	20	18.4	92	70-130	
1,2-Dichloroethane	ug/L	0.27 U	20	17.5	87	70-130	
1,2-Dichloropropane	ug/L	0.23 U	20	18.3	92	70-130	
1,4-Dichlorobenzene	ug/L	0.28 U	20	18.3	91	70-130	
2-Butanone (MEK)	ug/L	7.5 U	40	37.1	93	47-143	
2-Hexanone	ug/L	0.85 U	40	39.0	98	48-145	
4-Methyl-2-pentanone (MIBK)	ug/L	0.32 U	40	39.8	99	57-132	
Acetone	ug/L	5.8 I	40	40.5	87	46-148	
Acrylonitrile	ug/L	3.7 U	200	169	85	60-143	
Benzene	ug/L	0.30 U	20	18.9	95	70-130	
Bromochloromethane	ug/L	0.37 U	20	18.6	93	70-130	
Bromodichloromethane	ug/L	0.19 U	20	18.1	91	70-130	
Bromoform	ug/L	2.6 U	20	17.8	89	49-126	
Bromomethane	ug/L	4.0 U	20	10.3	51	10-165	
Carbon disulfide	ug/L	0.45 U	20	23.7	116	60-141	
Carbon tetrachloride	ug/L	1.1 U	20	17.9	90	63-126	
Chlorobenzene	ug/L	0.35 U	20	19.0	95	70-130	
Chloroethane	ug/L	3.7 U	20	34.9	175	71-142 J(M0),J(v1)	
Chloroform	ug/L	0.32 U	20	18.5	92	70-130	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1
Pace Project No.: 35460400

MATRIX SPIKE SAMPLE: 2879458		35460400002	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Chloromethane	ug/L	0.97 U	20	19.0	95	40-140	
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	16.8	84	70-130	
Dibromochloromethane	ug/L	0.45 U	20	15.8	79	62-118	
Dibromomethane	ug/L	0.68 U	20	18.5	93	70-130	
Ethylbenzene	ug/L	0.30 U	20	19.0	95	70-130	
Iodomethane	ug/L	9.3 U	40	26.3	65	10-164	
Methylene Chloride	ug/L	2.0 U	20	16.8	84	65-136	
Styrene	ug/L	0.26 U	20	17.9	89	70-130	
Tetrachloroethene	ug/L	0.38 U	20	19.2	96	64-134	
Toluene	ug/L	0.33 U	20	19.5	97	70-130	
trans-1,2-Dichloroethene	ug/L	0.23 U	20	17.9	90	68-127	
trans-1,3-Dichloropropene	ug/L	0.17 U	20	15.1	75	65-121	
trans-1,4-Dichloro-2-butene	ug/L	2.5 U	20	14.8	74	42-129	
Trichloroethene	ug/L	0.36 U	20	18.2	91	70-130	
Trichlorofluoromethane	ug/L	0.35 U	20	23.5	118	65-135	
Vinyl acetate	ug/L	0.19 U	20	17.5	87	60-144	
Vinyl chloride	ug/L	0.39 U	20	17.9	90	68-131	
Xylene (Total)	ug/L	2.1 U	60	57.7	96	70-130	
1,2-Dichloroethane-d4 (S)	%				100	70-130	
4-Bromofluorobenzene (S)	%				102	70-130	
Toluene-d8 (S)	%				98	70-130	

SAMPLE DUPLICATE: 2879457

Parameter	Units	35460400001	Dup	RPD	Max	
		Result	Result		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	J(v1)
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	
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	5.5 I		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

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QUALITY CONTROL DATA

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35460400

SAMPLE DUPLICATE: 2879457

Parameter	Units	35460400001 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	
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	J(v1)
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	
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	
Xylene (Total)	ug/L	2.1 U	2.1 U		40	
1,2-Dichloroethane-d4 (S)	%	98	98		40	
4-Bromofluorobenzene (S)	%	97	100		40	
Toluene-d8 (S)	%	100	99		40	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35460400

QC Batch: 532442 Analysis Method: EPA 8011
QC Batch Method: EPA 8011 Analysis Description: 8011 EDB DBCP
Associated Lab Samples: 35460400001, 35460400002, 35460400003, 35460400005

METHOD BLANK: 2884387 Matrix: Water
Associated Lab Samples: 35460400001, 35460400002, 35460400003, 35460400005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.0064 U	0.020	0.0064	04/22/19 04:23	
1,2-Dibromoethane (EDB)	ug/L	0.0075 U	0.010	0.0075	04/22/19 04:23	

LABORATORY CONTROL SAMPLE: 2884388

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.26	106	60-140	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.27	107	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2885618 2885619

Parameter	Units	35461773004 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	0.0062 U	0.44	0.44	0.57	0.53	130	121	60-140	7	40	
1,2-Dibromoethane (EDB)	ug/L	0.0073 U	0.44	0.44	0.56	0.55	127	126	60-140	1	40	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35460400

QC Batch:	531749	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
Associated Lab Samples:	35460400001, 35460400002, 35460400003		

METHOD BLANK: 2879961 Matrix: Water

Associated Lab Samples: 35460400001, 35460400002, 35460400003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	5.0 U	5.0	5.0	04/17/19 19:26	

LABORATORY CONTROL SAMPLE: 2879962

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	300	302	101	90-110	

SAMPLE DUPLICATE: 2879963

Parameter	Units	35460400001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1810	1890	4	5	

SAMPLE DUPLICATE: 2881030

Parameter	Units	35460475007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	678	680	0	5	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35460400

QC Batch: 533006 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 35460400001, 35460400002, 35460400003

METHOD BLANK: 2887531 Matrix: Water

Associated Lab Samples: 35460400001, 35460400002, 35460400003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	2.5 U	5.0	2.5	04/23/19 16:33	
Sulfate	mg/L	2.5 U	5.0	2.5	04/23/19 16:33	

LABORATORY CONTROL SAMPLE: 2887532

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.5	99	90-110	
Sulfate	mg/L	50	48.9	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2888064 2888065

Parameter	Units	35460448001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	17.5	50	50	70.2	70.4	105	106	90-110	0	20	
Sulfate	mg/L	3.4 I	50	50	51.3	51.4	96	96	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2888066 2888067

Parameter	Units	35460544001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	45.3	50	50	99.8	100	109	110	90-110	0	20 L	
Sulfate	mg/L	19.4	50	50	70.0	70.3	101	102	90-110	0	20	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35460400

QC Batch:	532899	Analysis Method:	EPA 350.1
QC Batch Method:	EPA 350.1	Analysis Description:	350.1 Ammonia
Associated Lab Samples:	35460400001, 35460400002, 35460400003		

METHOD BLANK: 2887042 Matrix: Water

Associated Lab Samples: 35460400001, 35460400002, 35460400003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	0.035 U	0.050	0.035	04/22/19 18:05	

LABORATORY CONTROL SAMPLE: 2887043

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

MATRIX SPIKE SAMPLE: 2887045

Parameter	Units	35459489003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	1.6	1	2.6	107	90-110	

SAMPLE DUPLICATE: 2887044

Parameter	Units	35459489003 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	1.6	1.5	1	20	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35460400

QC Batch: 530135

Analysis Method: EPA 353.2

QC Batch Method: EPA 353.2

Analysis Description: 353.2 Nitrate + Nitrite, Unpres.

Associated Lab Samples: 35460400002

METHOD BLANK: 2870425

Matrix: Water

Associated Lab Samples: 35460400002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.050	0.025	04/11/19 05:59	

SAMPLE DUPLICATE: 2870427

Parameter	Units	35460337004 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.14	0.14	3	20	

SAMPLE DUPLICATE: 2870429

Parameter	Units	35460517001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	1.1	1.1	0	20	

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QUALITY CONTROL DATA

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35460400

QC Batch: 530136

Analysis Method: EPA 353.2

QC Batch Method: EPA 353.2

Analysis Description: 353.2 Nitrate + Nitrite, Unpres.

Associated Lab Samples: 35460400003

METHOD BLANK: 2870431

Matrix: Water

Associated Lab Samples: 35460400003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.050	0.025	04/11/19 06:43	

SAMPLE DUPLICATE: 2870433

Parameter	Units	35460332003 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.025 U		20	

SAMPLE DUPLICATE: 2870435

Parameter	Units	35460374001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	13.8	13.7	1	20	

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QUALITY CONTROL DATA

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35460400

QC Batch: 530137

Analysis Method: EPA 353.2

QC Batch Method: EPA 353.2

Analysis Description: 353.2 Nitrate + Nitrite, Unpres.

Associated Lab Samples: 35460400001

METHOD BLANK: 2870437

Matrix: Water

Associated Lab Samples: 35460400001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.050	0.025	04/11/19 07:29	

SAMPLE DUPLICATE: 2870439

Parameter	Units	35460441002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	2.7	2.7	1	20	

SAMPLE DUPLICATE: 2870441

Parameter	Units	35460450001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.13	0.12	3	20	

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QUALIFIERS

Project: Central Cty MW wells Appdx 1
Pace Project No.: 35460400

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(L1)	Estimated Value. Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
J(M0)	Estimated Value. Matrix spike recovery was outside laboratory control limits.
J(M1)	Estimated Value. Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
J(v1)	The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.
L	Off-scale high. Actual value is known to be greater than value given.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35460400

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
35460400001	MW-15 (23031)				
35460400002	MW-16 (23032)				
35460400003	MW-17 (23033)				
35460400001	MW-15 (23031)	EPA 8011	532442	EPA 8011	532620
35460400002	MW-16 (23032)	EPA 8011	532442	EPA 8011	532620
35460400003	MW-17 (23033)	EPA 8011	532442	EPA 8011	532620
35460400005	Trip Blank 8011 #4	EPA 8011	532442	EPA 8011	532620
35460400001	MW-15 (23031)	EPA 3010	530773	EPA 6010	530777
35460400002	MW-16 (23032)	EPA 3010	530773	EPA 6010	530777
35460400003	MW-17 (23033)	EPA 3010	530773	EPA 6010	530777
35460400001	MW-15 (23031)	EPA 3010	530772	EPA 6020	530776
35460400002	MW-16 (23032)	EPA 3010	530772	EPA 6020	530776
35460400003	MW-17 (23033)	EPA 3010	530772	EPA 6020	530776
35460400001	MW-15 (23031)	EPA 7470	530245	EPA 7470	530416
35460400002	MW-16 (23032)	EPA 7470	530245	EPA 7470	530416
35460400003	MW-17 (23033)	EPA 7470	530245	EPA 7470	530416
35460400001	MW-15 (23031)	EPA 8260	531664		
35460400002	MW-16 (23032)	EPA 8260	531664		
35460400003	MW-17 (23033)	EPA 8260	531664		
35460400004	Trip Blank 8260 #4	EPA 8260	531664		
35460400001	MW-15 (23031)	SM 2540C	531749		
35460400002	MW-16 (23032)	SM 2540C	531749		
35460400003	MW-17 (23033)	SM 2540C	531749		
35460400001	MW-15 (23031)	EPA 300.0	533006		
35460400002	MW-16 (23032)	EPA 300.0	533006		
35460400003	MW-17 (23033)	EPA 300.0	533006		
35460400001	MW-15 (23031)	EPA 350.1	532899		
35460400002	MW-16 (23032)	EPA 350.1	532899		
35460400003	MW-17 (23033)	EPA 350.1	532899		
35460400001	MW-15 (23031)	EPA 353.2	530137		
35460400002	MW-16 (23032)	EPA 353.2	530135		
35460400003	MW-17 (23033)	EPA 353.2	530136		

REPORT OF LABORATORY ANALYSIS

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SAMPLER NAME AND SIGNATURE		TEMP in C	Received on Ice (Y/N)	Customary Sealed Cooler (Y/N)	Samples intact (Y/N)
PRINT Name of SAMPLER: Ronald L. Moore Ron Moore					
SIGNATURE of SAMPLER: [Signature] DATE Signed: 4/10/19					

Required Client Information:

Company: Sarasota County	
Address: 1255 T. Mabry Carlton Parkway	
Venice, FL 34292	
Email:	
Phone: 941-850-0834	Fax:
Requested Due Date:	

Section B

Required Project Information:

Report To:	Mr. Cesar Rodríguez
Copy To:	
Purchase Order #:	181191
Project Name:	Central City MW wells Appdx 1
Project #:	

Section C

Invoice information:

Attention: _____
Company Name: _____
Address: _____
Phone: _____
Fax: _____
E-mail: martha.montero@nacelabs.com
Pace Profile #: 833 #1

[illegible]

	Document Name:	Document Revised:
	Sample Condition Upon Receipt Form	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# : 35460400**
 Project Manager: **PM: MIM** Due Date: **04/24/19**
 Client: **CLIENT: SARCOU**

Date and Initials of person:

Examining contents: **AS**

Label: **4-10-19**

Deliver: **AS**

pH: **AS**

Thermometer Used: **T-203**

Date: **4-10-19**

Time: **1655**

Initials: **MIM**

State of Origin: **FL**

☐ For WV projects, all containers verified to $\pm 0.5^\circ\text{C}$

Cooler #1 Temp. $^\circ\text{C}$ **1.9** (Visual) **0.0** (Correction Factor) **1.9** (Actual)

Cooler #2 Temp. $^\circ\text{C}$ (Visual) (Correction Factor) (Actual)

Cooler #3 Temp. $^\circ\text{C}$ (Visual) (Correction Factor) (Actual)

Cooler #4 Temp. $^\circ\text{C}$ (Visual) (Correction Factor) (Actual)

Cooler #5 Temp. $^\circ\text{C}$ (Visual) (Correction Factor) (Actual)

Cooler #6 Temp. $^\circ\text{C}$ (Visual) (Correction Factor) (Actual)

☒ Samples on ice, cooling process has begun

☐ Samples on ice, cooling process has begun

☐ Samples on ice, cooling process has begun

☐ Samples on ice, cooling process has begun

☐ Samples on ice, cooling process has begun

☐ Samples on ice, cooling process has begun

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

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	Preservation Information: Preservative: _____ Lot #/Trace #: _____ Date: _____ Time: _____ Initials: _____
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	
All Containers needing preservation are found to be in compliance with EPA recommendation:	☒ Yes ☐ No ☐ N/A	
Exceptions: VOA, Coliform, TOC, O&G, Carbamates		
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: _____

Page 40 of 40

April 18, 2019

REVIEWED

By Cesar Rodriguez-Palacios at 2:20 pm, May 24, 2019

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

RE: Project: Central Cty MW wells Appdx 1
Pace Project No.: 35458981

Dear Mr. Rodriguez:

Enclosed are the analytical results for sample(s) received by the laboratory on April 04, 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



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458981

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

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SAMPLE SUMMARY

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458981

Lab ID	Sample ID	Matrix	Date Collected	Date Received
35458981001	MW-9 (4509)	Water	04/04/19 08:05	04/04/19 16:50
35458981002	MW-10R (4510)	Water	04/04/19 11:40	04/04/19 16:50
35458981003	Equipment Blank 3 (sub)	Water	04/04/19 13:00	04/04/19 16:50
35458981004	Trip Blank-8260	Water	04/04/19 08:05	04/04/19 16:50
35458981005	Trip Blank-8011	Water	04/04/19 08:05	04/04/19 16:50

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SAMPLE ANALYTE COUNT

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458981

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
35458981001	MW-9 (4509)	EPA 8011	LJM	2	PASI-O
		EPA 6010	SC1	15	PASI-O
		EPA 6020	FDV	3	PASI-O
		EPA 7470	AMS	1	PASI-O
		EPA 8260	BTN	48	PASI-O
		SM 2540C	KLT	1	PASI-O
		EPA 300.0	SEW	2	PASI-O
		EPA 350.1	MAJ	1	PASI-O
		EPA 353.2	CLL	1	PASI-O
35458981002	MW-10R (4510)	EPA 8011	LJM	2	PASI-O
		EPA 6010	JWP, SC1	15	PASI-O
		EPA 6020	FDV	3	PASI-O
		EPA 7470	AMS	1	PASI-O
		EPA 8260	BTN	48	PASI-O
		SM 2540C	KLT	1	PASI-O
		EPA 300.0	SEW	2	PASI-O
		EPA 350.1	MAJ	1	PASI-O
		EPA 353.2	CLL	1	PASI-O
35458981003	Equipment Blank 3 (sub)	EPA 8011	LJM	2	PASI-O
		EPA 6010	SC1	15	PASI-O
		EPA 6020	FDV	3	PASI-O
		EPA 7470	AMS	1	PASI-O
		EPA 8260	BTN	48	PASI-O
		SM 2540C	KLT	1	PASI-O
		EPA 300.0	SEW	2	PASI-O
		EPA 350.1	MAJ	1	PASI-O
		EPA 353.2	CLL	1	PASI-O
35458981004	Trip Blank-8260	EPA 8260	BTN	48	PASI-O
35458981005	Trip Blank-8011	EPA 8011	LJM	2	PASI-O

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458981

Sample: MW-9 (4509) Lab ID: 35458981001 Collected: 04/04/19 08:05 Received: 04/04/19 16:50 Matrix: Water									
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data Analytical Method:									
Field pH	6.67	Std. Units			1		04/04/19 08:05		
Field Temperature	26.04	deg C			1		04/04/19 08:05		
Field Specific Conductance	1707	umhos/cm			1		04/04/19 08:05		
Oxygen, Dissolved	0.24	mg/L			1		04/04/19 08:05	7782-44-7	
Turbidity	1.20	NTU			1		04/04/19 08:05		
Water Level(NGVD)	19.22	feet			1		04/04/19 08:05		
8011 GCS EDB and DBCP Analytical Method: EPA 8011 Preparation Method: EPA 8011									
1,2-Dibromo-3-chloropropane	0.0062 U	ug/L	0.019	0.0062	1	04/05/19 08:16	04/05/19 20:44	96-12-8	
1,2-Dibromoethane (EDB)	0.0073 U	ug/L	0.0097	0.0073	1	04/05/19 08:16	04/05/19 20:44	106-93-4	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Barium	98.9	ug/L	10.0	0.84	1	04/05/19 02:56	04/08/19 22:15	7440-39-3	
Beryllium	1.6 U	ug/L	4.0	1.6	1	04/05/19 02:56	04/08/19 22:15	7440-41-7	
Cadmium	0.33 U	ug/L	1.0	0.33	1	04/05/19 02:56	04/08/19 22:15	7440-43-9	
Chromium	1.7 U	ug/L	5.0	1.7	1	04/05/19 02:56	04/08/19 22:15	7440-47-3	
Cobalt	2.7 I	ug/L	10.0	0.96	1	04/05/19 02:56	04/08/19 22:15	7440-48-4	
Copper	2.6 U	ug/L	5.0	2.6	1	04/05/19 02:56	04/08/19 22:15	7440-50-8	
Iron	26200	ug/L	40.0	9.2	1	04/05/19 02:56	04/08/19 22:15	7439-89-6	
Lead	4.6 U	ug/L	10.0	4.6	1	04/05/19 02:56	04/08/19 22:15	7439-92-1	
Manganese	45.6	ug/L	5.0	0.42	1	04/05/19 02:56	04/08/19 22:15	7439-96-5	
Nickel	2.1 U	ug/L	5.0	2.1	1	04/05/19 02:56	04/08/19 22:15	7440-02-0	
Selenium	8.5 U	ug/L	15.0	8.5	1	04/05/19 02:56	04/08/19 22:15	7782-49-2	
Silver	1.0 U	ug/L	5.0	1.0	1	04/05/19 02:56	04/08/19 22:15	7440-22-4	
Sodium	22.8	mg/L	2.0	0.27	1	04/05/19 02:56	04/08/19 22:15	7440-23-5	
Vanadium	2.0 I	ug/L	10.0	1.0	1	04/05/19 02:56	04/08/19 22:15	7440-62-2	
Zinc	11.0 U	ug/L	20.0	11.0	1	04/05/19 02:56	04/08/19 22:15	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	04/05/19 02:56	04/05/19 18:09	7440-36-0	
Arsenic	13.3	ug/L	1.0	0.50	1	04/05/19 02:56	04/06/19 14:16	7440-38-2	
Thallium	0.50 U	ug/L	1.0	0.50	1	04/05/19 02:56	04/05/19 18:09	7440-28-0	
7470 Mercury Analytical Method: EPA 7470 Preparation Method: EPA 7470									
Mercury	0.10 U	ug/L	0.20	0.10	1	04/07/19 18:18	04/08/19 15:53	7439-97-6	
8260 MSV Analytical Method: EPA 8260									
Acetone	5.3 U	ug/L	20.0	5.3	1		04/12/19 20:08	67-64-1	
Acrylonitrile	3.7 U	ug/L	10.0	3.7	1		04/12/19 20:08	107-13-1	
Benzene	0.10 U	ug/L	1.0	0.10	1		04/12/19 20:08	71-43-2	
Bromochloromethane	0.37 U	ug/L	1.0	0.37	1		04/12/19 20:08	74-97-5	
Bromodichloromethane	0.19 U	ug/L	0.60	0.19	1		04/12/19 20:08	75-27-4	
Bromoform	2.6 U	ug/L	3.0	2.6	1		04/12/19 20:08	75-25-2	
Bromomethane	4.0 U	ug/L	5.0	4.0	1		04/12/19 20:08	74-83-9	
2-Butanone (MEK)	5.0 U	ug/L	10.0	5.0	1		04/12/19 20:08	78-93-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1
Pace Project No.: 35458981

Sample: MW-9 (4509) Lab ID: 35458981001 Collected: 04/04/19 08:05 Received: 04/04/19 16:50 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		04/12/19 20:08	75-15-0	
Carbon tetrachloride	0.50 U	ug/L	3.0	0.50	1		04/12/19 20:08	56-23-5	
Chlorobenzene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:08	108-90-7	
Chloroethane	3.7 U	ug/L	10.0	3.7	1		04/12/19 20:08	75-00-3	
Chloroform	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:08	67-66-3	
Chloromethane	0.97 U	ug/L	1.0	0.97	1		04/12/19 20:08	74-87-3	J(v2)
Dibromochloromethane	0.45 U	ug/L	2.0	0.45	1		04/12/19 20:08	124-48-1	
Dibromomethane	0.68 U	ug/L	2.0	0.68	1		04/12/19 20:08	74-95-3	
1,2-Dichlorobenzene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:08	95-50-1	
1,4-Dichlorobenzene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:08	106-46-7	
trans-1,4-Dichloro-2-butene	2.5 U	ug/L	10.0	2.5	1		04/12/19 20:08	110-57-6	J(v2)
1,1-Dichloroethane	0.34 U	ug/L	1.0	0.34	1		04/12/19 20:08	75-34-3	
1,2-Dichloroethane	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:08	107-06-2	
1,1-Dichloroethene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:08	75-35-4	
cis-1,2-Dichloroethene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:08	156-59-2	
trans-1,2-Dichloroethene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:08	156-60-5	
1,2-Dichloropropane	0.23 U	ug/L	1.0	0.23	1		04/12/19 20:08	78-87-5	
cis-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/12/19 20:08	10061-01-5	
trans-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/12/19 20:08	10061-02-6	
Ethylbenzene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:08	100-41-4	
2-Hexanone	0.85 U	ug/L	10.0	0.85	1		04/12/19 20:08	591-78-6	
Iodomethane	9.3 U	ug/L	10.0	9.3	1		04/12/19 20:08	74-88-4	
Methylene Chloride	2.0 U	ug/L	5.0	2.0	1		04/12/19 20:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.32 U	ug/L	10.0	0.32	1		04/12/19 20:08	108-10-1	
Styrene	0.26 U	ug/L	1.0	0.26	1		04/12/19 20:08	100-42-5	
1,1,1,2-Tetrachloroethane	0.32 U	ug/L	1.0	0.32	1		04/12/19 20:08	630-20-6	
1,1,2,2-Tetrachloroethane	0.20 U	ug/L	0.50	0.20	1		04/12/19 20:08	79-34-5	
Tetrachloroethene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:08	127-18-4	
Toluene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:08	108-88-3	
1,1,1-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/12/19 20:08	71-55-6	
1,1,2-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/12/19 20:08	79-00-5	
Trichloroethene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:08	79-01-6	
Trichlorofluoromethane	0.35 U	ug/L	1.0	0.35	1		04/12/19 20:08	75-69-4	
1,2,3-Trichloropropane	1.1 U	ug/L	2.0	1.1	1		04/12/19 20:08	96-18-4	
Vinyl acetate	0.19 U	ug/L	10.0	0.19	1		04/12/19 20:08	108-05-4	
Vinyl chloride	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:08	75-01-4	
Xylene (Total)	1.0 U	ug/L	5.0	1.0	1		04/12/19 20:08	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	113	%	70-130		1		04/12/19 20:08	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	70-130		1		04/12/19 20:08	17060-07-0	
Toluene-d8 (S)	96	%	70-130		1		04/12/19 20:08	2037-26-5	

2540C Total Dissolved Solids Analytical Method: SM 2540C

Total Dissolved Solids	940	mg/L	10.0	10.0	1	04/11/19 20:20
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458981

Sample: MW-9 (4509)		Lab ID: 35458981001		Collected: 04/04/19 08:05		Received: 04/04/19 16:50		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	19.3	mg/L	5.0	2.5	1		04/15/19 15:57	16887-00-6	
Sulfate	2.5 U	mg/L	5.0	2.5	1		04/15/19 15:57	14808-79-8	
350.1 Ammonia		Analytical Method: EPA 350.1							
Nitrogen, Ammonia	11.4	mg/L	0.050	0.035	1		04/17/19 16:42	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		04/05/19 05:05	14797-55-8	

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ANALYTICAL RESULTS



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458981

Sample: MW-10R (4510) **Lab ID: 35458981002** Collected: 04/04/19 11:40 Received: 04/04/19 16:50 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data									
		Analytical Method:							
Field pH	6.19	Std. Units			1		04/04/19 11:40		
Field Temperature	27.49	deg C			1		04/04/19 11:40		
Field Specific Conductance	1643	umhos/cm			1		04/04/19 11:40		
Oxygen, Dissolved	0.17	mg/L			1		04/04/19 11:40	7782-44-7	
Turbidity	0.95	NTU			1		04/04/19 11:40		
Water Level(NGVD)	19.07	feet			1		04/04/19 11:40		
8011 GCS EDB and DBCP									
		Analytical Method: EPA 8011 Preparation Method: EPA 8011							
1,2-Dibromo-3-chloropropane	0.0062 U	ug/L	0.019	0.0062	1	04/05/19 08:16	04/05/19 21:13	96-12-8	
1,2-Dibromoethane (EDB)	0.0073 U	ug/L	0.0097	0.0073	1	04/05/19 08:16	04/05/19 21:13	106-93-4	
6010 MET ICP									
		Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Barium	77.3	ug/L	10.0	0.84	1	04/05/19 02:56	04/08/19 22:18	7440-39-3	
Beryllium	1.6 U	ug/L	4.0	1.6	1	04/05/19 02:56	04/08/19 22:18	7440-41-7	
Cadmium	0.33 U	ug/L	1.0	0.33	1	04/05/19 02:56	04/08/19 22:18	7440-43-9	
Chromium	1.7 U	ug/L	5.0	1.7	1	04/05/19 02:56	04/08/19 22:18	7440-47-3	
Cobalt	3.5 I	ug/L	10.0	0.96	1	04/05/19 02:56	04/08/19 22:18	7440-48-4	
Copper	2.6 U	ug/L	5.0	2.6	1	04/05/19 02:56	04/08/19 22:18	7440-50-8	
Iron	57500	ug/L	400	92.0	10	04/05/19 02:56	04/09/19 10:39	7439-89-6	
Lead	5.3 I	ug/L	10.0	4.6	1	04/05/19 02:56	04/08/19 22:18	7439-92-1	
Manganese	29.0	ug/L	5.0	0.42	1	04/05/19 02:56	04/08/19 22:18	7439-96-5	
Nickel	2.1 U	ug/L	5.0	2.1	1	04/05/19 02:56	04/08/19 22:18	7440-02-0	
Selenium	8.5 U	ug/L	15.0	8.5	1	04/05/19 02:56	04/08/19 22:18	7782-49-2	
Silver	1.0 U	ug/L	5.0	1.0	1	04/05/19 02:56	04/08/19 22:18	7440-22-4	
Sodium	76.5	mg/L	2.0	0.27	1	04/05/19 02:56	04/08/19 22:18	7440-23-5	
Vanadium	3.5 I	ug/L	10.0	1.0	1	04/05/19 02:56	04/08/19 22:18	7440-62-2	
Zinc	11.0 U	ug/L	20.0	11.0	1	04/05/19 02:56	04/08/19 22:18	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	04/05/19 02:56	04/05/19 18:12	7440-36-0	
Arsenic	13.7	ug/L	1.0	0.50	1	04/05/19 02:56	04/06/19 14:17	7440-38-2	
Thallium	0.50 U	ug/L	1.0	0.50	1	04/05/19 02:56	04/05/19 18:12	7440-28-0	
7470 Mercury									
		Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	0.10 U	ug/L	0.20	0.10	1	04/07/19 18:18	04/08/19 15:55	7439-97-6	
8260 MSV									
		Analytical Method: EPA 8260							
Acetone	5.3 U	ug/L	20.0	5.3	1		04/12/19 20:32	67-64-1	
Acrylonitrile	3.7 U	ug/L	10.0	3.7	1		04/12/19 20:32	107-13-1	
Benzene	0.10 U	ug/L	1.0	0.10	1		04/12/19 20:32	71-43-2	
Bromochloromethane	0.37 U	ug/L	1.0	0.37	1		04/12/19 20:32	74-97-5	
Bromodichloromethane	0.19 U	ug/L	0.60	0.19	1		04/12/19 20:32	75-27-4	
Bromoform	2.6 U	ug/L	3.0	2.6	1		04/12/19 20:32	75-25-2	
Bromomethane	4.0 U	ug/L	5.0	4.0	1		04/12/19 20:32	74-83-9	
2-Butanone (MEK)	5.0 U	ug/L	10.0	5.0	1		04/12/19 20:32	78-93-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458981

Sample: MW-10R (4510) **Lab ID: 35458981002** Collected: 04/04/19 11:40 Received: 04/04/19 16:50 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		04/12/19 20:32	75-15-0	
Carbon tetrachloride	0.50 U	ug/L	3.0	0.50	1		04/12/19 20:32	56-23-5	
Chlorobenzene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:32	108-90-7	
Chloroethane	3.7 U	ug/L	10.0	3.7	1		04/12/19 20:32	75-00-3	
Chloroform	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:32	67-66-3	
Chloromethane	0.97 U	ug/L	1.0	0.97	1		04/12/19 20:32	74-87-3	J(v2)
Dibromochloromethane	0.45 U	ug/L	2.0	0.45	1		04/12/19 20:32	124-48-1	
Dibromomethane	0.68 U	ug/L	2.0	0.68	1		04/12/19 20:32	74-95-3	
1,2-Dichlorobenzene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:32	95-50-1	
1,4-Dichlorobenzene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:32	106-46-7	
trans-1,4-Dichloro-2-butene	2.5 U	ug/L	10.0	2.5	1		04/12/19 20:32	110-57-6	J(v2)
1,1-Dichloroethane	0.34 U	ug/L	1.0	0.34	1		04/12/19 20:32	75-34-3	
1,2-Dichloroethane	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:32	107-06-2	
1,1-Dichloroethene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:32	75-35-4	
cis-1,2-Dichloroethene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:32	156-59-2	
trans-1,2-Dichloroethene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:32	156-60-5	
1,2-Dichloropropane	0.23 U	ug/L	1.0	0.23	1		04/12/19 20:32	78-87-5	
cis-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/12/19 20:32	10061-01-5	
trans-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/12/19 20:32	10061-02-6	
Ethylbenzene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:32	100-41-4	
2-Hexanone	0.85 U	ug/L	10.0	0.85	1		04/12/19 20:32	591-78-6	
Iodomethane	9.3 U	ug/L	10.0	9.3	1		04/12/19 20:32	74-88-4	
Methylene Chloride	2.0 U	ug/L	5.0	2.0	1		04/12/19 20:32	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.32 U	ug/L	10.0	0.32	1		04/12/19 20:32	108-10-1	
Styrene	0.26 U	ug/L	1.0	0.26	1		04/12/19 20:32	100-42-5	
1,1,1,2-Tetrachloroethane	0.32 U	ug/L	1.0	0.32	1		04/12/19 20:32	630-20-6	
1,1,2,2-Tetrachloroethane	0.20 U	ug/L	0.50	0.20	1		04/12/19 20:32	79-34-5	
Tetrachloroethene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:32	127-18-4	
Toluene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:32	108-88-3	
1,1,1-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/12/19 20:32	71-55-6	
1,1,2-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/12/19 20:32	79-00-5	
Trichloroethene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:32	79-01-6	
Trichlorofluoromethane	0.35 U	ug/L	1.0	0.35	1		04/12/19 20:32	75-69-4	
1,2,3-Trichloropropane	1.1 U	ug/L	2.0	1.1	1		04/12/19 20:32	96-18-4	
Vinyl acetate	0.19 U	ug/L	10.0	0.19	1		04/12/19 20:32	108-05-4	
Vinyl chloride	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:32	75-01-4	
Xylene (Total)	1.0 U	ug/L	5.0	1.0	1		04/12/19 20:32	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	110	%	70-130		1		04/12/19 20:32	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70-130		1		04/12/19 20:32	17060-07-0	
Toluene-d8 (S)	95	%	70-130		1		04/12/19 20:32	2037-26-5	

2540C Total Dissolved Solids Analytical Method: SM 2540C

Total Dissolved Solids	842	mg/L	10.0	10.0	1		04/11/19 20:20
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ANALYTICAL RESULTS



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458981

Sample: MW-10R (4510)		Lab ID: 35458981002		Collected: 04/04/19 11:40		Received: 04/04/19 16:50		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	87.0	mg/L	25.0	12.5	5		04/15/19 04:08	16887-00-6	
Sulfate	2.5 U	mg/L	5.0	2.5	1		04/15/19 16:19	14808-79-8	
350.1 Ammonia		Analytical Method: EPA 350.1							
Nitrogen, Ammonia	7.9	mg/L	0.050	0.035	1		04/17/19 16:44	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		04/05/19 07:58	14797-55-8	

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458981

Sample: Equipment Blank 3 (sub) **Lab ID:** 35458981003 **Collected:** 04/04/19 13:00 **Received:** 04/04/19 16:50 **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	0.0062 U	ug/L	0.019	0.0062	1	04/05/19 08:16	04/05/19 21:28	96-12-8	
1,2-Dibromoethane (EDB)	0.0073 U	ug/L	0.0097	0.0073	1	04/05/19 08:16	04/05/19 21:28	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	04/05/19 02:56	04/08/19 22:21	7440-39-3	
Beryllium	1.6 U	ug/L	4.0	1.6	1	04/05/19 02:56	04/08/19 22:21	7440-41-7	
Cadmium	0.33 U	ug/L	1.0	0.33	1	04/05/19 02:56	04/08/19 22:21	7440-43-9	
Chromium	2.1 I	ug/L	5.0	1.7	1	04/05/19 02:56	04/08/19 22:21	7440-47-3	
Cobalt	0.96 U	ug/L	10.0	0.96	1	04/05/19 02:56	04/08/19 22:21	7440-48-4	
Copper	2.6 U	ug/L	5.0	2.6	1	04/05/19 02:56	04/08/19 22:21	7440-50-8	
Iron	14.0 I	ug/L	40.0	9.2	1	04/05/19 02:56	04/08/19 22:21	7439-89-6	
Lead	4.6 U	ug/L	10.0	4.6	1	04/05/19 02:56	04/08/19 22:21	7439-92-1	
Manganese	0.42 U	ug/L	5.0	0.42	1	04/05/19 02:56	04/08/19 22:21	7439-96-5	
Nickel	2.1 U	ug/L	5.0	2.1	1	04/05/19 02:56	04/08/19 22:21	7440-02-0	
Selenium	8.5 U	ug/L	15.0	8.5	1	04/05/19 02:56	04/08/19 22:21	7782-49-2	
Silver	1.0 U	ug/L	5.0	1.0	1	04/05/19 02:56	04/08/19 22:21	7440-22-4	
Sodium	0.27 U	mg/L	2.0	0.27	1	04/05/19 02:56	04/08/19 22:21	7440-23-5	
Vanadium	1.0 U	ug/L	10.0	1.0	1	04/05/19 02:56	04/08/19 22:21	7440-62-2	
Zinc	11.0 U	ug/L	20.0	11.0	1	04/05/19 02:56	04/08/19 22:21	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	04/05/19 02:56	04/05/19 18:15	7440-36-0	
Arsenic	0.50 U	ug/L	1.0	0.50	1	04/05/19 02:56	04/06/19 14:18	7440-38-2	
Thallium	0.50 U	ug/L	1.0	0.50	1	04/05/19 02:56	04/05/19 18:15	7440-28-0	
7470 Mercury Analytical Method: EPA 7470 Preparation Method: EPA 7470									
Mercury	0.10 U	ug/L	0.20	0.10	1	04/07/19 18:18	04/08/19 15:57	7439-97-6	
8260 MSV Analytical Method: EPA 8260									
Acetone	11.4 I	ug/L	20.0	5.3	1		04/12/19 20:57	67-64-1	
Acrylonitrile	3.7 U	ug/L	10.0	3.7	1		04/12/19 20:57	107-13-1	
Benzene	0.10 U	ug/L	1.0	0.10	1		04/12/19 20:57	71-43-2	
Bromochloromethane	0.37 U	ug/L	1.0	0.37	1		04/12/19 20:57	74-97-5	
Bromodichloromethane	0.19 U	ug/L	0.60	0.19	1		04/12/19 20:57	75-27-4	
Bromoform	2.6 U	ug/L	3.0	2.6	1		04/12/19 20:57	75-25-2	
Bromomethane	4.0 U	ug/L	5.0	4.0	1		04/12/19 20:57	74-83-9	
2-Butanone (MEK)	5.0 U	ug/L	10.0	5.0	1		04/12/19 20:57	78-93-3	
Carbon disulfide	0.45 U	ug/L	10.0	0.45	1		04/12/19 20:57	75-15-0	
Carbon tetrachloride	0.50 U	ug/L	3.0	0.50	1		04/12/19 20:57	56-23-5	
Chlorobenzene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:57	108-90-7	
Chloroethane	3.7 U	ug/L	10.0	3.7	1		04/12/19 20:57	75-00-3	
Chloroform	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:57	67-66-3	
Chloromethane	0.97 U	ug/L	1.0	0.97	1		04/12/19 20:57	74-87-3	J(v2)
Dibromochloromethane	0.45 U	ug/L	2.0	0.45	1		04/12/19 20:57	124-48-1	
Dibromomethane	0.68 U	ug/L	2.0	0.68	1		04/12/19 20:57	74-95-3	

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458981

Sample: Equipment Blank 3 (sub) **Lab ID:** 35458981003 **Collected:** 04/04/19 13:00 **Received:** 04/04/19 16:50 **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		04/12/19 20:57	95-50-1	
1,4-Dichlorobenzene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:57	106-46-7	
trans-1,4-Dichloro-2-butene	2.5 U	ug/L	10.0	2.5	1		04/12/19 20:57	110-57-6	J(v2)
1,1-Dichloroethane	0.34 U	ug/L	1.0	0.34	1		04/12/19 20:57	75-34-3	
1,2-Dichloroethane	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:57	107-06-2	
1,1-Dichloroethene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:57	75-35-4	
cis-1,2-Dichloroethene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:57	156-59-2	
trans-1,2-Dichloroethene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:57	156-60-5	
1,2-Dichloropropane	0.23 U	ug/L	1.0	0.23	1		04/12/19 20:57	78-87-5	
cis-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/12/19 20:57	10061-01-5	
trans-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/12/19 20:57	10061-02-6	
Ethylbenzene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:57	100-41-4	
2-Hexanone	0.85 U	ug/L	10.0	0.85	1		04/12/19 20:57	591-78-6	
Iodomethane	9.3 U	ug/L	10.0	9.3	1		04/12/19 20:57	74-88-4	
Methylene Chloride	2.0 U	ug/L	5.0	2.0	1		04/12/19 20:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.32 U	ug/L	10.0	0.32	1		04/12/19 20:57	108-10-1	
Styrene	0.26 U	ug/L	1.0	0.26	1		04/12/19 20:57	100-42-5	
1,1,1,2-Tetrachloroethane	0.32 U	ug/L	1.0	0.32	1		04/12/19 20:57	630-20-6	
1,1,2,2-Tetrachloroethane	0.20 U	ug/L	0.50	0.20	1		04/12/19 20:57	79-34-5	
Tetrachloroethene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:57	127-18-4	
Toluene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:57	108-88-3	
1,1,1-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/12/19 20:57	71-55-6	
1,1,2-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/12/19 20:57	79-00-5	
Trichloroethene	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:57	79-01-6	
Trichlorofluoromethane	0.35 U	ug/L	1.0	0.35	1		04/12/19 20:57	75-69-4	
1,2,3-Trichloropropane	1.1 U	ug/L	2.0	1.1	1		04/12/19 20:57	96-18-4	
Vinyl acetate	0.19 U	ug/L	10.0	0.19	1		04/12/19 20:57	108-05-4	
Vinyl chloride	0.50 U	ug/L	1.0	0.50	1		04/12/19 20:57	75-01-4	
Xylene (Total)	1.0 U	ug/L	5.0	1.0	1		04/12/19 20:57	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	111	%	70-130		1		04/12/19 20:57	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	70-130		1		04/12/19 20:57	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		04/12/19 20:57	2037-26-5	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	5.0 U	mg/L	5.0	5.0	1		04/11/19 20:20		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Chloride	2.5 U	mg/L	5.0	2.5	1		04/15/19 04:30	16887-00-6	
Sulfate	2.5 U	mg/L	5.0	2.5	1		04/15/19 04:30	14808-79-8	
350.1 Ammonia		Analytical Method: EPA 350.1							
Nitrogen, Ammonia	0.035 U	mg/L	0.050	0.035	1		04/17/19 16:50	7664-41-7	

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ANALYTICAL RESULTS



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458981

Sample: Equipment Blank 3 (sub) Lab ID: 35458981003 Collected: 04/04/19 13:00 Received: 04/04/19 16:50 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		04/05/19 09:57	14797-55-8	

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458981

Sample: Trip Blank-8260 **Lab ID: 35458981004** Collected: 04/04/19 08:05 Received: 04/04/19 16:50 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		04/12/19 21:22	67-64-1	
Acrylonitrile	3.7 U	ug/L	10.0	3.7	1		04/12/19 21:22	107-13-1	
Benzene	0.10 U	ug/L	1.0	0.10	1		04/12/19 21:22	71-43-2	
Bromochloromethane	0.37 U	ug/L	1.0	0.37	1		04/12/19 21:22	74-97-5	
Bromodichloromethane	0.19 U	ug/L	0.60	0.19	1		04/12/19 21:22	75-27-4	
Bromoform	2.6 U	ug/L	3.0	2.6	1		04/12/19 21:22	75-25-2	
Bromomethane	4.0 U	ug/L	5.0	4.0	1		04/12/19 21:22	74-83-9	
2-Butanone (MEK)	5.0 U	ug/L	10.0	5.0	1		04/12/19 21:22	78-93-3	
Carbon disulfide	0.45 U	ug/L	10.0	0.45	1		04/12/19 21:22	75-15-0	
Carbon tetrachloride	0.50 U	ug/L	3.0	0.50	1		04/12/19 21:22	56-23-5	
Chlorobenzene	0.50 U	ug/L	1.0	0.50	1		04/12/19 21:22	108-90-7	
Chloroethane	3.7 U	ug/L	10.0	3.7	1		04/12/19 21:22	75-00-3	
Chloroform	0.50 U	ug/L	1.0	0.50	1		04/12/19 21:22	67-66-3	
Chloromethane	0.97 U	ug/L	1.0	0.97	1		04/12/19 21:22	74-87-3	J(v2)
Dibromochloromethane	0.45 U	ug/L	2.0	0.45	1		04/12/19 21:22	124-48-1	
Dibromomethane	0.68 U	ug/L	2.0	0.68	1		04/12/19 21:22	74-95-3	
1,2-Dichlorobenzene	0.50 U	ug/L	1.0	0.50	1		04/12/19 21:22	95-50-1	
1,4-Dichlorobenzene	0.50 U	ug/L	1.0	0.50	1		04/12/19 21:22	106-46-7	
trans-1,4-Dichloro-2-butene	2.5 U	ug/L	10.0	2.5	1		04/12/19 21:22	110-57-6	J(v2)
1,1-Dichloroethane	0.34 U	ug/L	1.0	0.34	1		04/12/19 21:22	75-34-3	
1,2-Dichloroethane	0.50 U	ug/L	1.0	0.50	1		04/12/19 21:22	107-06-2	
1,1-Dichloroethene	0.50 U	ug/L	1.0	0.50	1		04/12/19 21:22	75-35-4	
cis-1,2-Dichloroethene	0.50 U	ug/L	1.0	0.50	1		04/12/19 21:22	156-59-2	
trans-1,2-Dichloroethene	0.50 U	ug/L	1.0	0.50	1		04/12/19 21:22	156-60-5	
1,2-Dichloropropane	0.23 U	ug/L	1.0	0.23	1		04/12/19 21:22	78-87-5	
cis-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/12/19 21:22	10061-01-5	
trans-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/12/19 21:22	10061-02-6	
Ethylbenzene	0.50 U	ug/L	1.0	0.50	1		04/12/19 21:22	100-41-4	
2-Hexanone	0.85 U	ug/L	10.0	0.85	1		04/12/19 21:22	591-78-6	
Iodomethane	9.3 U	ug/L	10.0	9.3	1		04/12/19 21:22	74-88-4	
Methylene Chloride	2.0 U	ug/L	5.0	2.0	1		04/12/19 21:22	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.32 U	ug/L	10.0	0.32	1		04/12/19 21:22	108-10-1	
Styrene	0.26 U	ug/L	1.0	0.26	1		04/12/19 21:22	100-42-5	
1,1,1,2-Tetrachloroethane	0.32 U	ug/L	1.0	0.32	1		04/12/19 21:22	630-20-6	
1,1,2,2-Tetrachloroethane	0.20 U	ug/L	0.50	0.20	1		04/12/19 21:22	79-34-5	
Tetrachloroethene	0.50 U	ug/L	1.0	0.50	1		04/12/19 21:22	127-18-4	
Toluene	0.50 U	ug/L	1.0	0.50	1		04/12/19 21:22	108-88-3	
1,1,1-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/12/19 21:22	71-55-6	
1,1,2-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/12/19 21:22	79-00-5	
Trichloroethene	0.50 U	ug/L	1.0	0.50	1		04/12/19 21:22	79-01-6	
Trichlorofluoromethane	0.35 U	ug/L	1.0	0.35	1		04/12/19 21:22	75-69-4	
1,2,3-Trichloropropane	1.1 U	ug/L	2.0	1.1	1		04/12/19 21:22	96-18-4	
Vinyl acetate	0.19 U	ug/L	10.0	0.19	1		04/12/19 21:22	108-05-4	
Vinyl chloride	0.50 U	ug/L	1.0	0.50	1		04/12/19 21:22	75-01-4	
Xylene (Total)	1.0 U	ug/L	5.0	1.0	1		04/12/19 21:22	1330-20-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458981

Sample: Trip Blank-8260		Lab ID: 35458981004		Collected: 04/04/19 08:05		Received: 04/04/19 16:50		Matrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Surrogates									
4-Bromofluorobenzene (S)	111	%	70-130		1		04/12/19 21:22	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	70-130		1		04/12/19 21:22	17060-07-0	
Toluene-d8 (S)	97	%	70-130		1		04/12/19 21:22	2037-26-5	

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ANALYTICAL RESULTS

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458981

Sample: Trip Blank-8011		Lab ID: 35458981005	Collected: 04/04/19 08:05	Received: 04/04/19 16:50	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	0.0061 U	ug/L	0.019	0.0061	1	04/05/19 08:16	04/05/19 21:43	96-12-8	
1,2-Dibromoethane (EDB)	0.0071 U	ug/L	0.0095	0.0071	1	04/05/19 08:16	04/05/19 21:43	106-93-4	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458981

QC Batch: 529082 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 35458981001, 35458981002, 35458981003

METHOD BLANK: 2864490 Matrix: Water

Associated Lab Samples: 35458981001, 35458981002, 35458981003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	0.10 U	0.20	0.10	04/08/19 15:27	

LABORATORY CONTROL SAMPLE: 2864491

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2	2.1	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2864492 2864493

Parameter	Units	35458668001 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	2.0	2.0	98	102	75-125	5	20	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1
Pace Project No.: 35458981

QC Batch: 528643 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 35458981001, 35458981002, 35458981003

METHOD BLANK: 2861643 Matrix: Water
Associated Lab Samples: 35458981001, 35458981002, 35458981003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Barium	ug/L	0.84 U	10.0	0.84	04/09/19 10:33	
Beryllium	ug/L	1.6 U	4.0	1.6	04/09/19 10:33	
Cadmium	ug/L	0.33 U	1.0	0.33	04/09/19 10:33	
Chromium	ug/L	1.7 U	5.0	1.7	04/09/19 10:33	
Cobalt	ug/L	0.96 U	10.0	0.96	04/09/19 10:33	
Copper	ug/L	2.6 U	5.0	2.6	04/09/19 10:33	
Iron	ug/L	9.2 U	40.0	9.2	04/09/19 10:33	
Lead	ug/L	4.6 U	10.0	4.6	04/09/19 10:33	
Manganese	ug/L	0.64 I	5.0	0.42	04/09/19 10:33	
Nickel	ug/L	2.1 U	5.0	2.1	04/09/19 10:33	
Selenium	ug/L	8.5 U	15.0	8.5	04/09/19 10:33	
Silver	ug/L	1.0 U	5.0	1.0	04/09/19 10:33	
Sodium	mg/L	0.27 U	2.0	0.27	04/09/19 10:33	
Vanadium	ug/L	1.0 U	10.0	1.0	04/09/19 10:33	
Zinc	ug/L	11.0 U	20.0	11.0	04/09/19 10:33	

LABORATORY CONTROL SAMPLE: 2861644

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	250	248	99	80-120	
Beryllium	ug/L	25	24.8	99	80-120	
Cadmium	ug/L	25	25.4	102	80-120	
Chromium	ug/L	250	251	100	80-120	
Cobalt	ug/L	250	250	100	80-120	
Copper	ug/L	250	240	96	80-120	
Iron	ug/L	2500	2530	101	80-120	
Lead	ug/L	250	254	102	80-120	
Manganese	ug/L	250	250	100	80-120	
Nickel	ug/L	250	255	102	80-120	
Selenium	ug/L	250	250	100	80-120	
Silver	ug/L	25	24.9	100	80-120	
Sodium	mg/L	12.5	12.5	100	80-120	
Vanadium	ug/L	250	246	98	80-120	
Zinc	ug/L	1250	1280	102	80-120	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458981

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2861645 2861646											
Parameter	Units	35458178001		MS	MSD	MS		MSD	% Rec		Max
		Result		Spike Conc.	Spike Conc.	Result	Result	Result	% Rec	Limits	RPD
Barium	ug/L	33.7		250	250	284	279	100	98	75-125	2
Beryllium	ug/L	1.6 U		25	25	25.5	25.1	102	100	75-125	2
Cadmium	ug/L	0.33 U		25	25	25.6	24.9	102	99	75-125	3
Chromium	ug/L	1.7 U		250	250	255	250	101	100	75-125	2
Cobalt	ug/L	1.2 I		250	250	254	250	101	100	75-125	1
Copper	ug/L	2.6 U		250	250	249	245	100	98	75-125	2
Iron	ug/L	1730		2500	2500	4290	4240	103	100	75-125	1
Lead	ug/L	4.6 U		250	250	255	250	101	99	75-125	2
Manganese	ug/L	16.9		250	250	268	264	100	99	75-125	1
Nickel	ug/L	2.1 U		250	250	256	251	102	100	75-125	2
Selenium	ug/L	8.5 U		250	250	248	244	98	96	75-125	2
Silver	ug/L	1.0 U		25	25	25.1	25.0	100	100	75-125	0
Sodium	mg/L	16.0		12.5	12.5	29.0	28.5	104	100	75-125	2
Vanadium	ug/L	3.6 I		250	250	255	251	101	99	75-125	2
Zinc	ug/L	11.0 U		1250	1250	1270	1260	102	100	75-125	1

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458981

QC Batch: 528644 Analysis Method: EPA 6020
QC Batch Method: EPA 3010 Analysis Description: 6020 MET
Associated Lab Samples: 35458981001, 35458981002, 35458981003

METHOD BLANK: 2861647 Matrix: Water

Associated Lab Samples: 35458981001, 35458981002, 35458981003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	0.50 U	1.0	0.50	04/05/19 17:16	
Arsenic	ug/L	0.50 U	1.0	0.50	04/05/19 17:16	
Thallium	ug/L	0.50 U	1.0	0.50	04/05/19 17:16	

LABORATORY CONTROL SAMPLE: 2861648

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	50	52.8	106	80-120	
Arsenic	ug/L	50	46.7	93	80-120	
Thallium	ug/L	50	50.1	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2861649 2861650

Parameter	Units	35458178003 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	52.9	53.9	106	107	75-125	2	20	
Arsenic	ug/L	0.50 U	50	50	52.5	51.9	105	103	75-125	1	20	
Thallium	ug/L	0.50 U	50	50	50.1	50.3	100	100	75-125	0	20	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1
Pace Project No.: 35458981

QC Batch: 530634 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 35458981001, 35458981002, 35458981003, 35458981004

METHOD BLANK: 2873458 Matrix: Water
Associated Lab Samples: 35458981001, 35458981002, 35458981003, 35458981004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	0.32 U	1.0	0.32	04/12/19 13:01	
1,1,1-Trichloroethane	ug/L	0.30 U	1.0	0.30	04/12/19 13:01	
1,1,2,2-Tetrachloroethane	ug/L	0.20 U	0.50	0.20	04/12/19 13:01	
1,1,2-Trichloroethane	ug/L	0.30 U	1.0	0.30	04/12/19 13:01	
1,1-Dichloroethane	ug/L	0.34 U	1.0	0.34	04/12/19 13:01	
1,1-Dichloroethene	ug/L	0.50 U	1.0	0.50	04/12/19 13:01	
1,2,3-Trichloropropane	ug/L	1.1 U	2.0	1.1	04/12/19 13:01	
1,2-Dichlorobenzene	ug/L	0.50 U	1.0	0.50	04/12/19 13:01	
1,2-Dichloroethane	ug/L	0.50 U	1.0	0.50	04/12/19 13:01	
1,2-Dichloropropane	ug/L	0.23 U	1.0	0.23	04/12/19 13:01	
1,4-Dichlorobenzene	ug/L	0.50 U	1.0	0.50	04/12/19 13:01	
2-Butanone (MEK)	ug/L	5.0 U	10.0	5.0	04/12/19 13:01	
2-Hexanone	ug/L	0.85 U	10.0	0.85	04/12/19 13:01	
4-Methyl-2-pentanone (MIBK)	ug/L	0.32 U	10.0	0.32	04/12/19 13:01	
Acetone	ug/L	5.3 U	20.0	5.3	04/12/19 13:01	
Acrylonitrile	ug/L	3.7 U	10.0	3.7	04/12/19 13:01	
Benzene	ug/L	0.10 U	1.0	0.10	04/12/19 13:01	
Bromochloromethane	ug/L	0.37 U	1.0	0.37	04/12/19 13:01	
Bromodichloromethane	ug/L	0.19 U	0.60	0.19	04/12/19 13:01	
Bromoform	ug/L	2.6 U	3.0	2.6	04/12/19 13:01	
Bromomethane	ug/L	4.0 U	5.0	4.0	04/12/19 13:01	
Carbon disulfide	ug/L	0.45 U	10.0	0.45	04/12/19 13:01	
Carbon tetrachloride	ug/L	0.50 U	3.0	0.50	04/12/19 13:01	
Chlorobenzene	ug/L	0.50 U	1.0	0.50	04/12/19 13:01	
Chloroethane	ug/L	3.7 U	10.0	3.7	04/12/19 13:01	
Chloroform	ug/L	0.50 U	1.0	0.50	04/12/19 13:01	
Chloromethane	ug/L	0.97 U	1.0	0.97	04/12/19 13:01	J(v2)
cis-1,2-Dichloroethene	ug/L	0.50 U	1.0	0.50	04/12/19 13:01	
cis-1,3-Dichloropropene	ug/L	0.17 U	0.50	0.17	04/12/19 13:01	
Dibromochloromethane	ug/L	0.45 U	2.0	0.45	04/12/19 13:01	
Dibromomethane	ug/L	0.68 U	2.0	0.68	04/12/19 13:01	
Ethylbenzene	ug/L	0.50 U	1.0	0.50	04/12/19 13:01	
Iodomethane	ug/L	9.3 U	10.0	9.3	04/12/19 13:01	
Methylene Chloride	ug/L	2.0 U	5.0	2.0	04/12/19 13:01	
Styrene	ug/L	0.26 U	1.0	0.26	04/12/19 13:01	
Tetrachloroethene	ug/L	0.50 U	1.0	0.50	04/12/19 13:01	
Toluene	ug/L	0.50 U	1.0	0.50	04/12/19 13:01	
trans-1,2-Dichloroethene	ug/L	0.50 U	1.0	0.50	04/12/19 13:01	
trans-1,3-Dichloropropene	ug/L	0.17 U	0.50	0.17	04/12/19 13:01	
trans-1,4-Dichloro-2-butene	ug/L	2.5 U	10.0	2.5	04/12/19 13:01	J(v2)
Trichloroethene	ug/L	0.50 U	1.0	0.50	04/12/19 13:01	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1
Pace Project No.: 35458981

METHOD BLANK: 2873458

Matrix: Water

Associated Lab Samples: 35458981001, 35458981002, 35458981003, 35458981004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Trichlorofluoromethane	ug/L	0.35 U	1.0	0.35	04/12/19 13:01	
Vinyl acetate	ug/L	0.19 U	10.0	0.19	04/12/19 13:01	
Vinyl chloride	ug/L	0.50 U	1.0	0.50	04/12/19 13:01	
Xylene (Total)	ug/L	1.0 U	5.0	1.0	04/12/19 13:01	
1,2-Dichloroethane-d4 (S)	%	103	70-130		04/12/19 13:01	
4-Bromofluorobenzene (S)	%	112	70-130		04/12/19 13:01	
Toluene-d8 (S)	%	98	70-130		04/12/19 13:01	

LABORATORY CONTROL SAMPLE: 2873459

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	18.6	93	70-130	
1,1,1-Trichloroethane	ug/L	20	16.5	83	70-130	
1,1,2,2-Tetrachloroethane	ug/L	20	16.7	83	68-125	
1,1,2-Trichloroethane	ug/L	20	18.4	92	70-130	
1,1-Dichloroethane	ug/L	20	16.6	83	70-130	
1,1-Dichloroethene	ug/L	20	16.2	81	66-133	
1,2,3-Trichloropropane	ug/L	20	17.7	89	62-127	
1,2-Dichlorobenzene	ug/L	20	15.9	79	70-130	
1,2-Dichloroethane	ug/L	20	15.9	79	70-130	
1,2-Dichloropropane	ug/L	20	15.5	77	70-130	
1,4-Dichlorobenzene	ug/L	20	15.5	78	70-130	
2-Butanone (MEK)	ug/L	40	43.6	109	47-143	
2-Hexanone	ug/L	40	47.3	118	48-145	
4-Methyl-2-pentanone (MIBK)	ug/L	40	47.9	120	57-132	
Acetone	ug/L	40	48.4	121	46-148	
Acrylonitrile	ug/L	200	167	84	60-143	
Benzene	ug/L	20	16.6	83	70-130	
Bromochloromethane	ug/L	20	18.0	90	70-130	
Bromodichloromethane	ug/L	20	14.9	75	70-130	
Bromoform	ug/L	20	16.9	85	49-126	
Bromomethane	ug/L	20	16.4	82	10-165	
Carbon disulfide	ug/L	20	20.9	105	60-141	
Carbon tetrachloride	ug/L	20	16.3	82	63-126	
Chlorobenzene	ug/L	20	17.3	86	70-130	
Chloroethane	ug/L	20	16.5	82	71-142	
Chloroform	ug/L	20	15.8	79	70-130	
Chloromethane	ug/L	20	12.1	60	40-140 J(v3)	
cis-1,2-Dichloroethene	ug/L	20	16.1	81	70-130	
cis-1,3-Dichloropropene	ug/L	20	15.9	80	70-130	
Dibromochloromethane	ug/L	20	16.4	82	62-118	
Dibromomethane	ug/L	20	18.5	92	70-130	
Ethylbenzene	ug/L	20	17.2	86	70-130	
Iodomethane	ug/L	40	52.4	131	10-164	

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QUALITY CONTROL DATA

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458981

LABORATORY CONTROL SAMPLE: 2873459

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	20	17.8	89	65-136	
Styrene	ug/L	20	18.6	93	70-130	
Tetrachloroethene	ug/L	20	17.0	85	64-134	
Toluene	ug/L	20	17.2	86	70-130	
trans-1,2-Dichloroethene	ug/L	20	16.0	80	68-127	
trans-1,3-Dichloropropene	ug/L	20	17.0	85	65-121	
trans-1,4-Dichloro-2-butene	ug/L	20	13.2	66	42-129 J(v3)	
Trichloroethene	ug/L	20	18.1	91	70-130	
Trichlorofluoromethane	ug/L	20	17.7	88	65-135	
Vinyl acetate	ug/L	20	26.9	134	60-144	
Vinyl chloride	ug/L	20	15.1	75	68-131	
Xylene (Total)	ug/L	60	54.7	91	70-130	
1,2-Dichloroethane-d4 (S)	%			95	70-130	
4-Bromofluorobenzene (S)	%			116	70-130	
Toluene-d8 (S)	%			98	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2873461 2873957

Parameter	Units	35460517001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	0.32 U	20	20	19.4	20.0	97	100	70-130	3	40	
1,1,1-Trichloroethane	ug/L	11.5	20	20	36.3	34.1	124	113	70-130	6	40	
1,1,2,2-Tetrachloroethane	ug/L	0.20 U	20	20	16.3	17.3	81	86	68-125	6	40	
1,1,2-Trichloroethane	ug/L	0.62 I	20	20	19.7	20.6	95	100	70-130	5	40	
1,1-Dichloroethane	ug/L	0.66 I	20	20	19.0	20.1	92	97	70-130	5	40	
1,1-Dichloroethene	ug/L	190	20	20	230	231	202	206	66-133	0	40 J(P6)	
1,2,3-Trichloropropane	ug/L	1.1 U	20	20	13.7	14.6	68	73	62-127	7	40	
1,2-Dichlorobenzene	ug/L	0.50 U	20	20	15.5	16.4	78	82	70-130	6	40	
1,2-Dichloroethane	ug/L	0.50 U	20	20	16.9	17.9	82	88	70-130	6	40	
1,2-Dichloropropane	ug/L	0.23 U	20	20	16.2	17.4	81	87	70-130	7	40	
1,4-Dichlorobenzene	ug/L	0.50 U	20	20	15.6	16.2	78	81	70-130	4	40	
2-Butanone (MEK)	ug/L	5.0 U	40	40	32.9	37.0	82	93	47-143	12	40	
2-Hexanone	ug/L	0.85 U	40	40	39.5	41.0	99	103	48-145	4	40	
4-Methyl-2-pentanone (MIBK)	ug/L	0.32 U	40	40	39.5	41.0	99	103	57-132	4	40	
Acetone	ug/L	6.3 I	40	40	48.8	49.9	106	109	46-148	2	40	
Acrylonitrile	ug/L	3.7 U	200	200	171	184	86	92	60-143	7	40	
Benzene	ug/L	0.10 U	20	20	17.7	18.8	88	94	70-130	6	40	
Bromochloromethane	ug/L	0.37 U	20	20	18.6	19.4	93	97	70-130	5	40	
Bromodichloromethane	ug/L	0.19 U	20	20	15.6	16.6	78	83	70-130	6	40	
Bromoform	ug/L	2.6 U	20	20	17.0	18.1	85	91	49-126	6	40	
Bromomethane	ug/L	4.0 U	20	20	8.6	9.8	43	49	10-165	13	40	
Carbon disulfide	ug/L	0.45 U	20	20	23.3	23.6	117	118	60-141	1	40	
Carbon tetrachloride	ug/L	0.50 U	20	20	19.0	19.8	95	99	63-126	5	40	
Chlorobenzene	ug/L	0.50 U	20	20	18.0	19.0	90	95	70-130	6	40	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458981

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2873461 2873957											
Parameter	Units	35460517001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Chloroethane	ug/L	3.7 U	20	20	20.9	17.6	105	88	71-142	17	40
Chloroform	ug/L	0.50 U	20	20	18.1	18.0	89	89	70-130	1	40
Chloromethane	ug/L	0.97 U	20	20	15.9	12.2	79	61	40-140	26	40 J(v3)
cis-1,2-Dichloroethene	ug/L	0.50 U	20	20	17.3	18.7	86	92	70-130	8	40
cis-1,3-Dichloropropene	ug/L	0.17 U	20	20	14.4	16.3	72	81	70-130	12	40
Dibromochloromethane	ug/L	0.45 U	20	20	17.1	18.0	85	90	62-118	5	40
Dibromomethane	ug/L	0.68 U	20	20	18.5	19.8	93	99	70-130	7	40
Ethylbenzene	ug/L	0.50 U	20	20	18.1	19.0	90	95	70-130	5	40
Iodomethane	ug/L	9.3 U	40	40	32.7	42.3	81	105	10-164	26	40
Methylene Chloride	ug/L	2.0 U	20	20	17.8	19.0	89	95	65-136	6	40
Styrene	ug/L	0.26 U	20	20	19.1	20.3	96	101	70-130	6	40
Tetrachloroethene	ug/L	2.2	20	20	20.8	21.6	93	97	64-134	4	40
Toluene	ug/L	0.50 U	20	20	18.4	19.2	92	96	70-130	5	40
trans-1,2-Dichloroethene	ug/L	0.50 U	20	20	17.7	19.2	87	94	68-127	8	40
trans-1,3-Dichloropropene	ug/L	0.17 U	20	20	16.7	18.1	83	91	65-121	8	40
trans-1,4-Dichloro-2-butene	ug/L	2.5 U	20	20	11.2	11.1	56	55	42-129	2	40 J(v3)
Trichloroethene	ug/L	8.4	20	20	29.0	29.9	103	107	70-130	3	40
Trichlorofluoromethane	ug/L	0.35 U	20	20	24.1	23.4	120	116	65-135	3	40
Vinyl acetate	ug/L	0.19 U	20	20	22.0	22.7	110	113	60-144	3	40
Vinyl chloride	ug/L	0.50 U	20	20	19.6	19.7	98	99	68-131	1	40
Xylene (Total)	ug/L	1.0 U	60	60	56.8	60.0	95	100	70-130	5	40
1,2-Dichloroethane-d4 (S)	%						95	97	70-130		40
4-Bromofluorobenzene (S)	%						116	117	70-130		40
Toluene-d8 (S)	%						95	97	70-130		40

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458981

QC Batch: 528667 Analysis Method: EPA 8011
QC Batch Method: EPA 8011 Analysis Description: 8011 EDB DBCP
Associated Lab Samples: 35458981001, 35458981002, 35458981003, 35458981005

METHOD BLANK: 2861709 Matrix: Water
Associated Lab Samples: 35458981001, 35458981002, 35458981003, 35458981005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.0064 U	0.020	0.0064	04/05/19 12:22	
1,2-Dibromoethane (EDB)	ug/L	0.0075 U	0.010	0.0075	04/05/19 12:22	

LABORATORY CONTROL SAMPLE: 2861710

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.25	99	60-140	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.26	104	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2861711 2861712

Parameter	Units	35459032005 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	0.0062 U	0.44	0.44	0.47	0.49	107	111	60-140	4	40	
1,2-Dibromoethane (EDB)	ug/L	0.0072 U	0.44	0.44	0.51	0.53	116	122	60-140	5	40	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458981

QC Batch: 530320 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 35458981001, 35458981002, 35458981003

METHOD BLANK: 2871269 Matrix: Water

Associated Lab Samples: 35458981001, 35458981002, 35458981003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	5.0 U	5.0	5.0	04/11/19 20:20	

LABORATORY CONTROL SAMPLE: 2871270

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	300	296	99	90-110	

SAMPLE DUPLICATE: 2871271

Parameter	Units	35458981001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	940	932	1	5	

SAMPLE DUPLICATE: 2872421

Parameter	Units	35459758003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	670	676	1	5	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1
Pace Project No.: 35458981

QC Batch: 530814 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 35458981001, 35458981002, 35458981003

METHOD BLANK: 2874950 Matrix: Water
Associated Lab Samples: 35458981001, 35458981002, 35458981003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	2.5 U	5.0	2.5	04/14/19 20:44	
Sulfate	mg/L	2.5 U	5.0	2.5	04/14/19 20:44	

LABORATORY CONTROL SAMPLE: 2874951

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.1	102	90-110	
Sulfate	mg/L	50	51.7	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2875071 2875072

Parameter	Units	35457693005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.8 I	50	50	53.7	54.2	100	101	90-110	1	20	
Sulfate	mg/L	<2.5	50	50	51.2	51.6	100	101	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2875073 2875074

Parameter	Units	35458993001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	69.1	50	50	127	128	116	117	90-110	0	20	J(M1), L
Sulfate	mg/L	10.7	50	50	62.4	63.0	103	104	90-110	1	20	

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QUALITY CONTROL DATA

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458981

QC Batch: 531647

Analysis Method: EPA 350.1

QC Batch Method: EPA 350.1

Analysis Description: 350.1 Ammonia

Associated Lab Samples: 35458981001, 35458981002

METHOD BLANK: 2879417

Matrix: Water

Associated Lab Samples: 35458981001, 35458981002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	0.035 U	0.050	0.035	04/17/19 15:43	

LABORATORY CONTROL SAMPLE: 2879418

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	1	1.0	99	90-110	

MATRIX SPIKE SAMPLE: 2879420

Parameter	Units	35460943001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	0.94	1	2.0	107	90-110	

SAMPLE DUPLICATE: 2879419

Parameter	Units	35460943001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	0.94	0.96	2	20	

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QUALITY CONTROL DATA



Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458981

QC Batch: 531649

Analysis Method: EPA 350.1

QC Batch Method: EPA 350.1

Analysis Description: 350.1 Ammonia

Associated Lab Samples: 35458981003

METHOD BLANK: 2879421

Matrix: Water

Associated Lab Samples: 35458981003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	0.035 U	0.050	0.035	04/17/19 16:46	

LABORATORY CONTROL SAMPLE: 2879422

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	1	1.0	102	90-110	

MATRIX SPIKE SAMPLE: 2879424

Parameter	Units	35458981003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	0.035 U	1	1.1	104	90-110	

SAMPLE DUPLICATE: 2879423

Parameter	Units	35458981003 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	0.035 U	0.035 U		20	

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QUALITY CONTROL DATA

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458981

QC Batch:	528649	Analysis Method:	EPA 353.2
QC Batch Method:	EPA 353.2	Analysis Description:	353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples:	35458981001		

METHOD BLANK: 2861665 Matrix: Water

Associated Lab Samples: 35458981001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.050	0.025	04/05/19 04:42	

SAMPLE DUPLICATE: 2861667

Parameter	Units	35459106001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	<0.025	0.025 U		20	

SAMPLE DUPLICATE: 2861669

Parameter	Units	35458947001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.025 U		20	

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QUALITY CONTROL DATA

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458981

QC Batch:	528650	Analysis Method:	EPA 353.2
QC Batch Method:	EPA 353.2	Analysis Description:	353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples:	35458981002		

METHOD BLANK: 2861671 Matrix: Water

Associated Lab Samples: 35458981002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.050	0.025	04/05/19 05:48	

SAMPLE DUPLICATE: 2861673

Parameter	Units	35458979002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	10.2	10.1	1	20	

SAMPLE DUPLICATE: 2861675

Parameter	Units	35459053001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.034 I	0.029 I		20	

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QUALITY CONTROL DATA

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458981

QC Batch:	528651	Analysis Method:	EPA 353.2
QC Batch Method:	EPA 353.2	Analysis Description:	353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples:	35458981003		

METHOD BLANK: 2861677 Matrix: Water

Associated Lab Samples: 35458981003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.050	0.025	04/05/19 09:48	

SAMPLE DUPLICATE: 2861679

Parameter	Units	35458917001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.79	0.77	2	20	

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QUALIFIERS

Project: Central Cty MW wells Appdx 1
Pace Project No.: 35458981

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(M1)	Estimated Value. Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
J(P6)	Estimated Value. Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.
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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Central Cty MW wells Appdx 1

Pace Project No.: 35458981

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
35458981001	MW-9 (4509)				
35458981002	MW-10R (4510)				
35458981001	MW-9 (4509)	EPA 8011	528667	EPA 8011	528724
35458981002	MW-10R (4510)	EPA 8011	528667	EPA 8011	528724
35458981003	Equipment Blank 3 (sub)	EPA 8011	528667	EPA 8011	528724
35458981005	Trip Blank-8011	EPA 8011	528667	EPA 8011	528724
35458981001	MW-9 (4509)	EPA 3010	528643	EPA 6010	528647
35458981002	MW-10R (4510)	EPA 3010	528643	EPA 6010	528647
35458981003	Equipment Blank 3 (sub)	EPA 3010	528643	EPA 6010	528647
35458981001	MW-9 (4509)	EPA 3010	528644	EPA 6020	528648
35458981002	MW-10R (4510)	EPA 3010	528644	EPA 6020	528648
35458981003	Equipment Blank 3 (sub)	EPA 3010	528644	EPA 6020	528648
35458981001	MW-9 (4509)	EPA 7470	529082	EPA 7470	529121
35458981002	MW-10R (4510)	EPA 7470	529082	EPA 7470	529121
35458981003	Equipment Blank 3 (sub)	EPA 7470	529082	EPA 7470	529121
35458981001	MW-9 (4509)	EPA 8260	530634		
35458981002	MW-10R (4510)	EPA 8260	530634		
35458981003	Equipment Blank 3 (sub)	EPA 8260	530634		
35458981004	Trip Blank-8260	EPA 8260	530634		
35458981001	MW-9 (4509)	SM 2540C	530320		
35458981002	MW-10R (4510)	SM 2540C	530320		
35458981003	Equipment Blank 3 (sub)	SM 2540C	530320		
35458981001	MW-9 (4509)	EPA 300.0	530814		
35458981002	MW-10R (4510)	EPA 300.0	530814		
35458981003	Equipment Blank 3 (sub)	EPA 300.0	530814		
35458981001	MW-9 (4509)	EPA 350.1	531647		
35458981002	MW-10R (4510)	EPA 350.1	531647		
35458981003	Equipment Blank 3 (sub)	EPA 350.1	531649		
35458981001	MW-9 (4509)	EPA 353.2	528649		
35458981002	MW-10R (4510)	EPA 353.2	528650		
35458981003	Equipment Blank 3 (sub)	EPA 353.2	528651		

REPORT OF LABORATORY ANALYSIS

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Section A

Required Client Information:

Company:	Sarasota County
Address:	1255 T. Mabry Carlton Parkway
	Venice, FL 34292

Email:	
Phone: 941-650-9834	Fax:

Requested Due Date:

Section B

Required Project Information:

Report To:	Mr. Cesar Rodriguez
Copy To:	
Purchase Order #:	181191
Project Name:	Central Cty MW wells Appdx 1
Project #:	

Section C

Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	martha.montero@pacelabs.com
Pace Profile #:	R33 #1

Page : 1 Of 1

[illegible]

SAMPLER NAME AND SIGNATURE PRINT Name of SAMPLER: Ron Moore SIGNATURE of SAMPLER: 		DATE Signed: 4/4/19	
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Document Name:
Sample Condition Upon Receipt Form
Document No.:
F-FL-C-007 rev. 13

Document Revised:
May 30, 2018
Issuing Authority:
Pace Florida Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project # **WO# : 35458981**
Project Manager: PM: MIM **Due Date:** 04/18/19
Client: CLIENT: SARCOU

Date and Initials of person:

Examining contents: mrc

Label: 4/4/19

Deliver: ↓

pH: ↓

Thermometer Used: T-203

Date: 4-4-19

Time: 1650

Initials: LJM

State of Origin: FL

☐ For WV projects, all containers verified to ≤6 °C

Cooler #1 Temp. °C 0.6 (Visual) 0.0 (Correction Factor) 0.6 (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: Preservative: _____ Lot #/Trace #: _____ Date: _____ Time: _____ Initials: _____
All Containers needing preservation are found to be in compliance with EPA recommendation:	☒ Yes ☐ No ☐ N/A	
Exceptions: VOA, Coliform, TOC, O&G, Carbamates		
Headspace in VOA Vials? (>6mm):	☐ Yes ☒ No ☐ N/A	
Trip Blank Present:	☐ Yes ☐ No ☐ N/A	<u>Both 8011 & 8260</u>

Client Notification/ Resolution:

Person Contacted: _____

Date/Time: _____

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

Project Manager Review: _____

Date: _____ Page 37 of 39

REVIEWED

By Cesar Rodriguez-Palacios at 2:06 pm, May 24, 2019

April 26, 2019

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

RE: Project: Surface Water Central city
Pace Project No.: 35460696

Dear Mr. Rodriguez:

Enclosed are the analytical results for sample(s) received by the laboratory on April 11, 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



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Surface Water Central cty

Pace Project No.: 35460696

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

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Surface Water Central cty

Pace Project No.: 35460696

Lab ID	Sample ID	Matrix	Date Collected	Date Received
35460696001	Pond 1 28824	Water	04/11/19 12:45	04/11/19 15:30
35460696002	Pond 2 28825	Water	04/11/19 11:30	04/11/19 15:30
35460696003	Dup	Water	04/11/19 11:30	04/11/19 15:30
35460696004	field blank	Water	04/11/19 11:15	04/11/19 15:30
35460696006	trip 1	Water	04/11/19 11:15	04/11/19 15:30
35460696007	trip 2	Water	04/11/19 11:15	04/11/19 15:30

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SAMPLE ANALYTE COUNT

Project: Surface Water Central cty

Pace Project No.: 35460696

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
35460696001	Pond 1 28824	EPA 8011	LJM	2	PASI-O
		EPA 6010	SC1	8	PASI-O
		EPA 6020	FDV	9	PASI-O
		EPA 8260	BTN	48	PASI-O
		EPA 1631E	NMT	1	PASI-Tp
		SM 2320B	AGS	3	PASI-O
		SM 2540C	KLT	1	PASI-O
		SM 2540D	SA1	1	PASI-O
		SM 5210B	AGS	1	PASI-O
		SM10200	SA1	1	PASI-O
		TKN+NOx Calculation	JMD	1	PASI-O
		EPA 300.0	JDM	1	PASI-O
		EPA 350.1	MAJ	1	PASI-O
		EPA 351.2	JMD	1	PASI-O
		EPA 353.2	CLL	2	PASI-O
		EPA 365.4	JMD	1	PASI-O
		EPA 410.4	FGF	1	PASI-O
		SM 5310B	FGF	1	PASI-O
		FLDEP SOP 10/03/83	CLL	1	PASI-O
35460696002	Pond 2 28825	EPA 8011	LJM	2	PASI-O
		EPA 6010	SC1	8	PASI-O
		EPA 6020	FDV	9	PASI-O
		EPA 8260	BTN	48	PASI-O
		EPA 1631E	NMT	1	PASI-Tp
		SM 2320B	AGS	3	PASI-O
		SM 2540C	KLT	1	PASI-O
		SM 2540D	SA1	1	PASI-O
		SM 5210B	AGS	1	PASI-O
		SM10200	SA1	1	PASI-O
		TKN+NOx Calculation	JMD	1	PASI-O
		EPA 300.0	JDM	1	PASI-O
		EPA 350.1	MAJ	1	PASI-O
		EPA 351.2	JMD	1	PASI-O
		EPA 353.2	CLL	2	PASI-O
		EPA 365.4	JMD	1	PASI-O
		EPA 410.4	FGF	1	PASI-O
		SM 5310B	FGF	1	PASI-O

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SAMPLE ANALYTE COUNT

Project: Surface Water Central cty

Pace Project No.: 35460696

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
35460696003	Dup	FLDEP SOP 10/03/83	CLL	1	PASI-O
		EPA 8011	LJM	2	PASI-O
		EPA 6010	SC1	8	PASI-O
		EPA 6020	FDV	9	PASI-O
		EPA 8260	BTN	48	PASI-O
		EPA 1631E	NMT	1	PASI-Tp
		SM 2320B	AGS	3	PASI-O
		SM 2540C	KLT	1	PASI-O
		SM 2540D	SA1	1	PASI-O
		SM 5210B	AGS	1	PASI-O
		SM10200	SA1	1	PASI-O
		TKN+NOx Calculation	JMD	1	PASI-O
		EPA 300.0	SEW	1	PASI-O
		EPA 350.1	MAJ	1	PASI-O
		EPA 351.2	JMD	1	PASI-O
		EPA 353.2	CLL	2	PASI-O
		EPA 365.4	JMD	1	PASI-O
		EPA 410.4	FGF	1	PASI-O
		SM 5310B	FGF	1	PASI-O
35460696004	field blank	FLDEP SOP 10/03/83	CLL	1	PASI-O
		EPA 8011	LJM	2	PASI-O
		EPA 6010	SC1	8	PASI-O
		EPA 6020	FDV	9	PASI-O
		EPA 8260	BTN	48	PASI-O
		EPA 1631E	NMT	1	PASI-Tp
		SM 2320B	AGS	3	PASI-O
		SM 2540C	KLT	1	PASI-O
		SM 2540D	SA1	1	PASI-O
		SM 5210B	AGS	1	PASI-O
		SM10200	SA1	1	PASI-O
		TKN+NOx Calculation	JMD	1	PASI-O
		EPA 300.0	JDM	1	PASI-O
		EPA 350.1	MAJ	1	PASI-O
		EPA 351.2	JMD	1	PASI-O
		EPA 353.2	CLL	2	PASI-O
		EPA 365.4	JMD	1	PASI-O
		EPA 410.4	FGF	1	PASI-O

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SAMPLE ANALYTE COUNT

Project: Surface Water Central cty

Pace Project No.: 35460696

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
35460696006	trip 1	SM 5310B	FGF	1	PASI-O
		FLDEP SOP 10/03/83	CLL	1	PASI-O
		EPA 8011	LJM	2	PASI-O
		EPA 8260	BTN	48	PASI-O
35460696007	trip 2	EPA 8011	LJM	2	PASI-O
		EPA 8260	BTN	48	PASI-O

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ANALYTICAL RESULTS

Project: Surface Water Central cty

Pace Project No.: 35460696

Sample: Pond 1 28824 Lab ID: 35460696001 Collected: 04/11/19 12:45 Received: 04/11/19 15:30 Matrix: Water									
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data Analytical Method:									
Field pH	6.02	Std. Units			1		04/11/19 12:45		
Field Temperature	21.96	deg C			1		04/11/19 12:45		
Field Specific Conductance	256	umhos/cm			1		04/11/19 12:45		
Oxygen, Dissolved	0.21	mg/L			1		04/11/19 12:45	7782-44-7	
Turbidity	2.66	NTU			1		04/11/19 12:45		
8011 GCS EDB and DBCP Analytical Method: EPA 8011 Preparation Method: EPA 8011									
1,2-Dibromo-3-chloropropane	0.0061 U	ug/L	0.019	0.0061	1	04/21/19 10:45	04/22/19 19:52	96-12-8	
1,2-Dibromoethane (EDB)	0.0072 U	ug/L	0.0095	0.0072	1	04/21/19 10:45	04/22/19 19:52	106-93-4	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Arsenic	7.1 U	ug/L	10.0	7.1	1	04/23/19 14:25	04/24/19 23:58	7440-38-2	
Barium	14.2	ug/L	10.0	0.84	1	04/23/19 14:25	04/24/19 23:58	7440-39-3	
Chromium	1.7 U	ug/L	5.0	1.7	1	04/23/19 14:25	04/24/19 23:58	7440-47-3	
Cobalt	0.96 U	ug/L	10.0	0.96	1	04/23/19 14:25	04/24/19 23:58	7440-48-4	
Iron	183	ug/L	40.0	9.2	1	04/23/19 14:25	04/24/19 23:58	7439-89-6	
Nickel	2.1 U	ug/L	5.0	2.1	1	04/23/19 14:25	04/24/19 23:58	7440-02-0	
Tot Hardness asCaCO3 (SM 2340B	108	mg/L	3.2	0.51	1	04/23/19 14:25	04/24/19 23:58		
Vanadium	1.0 U	ug/L	10.0	1.0	1	04/23/19 14:25	04/24/19 23:58	7440-62-2	
6020 MET ICPMS Analytical Method: EPA 6020 Preparation Method: EPA 3010									
Antimony	0.50 U	ug/L	1.0	0.50	1	04/23/19 14:25	04/25/19 13:02	7440-36-0	
Beryllium	0.050 U	ug/L	0.10	0.050	1	04/23/19 14:25	04/25/19 13:02	7440-41-7	
Cadmium	0.050 U	ug/L	0.10	0.050	1	04/23/19 14:25	04/25/19 13:02	7440-43-9	
Copper	0.93 U	ug/L	1.0	0.93	1	04/23/19 14:25	04/26/19 13:29	7440-50-8	
Lead	0.50 U	ug/L	1.0	0.50	1	04/23/19 14:25	04/25/19 13:02	7439-92-1	
Selenium	0.50 U	ug/L	1.0	0.50	1	04/23/19 14:25	04/25/19 13:02	7782-49-2	
Silver	0.050 U	ug/L	0.10	0.050	1	04/23/19 14:25	04/26/19 13:29	7440-22-4	
Thallium	0.50 U	ug/L	1.0	0.50	1	04/23/19 14:25	04/25/19 13:02	7440-28-0	
Zinc	107	ug/L	5.0	2.5	1	04/23/19 14:25	04/26/19 13:29	7440-66-6	
8260 MSV Analytical Method: EPA 8260									
Acetone	5.3 U	ug/L	20.0	5.3	1		04/18/19 15:51	67-64-1	
Acrylonitrile	3.7 U	ug/L	10.0	3.7	1		04/18/19 15:51	107-13-1	
Benzene	0.30 U	ug/L	1.0	0.30	1		04/18/19 15:51	71-43-2	
Bromochloromethane	0.37 U	ug/L	1.0	0.37	1		04/18/19 15:51	74-97-5	
Bromodichloromethane	0.19 U	ug/L	0.60	0.19	1		04/18/19 15:51	75-27-4	
Bromoform	2.6 U	ug/L	3.0	2.6	1		04/18/19 15:51	75-25-2	
Bromomethane	4.0 U	ug/L	5.0	4.0	1		04/18/19 15:51	74-83-9	J(v2)
2-Butanone (MEK)	7.5 U	ug/L	10.0	7.5	1		04/18/19 15:51	78-93-3	
Carbon disulfide	0.45 U	ug/L	10.0	0.45	1		04/18/19 15:51	75-15-0	
Carbon tetrachloride	1.1 U	ug/L	3.0	1.1	1		04/18/19 15:51	56-23-5	
Chlorobenzene	0.35 U	ug/L	1.0	0.35	1		04/18/19 15:51	108-90-7	
Chloroethane	3.7 U	ug/L	10.0	3.7	1		04/18/19 15:51	75-00-3	
Chloroform	0.32 U	ug/L	1.0	0.32	1		04/18/19 15:51	67-66-3	

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ANALYTICAL RESULTS

Project: Surface Water Central cty

Pace Project No.: 35460696

Sample: Pond 1 28824 Lab ID: 35460696001 Collected: 04/11/19 12:45 Received: 04/11/19 15:30 Matrix: Water									
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Analytical Method: EPA 8260									
Chloromethane	0.97 U	ug/L	1.0	0.97	1		04/18/19 15:51	74-87-3	J(v2)
Dibromochloromethane	0.45 U	ug/L	2.0	0.45	1		04/18/19 15:51	124-48-1	
Dibromomethane	0.68 U	ug/L	2.0	0.68	1		04/18/19 15:51	74-95-3	
1,2-Dichlorobenzene	0.29 U	ug/L	1.0	0.29	1		04/18/19 15:51	95-50-1	
1,4-Dichlorobenzene	0.28 U	ug/L	1.0	0.28	1		04/18/19 15:51	106-46-7	
trans-1,4-Dichloro-2-butene	2.5 U	ug/L	10.0	2.5	1		04/18/19 15:51	110-57-6	J(v2)
1,1-Dichloroethane	0.34 U	ug/L	1.0	0.34	1		04/18/19 15:51	75-34-3	
1,2-Dichloroethane	0.27 U	ug/L	1.0	0.27	1		04/18/19 15:51	107-06-2	
1,1-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/18/19 15:51	75-35-4	
cis-1,2-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/18/19 15:51	156-59-2	
trans-1,2-Dichloroethene	0.23 U	ug/L	1.0	0.23	1		04/18/19 15:51	156-60-5	
1,2-Dichloropropane	0.23 U	ug/L	1.0	0.23	1		04/18/19 15:51	78-87-5	
cis-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/18/19 15:51	10061-01-5	
trans-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/18/19 15:51	10061-02-6	
Ethylbenzene	0.30 U	ug/L	1.0	0.30	1		04/18/19 15:51	100-41-4	
2-Hexanone	0.85 U	ug/L	10.0	0.85	1		04/18/19 15:51	591-78-6	
Iodomethane	9.3 U	ug/L	10.0	9.3	1		04/18/19 15:51	74-88-4	J(v2)
Methylene Chloride	2.0 U	ug/L	5.0	2.0	1		04/18/19 15:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.32 U	ug/L	10.0	0.32	1		04/18/19 15:51	108-10-1	
Styrene	0.26 U	ug/L	1.0	0.26	1		04/18/19 15:51	100-42-5	
1,1,1,2-Tetrachloroethane	0.32 U	ug/L	1.0	0.32	1		04/18/19 15:51	630-20-6	
1,1,2,2-Tetrachloroethane	0.20 U	ug/L	0.50	0.20	1		04/18/19 15:51	79-34-5	
Tetrachloroethene	0.38 U	ug/L	1.0	0.38	1		04/18/19 15:51	127-18-4	
Toluene	0.33 U	ug/L	1.0	0.33	1		04/18/19 15:51	108-88-3	
1,1,1-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/18/19 15:51	71-55-6	
1,1,2-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/18/19 15:51	79-00-5	
Trichloroethene	0.36 U	ug/L	1.0	0.36	1		04/18/19 15:51	79-01-6	
Trichlorofluoromethane	0.35 U	ug/L	1.0	0.35	1		04/18/19 15:51	75-69-4	
1,2,3-Trichloropropane	1.1 U	ug/L	2.0	1.1	1		04/18/19 15:51	96-18-4	
Vinyl acetate	0.19 U	ug/L	10.0	0.19	1		04/18/19 15:51	108-05-4	J(v1)
Vinyl chloride	0.39 U	ug/L	1.0	0.39	1		04/18/19 15:51	75-01-4	
Xylene (Total)	2.1 U	ug/L	5.0	2.1	1		04/18/19 15:51	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		04/18/19 15:51	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	70-130		1		04/18/19 15:51	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		04/18/19 15:51	2037-26-5	
1631E Mercury, Low Level Tampa Analytical Method: EPA 1631E Preparation Method: EPA 1631E									
Mercury	0.00127	ug/L	0.00050	0.00020	1	04/13/19 17:43	04/16/19 09:33	7439-97-6	
2320B Alkalinity Analytical Method: SM 2320B									
Alkalinity, Bicarbonate (CaCO3)	90.4	mg/L	5.0	5.0	1		04/23/19 14:56		
Alkalinity, Carbonate (CaCO3)	5.0 U	mg/L	5.0	5.0	1		04/23/19 14:56		
Alkalinity, Total as CaCO3	90.4	mg/L	5.0	5.0	1		04/23/19 14:56		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Surface Water Central cty

Pace Project No.: 35460696

Sample: Pond 1 28824		Lab ID: 35460696001		Collected: 04/11/19 12:45		Received: 04/11/19 15:30		Matrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	135	mg/L	5.0	5.0	1		04/18/19 20:31		
2540D Total Suspended Solids	Analytical Method: SM 2540D								
Total Suspended Solids	20.0	mg/L	5.0	5.0	1		04/17/19 14:09		
5210B BOD, 5 day	Analytical Method: SM 5210B								
BOD, 5 day	8.1	mg/L	2.0	2.0	1	04/12/19 14:14	04/17/19 16:58		
Chlorophyll & Pheophytin	Analytical Method: SM10200 Preparation Method: SM10200								
Chlorophyll a	39.4	ug/L	5.0	2.2	1	04/13/19 08:45	04/13/19 14:49		
Total Nitrogen Calculation	Analytical Method: TKN+NOx Calculation								
Total Nitrogen	0.89	mg/L	0.50	0.086	1		04/17/19 16:58		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	16.4	mg/L	5.0	2.5	1		04/24/19 19:28	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	0.035 U	mg/L	0.050	0.035	1		04/23/19 13:10	7664-41-7	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2								
Nitrogen, Kjeldahl, Total	0.86	mg/L	0.50	0.086	1	04/12/19 10:24	04/15/19 13:11	7727-37-9	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	0.033 U	mg/L	0.050	0.033	1		04/12/19 05:50		
Nitrogen, Nitrate	0.029 I	mg/L	0.050	0.025	1		04/12/19 05:50	14797-55-8	
365.4 Phosphorus, Total	Analytical Method: EPA 365.4 Preparation Method: EPA 365.4								
Phosphorus, Total (as P)	0.050 U	mg/L	0.10	0.050	1	04/12/19 10:24	04/15/19 13:11	7723-14-0	
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
Chemical Oxygen Demand	51.3	mg/L	20.0	12.5	1	04/22/19 10:20	04/22/19 16:22		
5310B TOC	Analytical Method: SM 5310B								
Total Organic Carbon	12.7	mg/L	1.0	0.50	1		04/24/19 10:26	7440-44-0	
Un-ionized Ammonia, Ammonium	Analytical Method: FLDEP SOP 10/03/83								
Nitrogen, Ammonia (Unionized)	0.020 U	mg/L	0.020	0.020	1		04/24/19 12:00		

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ANALYTICAL RESULTS



Project: Surface Water Central cty

Pace Project No.: 35460696

Sample: Pond 2 28825 Lab ID: 35460696002 Collected: 04/11/19 11:30 Received: 04/11/19 15:30 Matrix: Water									
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data Analytical Method:									
Field pH	5.41	Std. Units			1		04/23/19 19:29		
Field Temperature	20.51	deg C			1		04/23/19 19:29		
Field Specific Conductance	228	umhos/cm			1		04/23/19 19:29		
Oxygen, Dissolved	0.41	mg/L			1		04/23/19 19:29	7782-44-7	
Turbidity	1.72	NTU			1		04/23/19 19:29		
8011 GCS EDB and DBCP Analytical Method: EPA 8011 Preparation Method: EPA 8011									
1,2-Dibromo-3-chloropropane	0.0061 U	ug/L	0.019	0.0061	1	04/21/19 10:45	04/22/19 20:07	96-12-8	
1,2-Dibromoethane (EDB)	0.0072 U	ug/L	0.0096	0.0072	1	04/21/19 10:45	04/22/19 20:07	106-93-4	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Arsenic	7.1 U	ug/L	10.0	7.1	1	04/23/19 14:25	04/25/19 00:09	7440-38-2	
Barium	8.7 I	ug/L	10.0	0.84	1	04/23/19 14:25	04/25/19 00:09	7440-39-3	
Chromium	1.7 U	ug/L	5.0	1.7	1	04/23/19 14:25	04/25/19 00:09	7440-47-3	
Cobalt	0.96 U	ug/L	10.0	0.96	1	04/23/19 14:25	04/25/19 00:09	7440-48-4	
Iron	240	ug/L	40.0	9.2	1	04/23/19 14:25	04/25/19 00:09	7439-89-6	
Nickel	2.1 U	ug/L	5.0	2.1	1	04/23/19 14:25	04/25/19 00:09	7440-02-0	
Tot Hardness asCaCO3 (SM 2340B	76.2	mg/L	3.2	0.51	1	04/23/19 14:25	04/25/19 00:09		
Vanadium	1.0 U	ug/L	10.0	1.0	1	04/23/19 14:25	04/25/19 00:09	7440-62-2	
6020 MET ICPMS Analytical Method: EPA 6020 Preparation Method: EPA 3010									
Antimony	0.50 U	ug/L	1.0	0.50	1	04/23/19 14:25	04/25/19 13:05	7440-36-0	
Beryllium	0.050 U	ug/L	0.10	0.050	1	04/23/19 14:25	04/25/19 13:05	7440-41-7	
Cadmium	0.050 U	ug/L	0.10	0.050	1	04/23/19 14:25	04/25/19 13:05	7440-43-9	
Copper	0.93 U	ug/L	1.0	0.93	1	04/23/19 14:25	04/26/19 13:30	7440-50-8	
Lead	0.50 U	ug/L	1.0	0.50	1	04/23/19 14:25	04/25/19 13:05	7439-92-1	
Selenium	0.50 U	ug/L	1.0	0.50	1	04/23/19 14:25	04/25/19 13:05	7782-49-2	
Silver	0.050 U	ug/L	0.10	0.050	1	04/23/19 14:25	04/26/19 13:30	7440-22-4	
Thallium	0.50 U	ug/L	1.0	0.50	1	04/23/19 14:25	04/25/19 13:05	7440-28-0	
Zinc	47.6	ug/L	5.0	2.5	1	04/23/19 14:25	04/26/19 13:30	7440-66-6	
8260 MSV Analytical Method: EPA 8260									
Acetone	5.3 U	ug/L	20.0	5.3	1		04/18/19 16:16	67-64-1	
Acrylonitrile	3.7 U	ug/L	10.0	3.7	1		04/18/19 16:16	107-13-1	
Benzene	0.30 U	ug/L	1.0	0.30	1		04/18/19 16:16	71-43-2	
Bromochloromethane	0.37 U	ug/L	1.0	0.37	1		04/18/19 16:16	74-97-5	
Bromodichloromethane	0.19 U	ug/L	0.60	0.19	1		04/18/19 16:16	75-27-4	
Bromoform	2.6 U	ug/L	3.0	2.6	1		04/18/19 16:16	75-25-2	
Bromomethane	4.0 U	ug/L	5.0	4.0	1		04/18/19 16:16	74-83-9	J(v2)
2-Butanone (MEK)	7.5 U	ug/L	10.0	7.5	1		04/18/19 16:16	78-93-3	
Carbon disulfide	0.45 U	ug/L	10.0	0.45	1		04/18/19 16:16	75-15-0	
Carbon tetrachloride	1.1 U	ug/L	3.0	1.1	1		04/18/19 16:16	56-23-5	
Chlorobenzene	0.35 U	ug/L	1.0	0.35	1		04/18/19 16:16	108-90-7	
Chloroethane	3.7 U	ug/L	10.0	3.7	1		04/18/19 16:16	75-00-3	
Chloroform	0.32 U	ug/L	1.0	0.32	1		04/18/19 16:16	67-66-3	

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ANALYTICAL RESULTS

Project: Surface Water Central cty

Pace Project No.: 35460696

Sample: Pond 2 28825 **Lab ID: 35460696002** Collected: 04/11/19 11:30 Received: 04/11/19 15:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Analytical Method: EPA 8260									
Chloromethane	0.97 U	ug/L	1.0	0.97	1		04/18/19 16:16	74-87-3	J(v2)
Dibromochloromethane	0.45 U	ug/L	2.0	0.45	1		04/18/19 16:16	124-48-1	
Dibromomethane	0.68 U	ug/L	2.0	0.68	1		04/18/19 16:16	74-95-3	
1,2-Dichlorobenzene	0.29 U	ug/L	1.0	0.29	1		04/18/19 16:16	95-50-1	
1,4-Dichlorobenzene	0.28 U	ug/L	1.0	0.28	1		04/18/19 16:16	106-46-7	
trans-1,4-Dichloro-2-butene	2.5 U	ug/L	10.0	2.5	1		04/18/19 16:16	110-57-6	J(v2)
1,1-Dichloroethane	0.34 U	ug/L	1.0	0.34	1		04/18/19 16:16	75-34-3	
1,2-Dichloroethane	0.27 U	ug/L	1.0	0.27	1		04/18/19 16:16	107-06-2	
1,1-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/18/19 16:16	75-35-4	
cis-1,2-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/18/19 16:16	156-59-2	
trans-1,2-Dichloroethene	0.23 U	ug/L	1.0	0.23	1		04/18/19 16:16	156-60-5	
1,2-Dichloropropane	0.23 U	ug/L	1.0	0.23	1		04/18/19 16:16	78-87-5	
cis-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/18/19 16:16	10061-01-5	
trans-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/18/19 16:16	10061-02-6	
Ethylbenzene	0.30 U	ug/L	1.0	0.30	1		04/18/19 16:16	100-41-4	
2-Hexanone	0.85 U	ug/L	10.0	0.85	1		04/18/19 16:16	591-78-6	
Iodomethane	9.3 U	ug/L	10.0	9.3	1		04/18/19 16:16	74-88-4	J(v2)
Methylene Chloride	2.0 U	ug/L	5.0	2.0	1		04/18/19 16:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.32 U	ug/L	10.0	0.32	1		04/18/19 16:16	108-10-1	
Styrene	0.26 U	ug/L	1.0	0.26	1		04/18/19 16:16	100-42-5	
1,1,1,2-Tetrachloroethane	0.32 U	ug/L	1.0	0.32	1		04/18/19 16:16	630-20-6	
1,1,2,2-Tetrachloroethane	0.20 U	ug/L	0.50	0.20	1		04/18/19 16:16	79-34-5	
Tetrachloroethene	0.38 U	ug/L	1.0	0.38	1		04/18/19 16:16	127-18-4	
Toluene	0.33 U	ug/L	1.0	0.33	1		04/18/19 16:16	108-88-3	
1,1,1-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/18/19 16:16	71-55-6	
1,1,2-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/18/19 16:16	79-00-5	
Trichloroethene	0.36 U	ug/L	1.0	0.36	1		04/18/19 16:16	79-01-6	
Trichlorofluoromethane	0.35 U	ug/L	1.0	0.35	1		04/18/19 16:16	75-69-4	
1,2,3-Trichloropropane	1.1 U	ug/L	2.0	1.1	1		04/18/19 16:16	96-18-4	
Vinyl acetate	0.19 U	ug/L	10.0	0.19	1		04/18/19 16:16	108-05-4	J(v1)
Vinyl chloride	0.39 U	ug/L	1.0	0.39	1		04/18/19 16:16	75-01-4	
Xylene (Total)	2.1 U	ug/L	5.0	2.1	1		04/18/19 16:16	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		04/18/19 16:16	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	70-130		1		04/18/19 16:16	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		04/18/19 16:16	2037-26-5	

1631E Mercury, Low Level Tampa

Analytical Method: EPA 1631E Preparation Method: EPA 1631E

Mercury	0.00131	ug/L	0.00050	0.00020	1	04/13/19 17:43	04/16/19 09:38	7439-97-6
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2320B Alkalinity

Analytical Method: SM 2320B

Alkalinity, Bicarbonate (CaCO ₃)	63.3	mg/L	5.0	5.0	1	04/23/19 15:01
Alkalinity, Carbonate (CaCO ₃)	5.0 U	mg/L	5.0	5.0	1	04/23/19 15:01
Alkalinity, Total as CaCO ₃	63.3	mg/L	5.0	5.0	1	04/23/19 15:01

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ANALYTICAL RESULTS

Project: Surface Water Central cty

Pace Project No.: 35460696

Sample: Pond 2 28825		Lab ID: 35460696002		Collected: 04/11/19 11:30		Received: 04/11/19 15:30		Matrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	130	mg/L	5.0	5.0	1		04/18/19 20:31		
2540D Total Suspended Solids	Analytical Method: SM 2540D								
Total Suspended Solids	5.0 U	mg/L	5.0	5.0	1		04/17/19 14:09		
5210B BOD, 5 day	Analytical Method: SM 5210B								
BOD, 5 day	4.7	mg/L	2.0	2.0	1	04/12/19 14:14	04/17/19 16:58		
Chlorophyll & Pheophytin	Analytical Method: SM10200 Preparation Method: SM10200								
Chlorophyll a	16.6	ug/L	5.0	2.2	1	04/13/19 08:45	04/13/19 14:25		
Total Nitrogen Calculation	Analytical Method: TKN+NOx Calculation								
Total Nitrogen	0.80	mg/L	0.50	0.086	1		04/17/19 16:58		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	11.7	mg/L	5.0	2.5	1		04/24/19 19:50	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	0.035 U	mg/L	0.050	0.035	1		04/23/19 13:12	7664-41-7	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2								
Nitrogen, Kjeldahl, Total	0.77	mg/L	0.50	0.086	1	04/12/19 10:24	04/15/19 13:17	7727-37-9	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	0.033 U	mg/L	0.050	0.033	1		04/12/19 05:40		
Nitrogen, Nitrate	0.027 I	mg/L	0.050	0.025	1		04/12/19 05:40	14797-55-8	
365.4 Phosphorus, Total	Analytical Method: EPA 365.4 Preparation Method: EPA 365.4								
Phosphorus, Total (as P)	0.079 I	mg/L	0.10	0.050	1	04/12/19 10:24	04/15/19 13:17	7723-14-0	
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
Chemical Oxygen Demand	86.1	mg/L	20.0	12.5	1	04/22/19 10:20	04/22/19 16:22		
5310B TOC	Analytical Method: SM 5310B								
Total Organic Carbon	13.6	mg/L	1.0	0.50	1		04/24/19 10:39	7440-44-0	
Un-ionized Ammonia, Ammonium	Analytical Method: FLDEP SOP 10/03/83								
Nitrogen, Ammonia (Unionized)	0.020 U	mg/L	0.020	0.020	1		04/24/19 12:00		

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ANALYTICAL RESULTS

Project: Surface Water Central cty

Pace Project No.: 35460696

Sample: Dup		Lab ID: 35460696003		Collected: 04/11/19 11:30		Received: 04/11/19 15:30		Matrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data									
Analytical Method:									
Field pH	5.41	Std. Units			1		04/11/19 11:30		
Field Temperature	20.51	deg C			1		04/11/19 11:30		
Field Specific Conductance	228	umhos/cm			1		04/11/19 11:30		
Oxygen, Dissolved	0.41	mg/L			1		04/11/19 11:30	7782-44-7	
Turbidity	1.72	NTU			1		04/11/19 11:30		
8011 GCS EDB and DBCP									
Analytical Method: EPA 8011 Preparation Method: EPA 8011									
1,2-Dibromo-3-chloropropane	0.0061 U	ug/L	0.019	0.0061	1	04/21/19 10:45	04/22/19 20:23	96-12-8	
1,2-Dibromoethane (EDB)	0.0072 U	ug/L	0.0096	0.0072	1	04/21/19 10:45	04/22/19 20:23	106-93-4	
6010 MET ICP									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Arsenic	7.1 U	ug/L	10.0	7.1	1	04/23/19 14:25	04/25/19 00:17	7440-38-2	
Barium	9.2 I	ug/L	10.0	0.84	1	04/23/19 14:25	04/25/19 00:17	7440-39-3	
Chromium	1.7 U	ug/L	5.0	1.7	1	04/23/19 14:25	04/25/19 00:17	7440-47-3	
Cobalt	0.96 U	ug/L	10.0	0.96	1	04/23/19 14:25	04/25/19 00:17	7440-48-4	
Iron	244	ug/L	40.0	9.2	1	04/23/19 14:25	04/25/19 00:17	7439-89-6	
Nickel	2.1 U	ug/L	5.0	2.1	1	04/23/19 14:25	04/25/19 00:17	7440-02-0	
Tot Hardness asCaCO3 (SM 2340B	78.4	mg/L	3.2	0.51	1	04/23/19 14:25	04/25/19 00:17		
Vanadium	1.0 U	ug/L	10.0	1.0	1	04/23/19 14:25	04/25/19 00:17	7440-62-2	
6020 MET ICPMS									
Analytical Method: EPA 6020 Preparation Method: EPA 3010									
Antimony	0.50 U	ug/L	1.0	0.50	1	04/23/19 14:25	04/25/19 13:08	7440-36-0	
Beryllium	0.050 U	ug/L	0.10	0.050	1	04/23/19 14:25	04/25/19 13:08	7440-41-7	
Cadmium	0.050 U	ug/L	0.10	0.050	1	04/23/19 14:25	04/25/19 13:08	7440-43-9	
Copper	0.93 U	ug/L	1.0	0.93	1	04/23/19 14:25	04/26/19 13:31	7440-50-8	
Lead	0.50 U	ug/L	1.0	0.50	1	04/23/19 14:25	04/25/19 13:08	7439-92-1	
Selenium	0.50 U	ug/L	1.0	0.50	1	04/23/19 14:25	04/25/19 13:08	7782-49-2	
Silver	0.050 U	ug/L	0.10	0.050	1	04/23/19 14:25	04/26/19 13:31	7440-22-4	
Thallium	0.50 U	ug/L	1.0	0.50	1	04/23/19 14:25	04/25/19 13:08	7440-28-0	
Zinc	69.8	ug/L	5.0	2.5	1	04/23/19 14:25	04/26/19 13:31	7440-66-6	
8260 MSV									
Analytical Method: EPA 8260									
Acetone	5.3 U	ug/L	20.0	5.3	1		04/18/19 16:41	67-64-1	
Acrylonitrile	3.7 U	ug/L	10.0	3.7	1		04/18/19 16:41	107-13-1	
Benzene	0.30 U	ug/L	1.0	0.30	1		04/18/19 16:41	71-43-2	
Bromochloromethane	0.37 U	ug/L	1.0	0.37	1		04/18/19 16:41	74-97-5	
Bromodichloromethane	0.19 U	ug/L	0.60	0.19	1		04/18/19 16:41	75-27-4	
Bromoform	2.6 U	ug/L	3.0	2.6	1		04/18/19 16:41	75-25-2	
Bromomethane	4.0 U	ug/L	5.0	4.0	1		04/18/19 16:41	74-83-9	J(v2)
2-Butanone (MEK)	7.5 U	ug/L	10.0	7.5	1		04/18/19 16:41	78-93-3	
Carbon disulfide	0.45 U	ug/L	10.0	0.45	1		04/18/19 16:41	75-15-0	
Carbon tetrachloride	1.1 U	ug/L	3.0	1.1	1		04/18/19 16:41	56-23-5	
Chlorobenzene	0.35 U	ug/L	1.0	0.35	1		04/18/19 16:41	108-90-7	
Chloroethane	3.7 U	ug/L	10.0	3.7	1		04/18/19 16:41	75-00-3	
Chloroform	0.32 U	ug/L	1.0	0.32	1		04/18/19 16:41	67-66-3	

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ANALYTICAL RESULTS



Project: Surface Water Central cty

Pace Project No.: 35460696

Sample: Dup		Lab ID: 35460696003		Collected: 04/11/19 11:30		Received: 04/11/19 15:30		Matrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Chloromethane	0.97 U	ug/L	1.0	0.97	1		04/18/19 16:41	74-87-3	J(v2)
Dibromochloromethane	0.45 U	ug/L	2.0	0.45	1		04/18/19 16:41	124-48-1	
Dibromomethane	0.68 U	ug/L	2.0	0.68	1		04/18/19 16:41	74-95-3	
1,2-Dichlorobenzene	0.29 U	ug/L	1.0	0.29	1		04/18/19 16:41	95-50-1	
1,4-Dichlorobenzene	0.28 U	ug/L	1.0	0.28	1		04/18/19 16:41	106-46-7	
trans-1,4-Dichloro-2-butene	2.5 U	ug/L	10.0	2.5	1		04/18/19 16:41	110-57-6	J(v2)
1,1-Dichloroethane	0.34 U	ug/L	1.0	0.34	1		04/18/19 16:41	75-34-3	
1,2-Dichloroethane	0.27 U	ug/L	1.0	0.27	1		04/18/19 16:41	107-06-2	
1,1-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/18/19 16:41	75-35-4	
cis-1,2-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/18/19 16:41	156-59-2	
trans-1,2-Dichloroethene	0.23 U	ug/L	1.0	0.23	1		04/18/19 16:41	156-60-5	
1,2-Dichloropropane	0.23 U	ug/L	1.0	0.23	1		04/18/19 16:41	78-87-5	
cis-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/18/19 16:41	10061-01-5	
trans-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/18/19 16:41	10061-02-6	
Ethylbenzene	0.30 U	ug/L	1.0	0.30	1		04/18/19 16:41	100-41-4	
2-Hexanone	0.85 U	ug/L	10.0	0.85	1		04/18/19 16:41	591-78-6	
Iodomethane	9.3 U	ug/L	10.0	9.3	1		04/18/19 16:41	74-88-4	J(v2)
Methylene Chloride	2.0 U	ug/L	5.0	2.0	1		04/18/19 16:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.32 U	ug/L	10.0	0.32	1		04/18/19 16:41	108-10-1	
Styrene	0.26 U	ug/L	1.0	0.26	1		04/18/19 16:41	100-42-5	
1,1,1,2-Tetrachloroethane	0.32 U	ug/L	1.0	0.32	1		04/18/19 16:41	630-20-6	
1,1,2,2-Tetrachloroethane	0.20 U	ug/L	0.50	0.20	1		04/18/19 16:41	79-34-5	
Tetrachloroethene	0.38 U	ug/L	1.0	0.38	1		04/18/19 16:41	127-18-4	
Toluene	0.37 I	ug/L	1.0	0.33	1		04/18/19 16:41	108-88-3	
1,1,1-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/18/19 16:41	71-55-6	
1,1,2-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/18/19 16:41	79-00-5	
Trichloroethene	0.36 U	ug/L	1.0	0.36	1		04/18/19 16:41	79-01-6	
Trichlorofluoromethane	0.35 U	ug/L	1.0	0.35	1		04/18/19 16:41	75-69-4	
1,2,3-Trichloropropane	1.1 U	ug/L	2.0	1.1	1		04/18/19 16:41	96-18-4	
Vinyl acetate	0.19 U	ug/L	10.0	0.19	1		04/18/19 16:41	108-05-4	J(v1)
Vinyl chloride	0.39 U	ug/L	1.0	0.39	1		04/18/19 16:41	75-01-4	
Xylene (Total)	2.1 U	ug/L	5.0	2.1	1		04/18/19 16:41	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		04/18/19 16:41	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	70-130		1		04/18/19 16:41	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		04/18/19 16:41	2037-26-5	
1631E Mercury, Low Level Tampa		Analytical Method: EPA 1631E Preparation Method: EPA 1631E							
Mercury	0.00132	ug/L	0.00050	0.00020	1	04/13/19 17:43	04/16/19 09:43	7439-97-6	J(M1)
2320B Alkalinity		Analytical Method: SM 2320B							
Alkalinity, Bicarbonate (CaCO3)	64.5	mg/L	5.0	5.0	1		04/23/19 15:07		
Alkalinity, Carbonate (CaCO3)	5.0 U	mg/L	5.0	5.0	1		04/23/19 15:07		
Alkalinity, Total as CaCO3	64.5	mg/L	5.0	5.0	1		04/23/19 15:07		

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ANALYTICAL RESULTS

Project: Surface Water Central cty

Pace Project No.: 35460696

Sample: Dup		Lab ID: 35460696003		Collected: 04/11/19 11:30		Received: 04/11/19 15:30		Matrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	136	mg/L	5.0	5.0	1		04/18/19 20:31		
2540D Total Suspended Solids		Analytical Method: SM 2540D							
Total Suspended Solids	7.5	mg/L	5.0	5.0	1		04/17/19 14:09		
5210B BOD, 5 day		Analytical Method: SM 5210B							
BOD, 5 day	4.3	mg/L	2.0	2.0	1	04/12/19 14:15	04/17/19 16:59		
Chlorophyll & Pheophytin		Analytical Method: SM10200 Preparation Method: SM10200							
Chlorophyll a	15.0	ug/L	5.0	2.2	1	04/13/19 08:45	04/13/19 14:27		
Total Nitrogen Calculation		Analytical Method: TKN+NOx Calculation							
Total Nitrogen	0.77	mg/L	0.50	0.086	1		04/17/19 16:58		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Sulfate	11.9	mg/L	5.0	2.5	1		04/24/19 13:17	14808-79-8	
350.1 Ammonia		Analytical Method: EPA 350.1							
Nitrogen, Ammonia	0.035 U	mg/L	0.050	0.035	1		04/23/19 13:14	7664-41-7	
351.2 Total Kjeldahl Nitrogen		Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	0.76	mg/L	0.50	0.086	1	04/12/19 10:24	04/15/19 13:18	7727-37-9	
353.2 Nitrogen, NO2/NO3 unpres		Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	0.033 U	mg/L	0.050	0.033	1		04/12/19 05:44		
Nitrogen, Nitrate	0.025 U	mg/L	0.050	0.025	1		04/12/19 05:44	14797-55-8	
365.4 Phosphorus, Total		Analytical Method: EPA 365.4 Preparation Method: EPA 365.4							
Phosphorus, Total (as P)	0.11	mg/L	0.10	0.050	1	04/12/19 10:24	04/15/19 13:18	7723-14-0	
410.4 COD		Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	55.4	mg/L	20.0	12.5	1	04/22/19 10:20	04/22/19 16:22		
5310B TOC		Analytical Method: SM 5310B							
Total Organic Carbon	13.8	mg/L	1.0	0.50	1		04/24/19 10:54	7440-44-0	
Un-ionized Ammonia, Ammonium		Analytical Method: FLDEP SOP 10/03/83							
Nitrogen, Ammonia (Unionized)	0.020 U	mg/L	0.020	0.020	1		04/24/19 12:00		

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ANALYTICAL RESULTS

Project: Surface Water Central cty

Pace Project No.: 35460696

Sample: field blank Lab ID: 35460696004 Collected: 04/11/19 11:15 Received: 04/11/19 15:30 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	0.0062 U	ug/L	0.019	0.0062	1	04/21/19 10:45	04/22/19 20:37	96-12-8	
1,2-Dibromoethane (EDB)	0.0073 U	ug/L	0.0097	0.0073	1	04/21/19 10:45	04/22/19 20:37	106-93-4	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Arsenic	7.1 U	ug/L	10.0	7.1	1	04/23/19 14:25	04/25/19 00:20	7440-38-2	
Barium	0.84 U	ug/L	10.0	0.84	1	04/23/19 14:25	04/25/19 00:20	7440-39-3	
Chromium	1.7 U	ug/L	5.0	1.7	1	04/23/19 14:25	04/25/19 00:20	7440-47-3	
Cobalt	0.96 U	ug/L	10.0	0.96	1	04/23/19 14:25	04/25/19 00:20	7440-48-4	
Iron	9.2 U	ug/L	40.0	9.2	1	04/23/19 14:25	04/25/19 00:20	7439-89-6	
Nickel	2.1 U	ug/L	5.0	2.1	1	04/23/19 14:25	04/25/19 00:20	7440-02-0	
Tot Hardness asCaCO3 (SM 2340B	0.51 U	mg/L	3.2	0.51	1	04/23/19 14:25	04/25/19 00:20		
Vanadium	1.0 U	ug/L	10.0	1.0	1	04/23/19 14:25	04/25/19 00:20	7440-62-2	
6020 MET ICPMS Analytical Method: EPA 6020 Preparation Method: EPA 3010									
Antimony	0.50 U	ug/L	1.0	0.50	1	04/23/19 14:25	04/25/19 13:11	7440-36-0	
Beryllium	0.050 U	ug/L	0.10	0.050	1	04/23/19 14:25	04/25/19 13:11	7440-41-7	
Cadmium	0.050 U	ug/L	0.10	0.050	1	04/23/19 14:25	04/25/19 13:11	7440-43-9	
Copper	0.93 U	ug/L	1.0	0.93	1	04/23/19 14:25	04/26/19 13:33	7440-50-8	
Lead	0.50 U	ug/L	1.0	0.50	1	04/23/19 14:25	04/25/19 13:11	7439-92-1	
Selenium	0.50 U	ug/L	1.0	0.50	1	04/23/19 14:25	04/25/19 13:11	7782-49-2	
Silver	0.050 U	ug/L	0.10	0.050	1	04/23/19 14:25	04/26/19 13:33	7440-22-4	
Thallium	0.50 U	ug/L	1.0	0.50	1	04/23/19 14:25	04/25/19 13:11	7440-28-0	
Zinc	2.5 U	ug/L	5.0	2.5	1	04/23/19 14:25	04/26/19 13:33	7440-66-6	
8260 MSV Analytical Method: EPA 8260									
Acetone	7.1 I	ug/L	20.0	5.3	1		04/18/19 17:06	67-64-1	
Acrylonitrile	3.7 U	ug/L	10.0	3.7	1		04/18/19 17:06	107-13-1	
Benzene	0.30 U	ug/L	1.0	0.30	1		04/18/19 17:06	71-43-2	
Bromochloromethane	0.37 U	ug/L	1.0	0.37	1		04/18/19 17:06	74-97-5	
Bromodichloromethane	0.19 U	ug/L	0.60	0.19	1		04/18/19 17:06	75-27-4	
Bromoform	2.6 U	ug/L	3.0	2.6	1		04/18/19 17:06	75-25-2	
Bromomethane	4.0 U	ug/L	5.0	4.0	1		04/18/19 17:06	74-83-9	J(v2)
2-Butanone (MEK)	7.5 U	ug/L	10.0	7.5	1		04/18/19 17:06	78-93-3	
Carbon disulfide	0.45 U	ug/L	10.0	0.45	1		04/18/19 17:06	75-15-0	
Carbon tetrachloride	1.1 U	ug/L	3.0	1.1	1		04/18/19 17:06	56-23-5	
Chlorobenzene	0.35 U	ug/L	1.0	0.35	1		04/18/19 17:06	108-90-7	
Chloroethane	3.7 U	ug/L	10.0	3.7	1		04/18/19 17:06	75-00-3	
Chloroform	0.32 U	ug/L	1.0	0.32	1		04/18/19 17:06	67-66-3	
Chloromethane	0.97 U	ug/L	1.0	0.97	1		04/18/19 17:06	74-87-3	J(v2)
Dibromochloromethane	0.45 U	ug/L	2.0	0.45	1		04/18/19 17:06	124-48-1	
Dibromomethane	0.68 U	ug/L	2.0	0.68	1		04/18/19 17:06	74-95-3	
1,2-Dichlorobenzene	0.29 U	ug/L	1.0	0.29	1		04/18/19 17:06	95-50-1	
1,4-Dichlorobenzene	0.28 U	ug/L	1.0	0.28	1		04/18/19 17:06	106-46-7	
trans-1,4-Dichloro-2-butene	2.5 U	ug/L	10.0	2.5	1		04/18/19 17:06	110-57-6	J(v2)
1,1-Dichloroethane	0.34 U	ug/L	1.0	0.34	1		04/18/19 17:06	75-34-3	

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ANALYTICAL RESULTS



Project: Surface Water Central cty

Pace Project No.: 35460696

Sample: field blank		Lab ID: 35460696004		Collected: 04/11/19 11:15		Received: 04/11/19 15:30		Matrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Analytical Method: EPA 8260									
1,2-Dichloroethane	0.27 U	ug/L	1.0	0.27	1		04/18/19 17:06	107-06-2	
1,1-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/18/19 17:06	75-35-4	
cis-1,2-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/18/19 17:06	156-59-2	
trans-1,2-Dichloroethene	0.23 U	ug/L	1.0	0.23	1		04/18/19 17:06	156-60-5	
1,2-Dichloropropane	0.23 U	ug/L	1.0	0.23	1		04/18/19 17:06	78-87-5	
cis-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/18/19 17:06	10061-01-5	
trans-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/18/19 17:06	10061-02-6	
Ethylbenzene	0.30 U	ug/L	1.0	0.30	1		04/18/19 17:06	100-41-4	
2-Hexanone	0.85 U	ug/L	10.0	0.85	1		04/18/19 17:06	591-78-6	
Iodomethane	9.3 U	ug/L	10.0	9.3	1		04/18/19 17:06	74-88-4	J(v2)
Methylene Chloride	2.0 U	ug/L	5.0	2.0	1		04/18/19 17:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.32 U	ug/L	10.0	0.32	1		04/18/19 17:06	108-10-1	
Styrene	0.26 U	ug/L	1.0	0.26	1		04/18/19 17:06	100-42-5	
1,1,1,2-Tetrachloroethane	0.32 U	ug/L	1.0	0.32	1		04/18/19 17:06	630-20-6	
1,1,2,2-Tetrachloroethane	0.20 U	ug/L	0.50	0.20	1		04/18/19 17:06	79-34-5	
Tetrachloroethene	0.38 U	ug/L	1.0	0.38	1		04/18/19 17:06	127-18-4	
Toluene	0.33 U	ug/L	1.0	0.33	1		04/18/19 17:06	108-88-3	
1,1,1-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/18/19 17:06	71-55-6	
1,1,2-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/18/19 17:06	79-00-5	
Trichloroethene	0.36 U	ug/L	1.0	0.36	1		04/18/19 17:06	79-01-6	
Trichlorofluoromethane	0.35 U	ug/L	1.0	0.35	1		04/18/19 17:06	75-69-4	
1,2,3-Trichloropropane	1.1 U	ug/L	2.0	1.1	1		04/18/19 17:06	96-18-4	
Vinyl acetate	0.19 U	ug/L	10.0	0.19	1		04/18/19 17:06	108-05-4	J(v1)
Vinyl chloride	0.39 U	ug/L	1.0	0.39	1		04/18/19 17:06	75-01-4	
Xylene (Total)	2.1 U	ug/L	5.0	2.1	1		04/18/19 17:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		04/18/19 17:06	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	70-130		1		04/18/19 17:06	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		04/18/19 17:06	2037-26-5	
1631E Mercury,Low Level Tampa Analytical Method: EPA 1631E Preparation Method: EPA 1631E									
Mercury	0.00020 U	ug/L	0.00050	0.00020	1	04/13/19 17:43	04/16/19 11:03	7439-97-6	
2320B Alkalinity Analytical Method: SM 2320B									
Alkalinity,Bicarbonate (CaCO3)	5.0 U	mg/L	5.0	5.0	1		04/23/19 15:09		
Alkalinity,Carbonate (CaCO3)	5.0 U	mg/L	5.0	5.0	1		04/23/19 15:09		
Alkalinity, Total as CaCO3	5.0 U	mg/L	5.0	5.0	1		04/23/19 15:09		
2540C Total Dissolved Solids Analytical Method: SM 2540C									
Total Dissolved Solids	5.0 U	mg/L	5.0	5.0	1		04/18/19 20:31		
2540D Total Suspended Solids Analytical Method: SM 2540D									
Total Suspended Solids	5.0 U	mg/L	5.0	5.0	1		04/17/19 14:09		

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ANALYTICAL RESULTS

Project: Surface Water Central cty

Pace Project No.: 35460696

Sample: field blank		Lab ID: 35460696004		Collected: 04/11/19 11:15		Received: 04/11/19 15:30		Matrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
5210B BOD, 5 day	Analytical Method: SM 5210B								
BOD, 5 day	2.0 U	mg/L	2.0	2.0	1	04/12/19 14:15	04/17/19 17:00		
Chlorophyll & Pheophytin	Analytical Method: SM10200 Preparation Method: SM10200								
Chlorophyll a	2.2 U	ug/L	5.0	2.2	1	04/13/19 08:45	04/13/19 14:14		
Total Nitrogen Calculation	Analytical Method: TKN+NOx Calculation								
Total Nitrogen	0.086 U	mg/L	0.50	0.086	1		04/17/19 16:58		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	2.5 U	mg/L	5.0	2.5	1		04/24/19 20:12	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	0.035 U	mg/L	0.050	0.035	1		04/23/19 13:19	7664-41-7	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2								
Nitrogen, Kjeldahl, Total	0.086 U	mg/L	0.50	0.086	1	04/12/19 10:24	04/15/19 13:19	7727-37-9	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	0.033 U	mg/L	0.050	0.033	1		04/12/19 05:39		
Nitrogen, Nitrate	0.025 U	mg/L	0.050	0.025	1		04/12/19 05:39	14797-55-8	
365.4 Phosphorus, Total	Analytical Method: EPA 365.4 Preparation Method: EPA 365.4								
Phosphorus, Total (as P)	0.050 U	mg/L	0.10	0.050	1	04/12/19 10:24	04/15/19 13:19	7723-14-0	
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
Chemical Oxygen Demand	12.5 U	mg/L	20.0	12.5	1	04/22/19 10:20	04/22/19 16:22		
5310B TOC	Analytical Method: SM 5310B								
Total Organic Carbon	0.51 I	mg/L	1.0	0.50	1		04/24/19 11:09	7440-44-0	
Un-ionized Ammonia, Ammonium	Analytical Method: FLDEP SOP 10/03/83								
Nitrogen, Ammonia (Unionized)	0.020 U	mg/L	0.020	0.020	1		04/24/19 12:00		

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ANALYTICAL RESULTS

Project: Surface Water Central cty
Pace Project No.: 35460696

Sample: trip 1 **Lab ID: 35460696006** Collected: 04/11/19 11:15 Received: 04/11/19 15:30 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	0.0063 U	ug/L	0.020	0.0063	1	04/21/19 10:45	04/22/19 20:52	96-12-8	
1,2-Dibromoethane (EDB)	0.0073 U	ug/L	0.0098	0.0073	1	04/21/19 10:45	04/22/19 20:52	106-93-4	
8260 MSV Analytical Method: EPA 8260									
Acetone	5.3 U	ug/L	20.0	5.3	1		04/18/19 17:31	67-64-1	
Acrylonitrile	3.7 U	ug/L	10.0	3.7	1		04/18/19 17:31	107-13-1	
Benzene	0.30 U	ug/L	1.0	0.30	1		04/18/19 17:31	71-43-2	
Bromochloromethane	0.37 U	ug/L	1.0	0.37	1		04/18/19 17:31	74-97-5	
Bromodichloromethane	0.19 U	ug/L	0.60	0.19	1		04/18/19 17:31	75-27-4	
Bromoform	2.6 U	ug/L	3.0	2.6	1		04/18/19 17:31	75-25-2	
Bromomethane	4.0 U	ug/L	5.0	4.0	1		04/18/19 17:31	74-83-9	J(v2)
2-Butanone (MEK)	7.5 U	ug/L	10.0	7.5	1		04/18/19 17:31	78-93-3	
Carbon disulfide	0.45 U	ug/L	10.0	0.45	1		04/18/19 17:31	75-15-0	
Carbon tetrachloride	1.1 U	ug/L	3.0	1.1	1		04/18/19 17:31	56-23-5	
Chlorobenzene	0.35 U	ug/L	1.0	0.35	1		04/18/19 17:31	108-90-7	
Chloroethane	3.7 U	ug/L	10.0	3.7	1		04/18/19 17:31	75-00-3	
Chloroform	0.32 U	ug/L	1.0	0.32	1		04/18/19 17:31	67-66-3	
Chloromethane	0.97 U	ug/L	1.0	0.97	1		04/18/19 17:31	74-87-3	J(v2)
Dibromochloromethane	0.45 U	ug/L	2.0	0.45	1		04/18/19 17:31	124-48-1	
Dibromomethane	0.68 U	ug/L	2.0	0.68	1		04/18/19 17:31	74-95-3	
1,2-Dichlorobenzene	0.29 U	ug/L	1.0	0.29	1		04/18/19 17:31	95-50-1	
1,4-Dichlorobenzene	0.28 U	ug/L	1.0	0.28	1		04/18/19 17:31	106-46-7	
trans-1,4-Dichloro-2-butene	2.5 U	ug/L	10.0	2.5	1		04/18/19 17:31	110-57-6	J(v2)
1,1-Dichloroethane	0.34 U	ug/L	1.0	0.34	1		04/18/19 17:31	75-34-3	
1,2-Dichloroethane	0.27 U	ug/L	1.0	0.27	1		04/18/19 17:31	107-06-2	
1,1-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/18/19 17:31	75-35-4	
cis-1,2-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/18/19 17:31	156-59-2	
trans-1,2-Dichloroethene	0.23 U	ug/L	1.0	0.23	1		04/18/19 17:31	156-60-5	
1,2-Dichloropropane	0.23 U	ug/L	1.0	0.23	1		04/18/19 17:31	78-87-5	
cis-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/18/19 17:31	10061-01-5	
trans-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/18/19 17:31	10061-02-6	
Ethylbenzene	0.30 U	ug/L	1.0	0.30	1		04/18/19 17:31	100-41-4	
2-Hexanone	0.85 U	ug/L	10.0	0.85	1		04/18/19 17:31	591-78-6	
Iodomethane	9.3 U	ug/L	10.0	9.3	1		04/18/19 17:31	74-88-4	J(v2)
Methylene Chloride	2.0 U	ug/L	5.0	2.0	1		04/18/19 17:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.32 U	ug/L	10.0	0.32	1		04/18/19 17:31	108-10-1	
Styrene	0.26 U	ug/L	1.0	0.26	1		04/18/19 17:31	100-42-5	
1,1,1,2-Tetrachloroethane	0.32 U	ug/L	1.0	0.32	1		04/18/19 17:31	630-20-6	
1,1,2,2-Tetrachloroethane	0.20 U	ug/L	0.50	0.20	1		04/18/19 17:31	79-34-5	
Tetrachloroethene	0.38 U	ug/L	1.0	0.38	1		04/18/19 17:31	127-18-4	
Toluene	0.33 U	ug/L	1.0	0.33	1		04/18/19 17:31	108-88-3	
1,1,1-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/18/19 17:31	71-55-6	
1,1,2-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/18/19 17:31	79-00-5	
Trichloroethene	0.36 U	ug/L	1.0	0.36	1		04/18/19 17:31	79-01-6	
Trichlorofluoromethane	0.35 U	ug/L	1.0	0.35	1		04/18/19 17:31	75-69-4	
1,2,3-Trichloropropane	1.1 U	ug/L	2.0	1.1	1		04/18/19 17:31	96-18-4	

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ANALYTICAL RESULTS

Project: Surface Water Central cty

Pace Project No.: 35460696

Sample: trip 1		Lab ID: 35460696006		Collected: 04/11/19 11:15		Received: 04/11/19 15:30		Matrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Vinyl acetate	0.19 U	ug/L	10.0	0.19	1		04/18/19 17:31	108-05-4	J(v1)
Vinyl chloride	0.39 U	ug/L	1.0	0.39	1		04/18/19 17:31	75-01-4	
Xylene (Total)	2.1 U	ug/L	5.0	2.1	1		04/18/19 17:31	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		04/18/19 17:31	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	70-130		1		04/18/19 17:31	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		04/18/19 17:31	2037-26-5	

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ANALYTICAL RESULTS

Project: Surface Water Central cty
Pace Project No.: 35460696

Sample: trip 2 **Lab ID: 35460696007** Collected: 04/11/19 11:15 Received: 04/11/19 15:30 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	0.0062 U	ug/L	0.019	0.0062	1	04/21/19 10:45	04/22/19 21:07	96-12-8	
1,2-Dibromoethane (EDB)	0.0073 U	ug/L	0.0097	0.0073	1	04/21/19 10:45	04/22/19 21:07	106-93-4	
8260 MSV Analytical Method: EPA 8260									
Acetone	5.3 U	ug/L	20.0	5.3	1		04/18/19 17:55	67-64-1	
Acrylonitrile	3.7 U	ug/L	10.0	3.7	1		04/18/19 17:55	107-13-1	
Benzene	0.30 U	ug/L	1.0	0.30	1		04/18/19 17:55	71-43-2	
Bromochloromethane	0.37 U	ug/L	1.0	0.37	1		04/18/19 17:55	74-97-5	
Bromodichloromethane	0.19 U	ug/L	0.60	0.19	1		04/18/19 17:55	75-27-4	
Bromoform	2.6 U	ug/L	3.0	2.6	1		04/18/19 17:55	75-25-2	
Bromomethane	4.0 U	ug/L	5.0	4.0	1		04/18/19 17:55	74-83-9	J(v2)
2-Butanone (MEK)	7.5 U	ug/L	10.0	7.5	1		04/18/19 17:55	78-93-3	
Carbon disulfide	0.45 U	ug/L	10.0	0.45	1		04/18/19 17:55	75-15-0	
Carbon tetrachloride	1.1 U	ug/L	3.0	1.1	1		04/18/19 17:55	56-23-5	
Chlorobenzene	0.35 U	ug/L	1.0	0.35	1		04/18/19 17:55	108-90-7	
Chloroethane	3.7 U	ug/L	10.0	3.7	1		04/18/19 17:55	75-00-3	
Chloroform	0.32 U	ug/L	1.0	0.32	1		04/18/19 17:55	67-66-3	
Chloromethane	0.97 U	ug/L	1.0	0.97	1		04/18/19 17:55	74-87-3	J(v2)
Dibromochloromethane	0.45 U	ug/L	2.0	0.45	1		04/18/19 17:55	124-48-1	
Dibromomethane	0.68 U	ug/L	2.0	0.68	1		04/18/19 17:55	74-95-3	
1,2-Dichlorobenzene	0.29 U	ug/L	1.0	0.29	1		04/18/19 17:55	95-50-1	
1,4-Dichlorobenzene	0.28 U	ug/L	1.0	0.28	1		04/18/19 17:55	106-46-7	
trans-1,4-Dichloro-2-butene	2.5 U	ug/L	10.0	2.5	1		04/18/19 17:55	110-57-6	J(v2)
1,1-Dichloroethane	0.34 U	ug/L	1.0	0.34	1		04/18/19 17:55	75-34-3	
1,2-Dichloroethane	0.27 U	ug/L	1.0	0.27	1		04/18/19 17:55	107-06-2	
1,1-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/18/19 17:55	75-35-4	
cis-1,2-Dichloroethene	0.27 U	ug/L	1.0	0.27	1		04/18/19 17:55	156-59-2	
trans-1,2-Dichloroethene	0.23 U	ug/L	1.0	0.23	1		04/18/19 17:55	156-60-5	
1,2-Dichloropropane	0.23 U	ug/L	1.0	0.23	1		04/18/19 17:55	78-87-5	
cis-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/18/19 17:55	10061-01-5	
trans-1,3-Dichloropropene	0.17 U	ug/L	0.50	0.17	1		04/18/19 17:55	10061-02-6	
Ethylbenzene	0.30 U	ug/L	1.0	0.30	1		04/18/19 17:55	100-41-4	
2-Hexanone	0.85 U	ug/L	10.0	0.85	1		04/18/19 17:55	591-78-6	
Iodomethane	9.3 U	ug/L	10.0	9.3	1		04/18/19 17:55	74-88-4	J(v2)
Methylene Chloride	2.0 U	ug/L	5.0	2.0	1		04/18/19 17:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.32 U	ug/L	10.0	0.32	1		04/18/19 17:55	108-10-1	
Styrene	0.26 U	ug/L	1.0	0.26	1		04/18/19 17:55	100-42-5	
1,1,1,2-Tetrachloroethane	0.32 U	ug/L	1.0	0.32	1		04/18/19 17:55	630-20-6	
1,1,2,2-Tetrachloroethane	0.20 U	ug/L	0.50	0.20	1		04/18/19 17:55	79-34-5	
Tetrachloroethene	0.38 U	ug/L	1.0	0.38	1		04/18/19 17:55	127-18-4	
Toluene	0.33 U	ug/L	1.0	0.33	1		04/18/19 17:55	108-88-3	
1,1,1-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/18/19 17:55	71-55-6	
1,1,2-Trichloroethane	0.30 U	ug/L	1.0	0.30	1		04/18/19 17:55	79-00-5	
Trichloroethene	0.36 U	ug/L	1.0	0.36	1		04/18/19 17:55	79-01-6	
Trichlorofluoromethane	0.35 U	ug/L	1.0	0.35	1		04/18/19 17:55	75-69-4	
1,2,3-Trichloropropane	1.1 U	ug/L	2.0	1.1	1		04/18/19 17:55	96-18-4	

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ANALYTICAL RESULTS

Project: Surface Water Central cty

Pace Project No.: 35460696

Sample: trip 2		Lab ID: 35460696007		Collected: 04/11/19 11:15		Received: 04/11/19 15:30		Matrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Vinyl acetate	0.19 U	ug/L	10.0	0.19	1		04/18/19 17:55	108-05-4	J(v1)
Vinyl chloride	0.39 U	ug/L	1.0	0.39	1		04/18/19 17:55	75-01-4	
Xylene (Total)	2.1 U	ug/L	5.0	2.1	1		04/18/19 17:55	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		04/18/19 17:55	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	70-130		1		04/18/19 17:55	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		04/18/19 17:55	2037-26-5	

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QUALITY CONTROL DATA



Project: Surface Water Central cty
Pace Project No.: 35460696

QC Batch: 533111 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004

METHOD BLANK: 2888019 Matrix: Water
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	ug/L	7.1 U	10.0	7.1	04/24/19 23:52	
Barium	ug/L	0.84 U	10.0	0.84	04/24/19 23:52	
Chromium	ug/L	1.7 U	5.0	1.7	04/24/19 23:52	
Cobalt	ug/L	0.96 U	10.0	0.96	04/24/19 23:52	
Iron	ug/L	9.2 U	40.0	9.2	04/24/19 23:52	
Nickel	ug/L	2.1 U	5.0	2.1	04/24/19 23:52	
Tot Hardness asCaCO3 (SM 2340B	mg/L	0.51 U	3.2	0.51	04/24/19 23:52	
Vanadium	ug/L	1.0 U	10.0	1.0	04/24/19 23:52	

LABORATORY CONTROL SAMPLE: 2888020

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	250	240	96	80-120	
Barium	ug/L	250	248	99	80-120	
Chromium	ug/L	250	247	99	80-120	
Cobalt	ug/L	250	248	99	80-120	
Iron	ug/L	2500	2540	102	80-120	
Nickel	ug/L	250	248	99	80-120	
Tot Hardness asCaCO3 (SM 2340B	mg/L	82.7	82.5	100	80-120	
Vanadium	ug/L	250	243	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2888021 2888022

Parameter	Units	35460696001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	7.1 U	250	250	243	243	96	96	75-125	0	20	
Barium	ug/L	14.2	250	250	263	263	99	99	75-125	0	20	
Chromium	ug/L	1.7 U	250	250	248	248	99	99	75-125	0	20	
Cobalt	ug/L	0.96 U	250	250	250	250	100	100	75-125	0	20	
Iron	ug/L	183	2500	2500	2770	2770	103	104	75-125	0	20	
Nickel	ug/L	2.1 U	250	250	249	250	100	100	75-125	0	20	
Tot Hardness asCaCO3 (SM 2340B	mg/L	108	82.7	82.7	191	189	100	97	75-125	1	20	
Vanadium	ug/L	1.0 U	250	250	246	245	98	98	75-125	0	20	

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QUALITY CONTROL DATA



Project: Surface Water Central cty
Pace Project No.: 35460696

QC Batch: 533112 Analysis Method: EPA 6020
QC Batch Method: EPA 3010 Analysis Description: 6020 MET
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004

METHOD BLANK: 2888025 Matrix: Water
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	0.50 U	1.0	0.50	04/25/19 12:56	
Beryllium	ug/L	0.050 U	0.10	0.050	04/25/19 12:56	
Cadmium	ug/L	0.050 U	0.10	0.050	04/25/19 12:56	
Copper	ug/L	0.93 U	1.0	0.93	04/26/19 13:27	
Lead	ug/L	0.50 U	1.0	0.50	04/25/19 12:56	
Selenium	ug/L	0.50 U	1.0	0.50	04/25/19 12:56	
Silver	ug/L	0.050 U	0.10	0.050	04/26/19 13:27	
Thallium	ug/L	0.50 U	1.0	0.50	04/25/19 12:56	
Zinc	ug/L	2.5 U	5.0	2.5	04/26/19 13:27	

LABORATORY CONTROL SAMPLE: 2888026

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	50	50.0	100	80-120	
Beryllium	ug/L	5	5.1	102	80-120	
Cadmium	ug/L	5	5.1	102	80-120	
Copper	ug/L	50	52.8	106	80-120	
Lead	ug/L	50	48.8	98	80-120	
Selenium	ug/L	50	48.7	97	80-120	
Silver	ug/L	5	5.7	113	80-120	
Thallium	ug/L	50	48.9	98	80-120	
Zinc	ug/L	250	255	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2888023 2888024

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	50.5	49.8	101	99	75-125	1	20	
Beryllium	ug/L	0.050 U	5	5	5.9	5.6	119	111	75-125	6	20	
Cadmium	ug/L	0.050 U	5	5	5.0	5.0	101	101	75-125	0	20	
Copper	ug/L	0.93 U	50	50	53.5	52.6	106	104	75-125	2	20	
Lead	ug/L	0.50 U	50	50	48.3	48.1	96	96	75-125	0	20	
Selenium	ug/L	0.50 U	50	50	47.0	47.3	94	94	75-125	1	20	
Silver	ug/L	0.050 U	5	5	5.6	5.6	112	112	75-125	0	20	
Thallium	ug/L	0.50 U	50	50	48.4	48.3	97	97	75-125	0	20	
Zinc	ug/L	47.6	250	250	300	298	101	100	75-125	0	20	

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QUALITY CONTROL DATA

Project: Surface Water Central cty
Pace Project No.: 35460696

QC Batch: 532001 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004, 35460696006, 35460696007

METHOD BLANK: 2881604 Matrix: Water
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004, 35460696006, 35460696007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	0.32 U	1.0	0.32	04/18/19 11:18	
1,1,1-Trichloroethane	ug/L	0.30 U	1.0	0.30	04/18/19 11:18	
1,1,2,2-Tetrachloroethane	ug/L	0.20 U	0.50	0.20	04/18/19 11:18	
1,1,2-Trichloroethane	ug/L	0.30 U	1.0	0.30	04/18/19 11:18	
1,1-Dichloroethane	ug/L	0.34 U	1.0	0.34	04/18/19 11:18	
1,1-Dichloroethene	ug/L	0.27 U	1.0	0.27	04/18/19 11:18	
1,2,3-Trichloropropane	ug/L	1.1 U	2.0	1.1	04/18/19 11:18	
1,2-Dichlorobenzene	ug/L	0.29 U	1.0	0.29	04/18/19 11:18	
1,2-Dichloroethane	ug/L	0.27 U	1.0	0.27	04/18/19 11:18	
1,2-Dichloropropane	ug/L	0.23 U	1.0	0.23	04/18/19 11:18	
1,4-Dichlorobenzene	ug/L	0.28 U	1.0	0.28	04/18/19 11:18	
2-Butanone (MEK)	ug/L	7.5 U	10.0	7.5	04/18/19 11:18	
2-Hexanone	ug/L	0.85 U	10.0	0.85	04/18/19 11:18	
4-Methyl-2-pentanone (MIBK)	ug/L	0.32 U	10.0	0.32	04/18/19 11:18	
Acetone	ug/L	5.3 U	20.0	5.3	04/18/19 11:18	
Acrylonitrile	ug/L	3.7 U	10.0	3.7	04/18/19 11:18	
Benzene	ug/L	0.30 U	1.0	0.30	04/18/19 11:18	
Bromochloromethane	ug/L	0.37 U	1.0	0.37	04/18/19 11:18	
Bromodichloromethane	ug/L	0.19 U	0.60	0.19	04/18/19 11:18	
Bromoform	ug/L	2.6 U	3.0	2.6	04/18/19 11:18	
Bromomethane	ug/L	4.0 U	5.0	4.0	04/18/19 11:18	J(v2)
Carbon disulfide	ug/L	0.45 U	10.0	0.45	04/18/19 11:18	
Carbon tetrachloride	ug/L	1.1 U	3.0	1.1	04/18/19 11:18	
Chlorobenzene	ug/L	0.35 U	1.0	0.35	04/18/19 11:18	
Chloroethane	ug/L	3.7 U	10.0	3.7	04/18/19 11:18	
Chloroform	ug/L	0.32 U	1.0	0.32	04/18/19 11:18	
Chloromethane	ug/L	0.97 U	1.0	0.97	04/18/19 11:18	J(v2)
cis-1,2-Dichloroethene	ug/L	0.27 U	1.0	0.27	04/18/19 11:18	
cis-1,3-Dichloropropene	ug/L	0.17 U	0.50	0.17	04/18/19 11:18	
Dibromochloromethane	ug/L	0.45 U	2.0	0.45	04/18/19 11:18	
Dibromomethane	ug/L	0.68 U	2.0	0.68	04/18/19 11:18	
Ethylbenzene	ug/L	0.30 U	1.0	0.30	04/18/19 11:18	
Iodomethane	ug/L	9.3 U	10.0	9.3	04/18/19 11:18	J(v2)
Methylene Chloride	ug/L	2.0 U	5.0	2.0	04/18/19 11:18	
Styrene	ug/L	0.26 U	1.0	0.26	04/18/19 11:18	
Tetrachloroethene	ug/L	0.38 U	1.0	0.38	04/18/19 11:18	
Toluene	ug/L	0.33 U	1.0	0.33	04/18/19 11:18	
trans-1,2-Dichloroethene	ug/L	0.23 U	1.0	0.23	04/18/19 11:18	
trans-1,3-Dichloropropene	ug/L	0.17 U	0.50	0.17	04/18/19 11:18	
trans-1,4-Dichloro-2-butene	ug/L	2.5 U	10.0	2.5	04/18/19 11:18	J(v2)
Trichloroethene	ug/L	0.36 U	1.0	0.36	04/18/19 11:18	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA



Project: Surface Water Central cty
Pace Project No.: 35460696

METHOD BLANK: 2881604

Matrix: Water

Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004, 35460696006, 35460696007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Trichlorofluoromethane	ug/L	0.35 U	1.0	0.35	04/18/19 11:18	
Vinyl acetate	ug/L	0.19 U	10.0	0.19	04/18/19 11:18	J(v1)
Vinyl chloride	ug/L	0.39 U	1.0	0.39	04/18/19 11:18	
Xylene (Total)	ug/L	2.1 U	5.0	2.1	04/18/19 11:18	
1,2-Dichloroethane-d4 (S)	%	105	70-130		04/18/19 11:18	
4-Bromofluorobenzene (S)	%	98	70-130		04/18/19 11:18	
Toluene-d8 (S)	%	101	70-130		04/18/19 11:18	

LABORATORY CONTROL SAMPLE: 2881605

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	23.8	119	70-130	
1,1,1-Trichloroethane	ug/L	20	22.8	114	70-130	
1,1,2,2-Tetrachloroethane	ug/L	20	22.6	113	68-125	
1,1,2-Trichloroethane	ug/L	20	22.9	114	70-130	
1,1-Dichloroethane	ug/L	20	23.2	116	70-130	
1,1-Dichloroethene	ug/L	20	23.3	116	66-133	
1,2,3-Trichloropropane	ug/L	20	20.9	105	62-127	
1,2-Dichlorobenzene	ug/L	20	22.0	110	70-130	
1,2-Dichloroethane	ug/L	20	22.5	113	70-130	
1,2-Dichloropropane	ug/L	20	22.9	115	70-130	
1,4-Dichlorobenzene	ug/L	20	21.7	108	70-130	
2-Butanone (MEK)	ug/L	40	39.9	100	47-143	
2-Hexanone	ug/L	40	41.3	103	48-145	
4-Methyl-2-pentanone (MIBK)	ug/L	40	41.8	104	57-132	
Acetone	ug/L	40	42.8	107	46-148	
Acrylonitrile	ug/L	200	199	100	60-143	
Benzene	ug/L	20	22.9	115	70-130	
Bromochloromethane	ug/L	20	22.5	113	70-130	
Bromodichloromethane	ug/L	20	22.7	114	70-130	
Bromoform	ug/L	20	18.5	92	49-126	
Bromomethane	ug/L	20	7.2	36	10-165	J(v3)
Carbon disulfide	ug/L	20	22.5	113	60-141	
Carbon tetrachloride	ug/L	20	22.8	114	63-126	
Chlorobenzene	ug/L	20	21.9	110	70-130	
Chloroethane	ug/L	20	25.2	126	71-142	
Chloroform	ug/L	20	22.7	114	70-130	
Chloromethane	ug/L	20	15.6	78	40-140	J(v3)
cis-1,2-Dichloroethene	ug/L	20	22.9	115	70-130	
cis-1,3-Dichloropropene	ug/L	20	23.9	120	70-130	
Dibromochloromethane	ug/L	20	18.7	94	62-118	
Dibromomethane	ug/L	20	22.5	113	70-130	
Ethylbenzene	ug/L	20	22.5	113	70-130	
Iodomethane	ug/L	40	28.8	72	10-164	J(v3)

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QUALITY CONTROL DATA



Project: Surface Water Central cty

Pace Project No.: 35460696

LABORATORY CONTROL SAMPLE: 2881605

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	20	22.3	111	65-136	
Styrene	ug/L	20	22.8	114	70-130	
Tetrachloroethene	ug/L	20	20.6	103	64-134	
Toluene	ug/L	20	22.6	113	70-130	
trans-1,2-Dichloroethene	ug/L	20	22.3	112	68-127	
trans-1,3-Dichloropropene	ug/L	20	20.8	104	65-121	
trans-1,4-Dichloro-2-butene	ug/L	20	18.9	94	42-129 J(v3)	
Trichloroethene	ug/L	20	21.4	107	70-130	
Trichlorofluoromethane	ug/L	20	18.0	90	65-135	
Vinyl acetate	ug/L	20	23.0	115	60-144 J(v1)	
Vinyl chloride	ug/L	20	16.7	83	68-131	
Xylene (Total)	ug/L	60	71.3	119	70-130	
1,2-Dichloroethane-d4 (S)	%			104	70-130	
4-Bromofluorobenzene (S)	%			100	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE SAMPLE: 2881653

Parameter	Units	35462057002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	0.32 U	20	13.8	69	70-130	J(M1)
1,1,1-Trichloroethane	ug/L	0.30 U	20	14.7	73	70-130	
1,1,2,2-Tetrachloroethane	ug/L	0.20 U	20	13.0	65	68-125	J(M1)
1,1,2-Trichloroethane	ug/L	0.30 U	20	13.6	68	70-130	J(M1)
1,1-Dichloroethane	ug/L	0.34 U	20	15.1	76	70-130	
1,1-Dichloroethene	ug/L	0.27 U	20	16.6	83	66-133	
1,2,3-Trichloropropane	ug/L	1.1 U	20	13.7	68	62-127	
1,2-Dichlorobenzene	ug/L	0.29 U	20	12.3	62	70-130	J(M1)
1,2-Dichloroethane	ug/L	0.27 U	20	14.1	70	70-130	
1,2-Dichloropropane	ug/L	0.23 U	20	14.2	71	70-130	
1,4-Dichlorobenzene	ug/L	0.28 U	20	12.6	63	70-130	J(M1)
2-Butanone (MEK)	ug/L	7.5 U	40	21.8	54	47-143	
2-Hexanone	ug/L	0.85 U	40	21.5	54	48-145	
4-Methyl-2-pentanone (MIBK)	ug/L	0.32 U	40	21.8	54	57-132	J(M1)
Acetone	ug/L	5.3 U	40	26.2	62	46-148	
Acrylonitrile	ug/L	3.7 U	200	179	89	60-143	
Benzene	ug/L	0.30 U	20	14.3	71	70-130	
Bromochloromethane	ug/L	0.37 U	20	13.7	69	70-130	J(M1)
Bromodichloromethane	ug/L	0.19 U	20	13.3	67	70-130	J(M1)
Bromoform	ug/L	2.6 U	20	10.0	50	49-126	
Bromomethane	ug/L	4.0 U	20	6.1	30	10-165	J(v3)
Carbon disulfide	ug/L	0.45 U	20	16.0	80	60-141	
Carbon tetrachloride	ug/L	1.1 U	20	14.4	72	63-126	
Chlorobenzene	ug/L	0.35 U	20	13.2	66	70-130	J(M1)
Chloroethane	ug/L	3.7 U	20	26.2	131	71-142	
Chloroform	ug/L	0.32 U	20	14.5	72	70-130	

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QUALITY CONTROL DATA

Project: Surface Water Central cty

Pace Project No.: 35460696

MATRIX SPIKE SAMPLE: 2881653		35462057002	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Chloromethane	ug/L	0.97 U	20	21.9	109	40-140	J(v3)
cis-1,2-Dichloroethene	ug/L	0.27 U	20	14.4	72	70-130	
cis-1,3-Dichloropropene	ug/L	0.17 U	20	12.3	62	70-130	J(M1)
Dibromochloromethane	ug/L	0.45 U	20	10.5	52	62-118	J(M1)
Dibromomethane	ug/L	0.68 U	20	13.4	67	70-130	J(M1)
Ethylbenzene	ug/L	0.30 U	20	13.5	67	70-130	J(M1)
Iodomethane	ug/L	9.3 U	40	14.7	35	10-164	J(v3)
Methylene Chloride	ug/L	2.0 U	20	14.0	70	65-136	
Styrene	ug/L	0.26 U	20	13.0	65	70-130	J(M1)
Tetrachloroethene	ug/L	0.38 U	20	11.4	57	64-134	J(M1)
Toluene	ug/L	0.33 U	20	13.8	69	70-130	J(M1)
trans-1,2-Dichloroethene	ug/L	0.23 U	20	14.3	72	68-127	
trans-1,3-Dichloropropene	ug/L	0.17 U	20	11.1	56	65-121	J(M1)
trans-1,4-Dichloro-2-butene	ug/L	2.5 U	20	7.2 I	36	42-129	J(M1),J(v3)
Trichloroethene	ug/L	0.36 U	20	13.6	68	70-130	J(M1)
Trichlorofluoromethane	ug/L	0.35 U	20	20.6	103	65-135	
Vinyl acetate	ug/L	0.19 U	20	11.4	57	60-144	J(M1),J(v1)
Vinyl chloride	ug/L	0.39 U	20	18.4	92	68-131	
Xylene (Total)	ug/L	2.1 U	60	41.7	69	70-130	MS
1,2-Dichloroethane-d4 (S)	%				105	70-130	
4-Bromofluorobenzene (S)	%				98	70-130	
Toluene-d8 (S)	%				100	70-130	

SAMPLE DUPLICATE: 2881652

Parameter	Units	35462057001	Dup	RPD	Max	
		Result	Result		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	
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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QUALITY CONTROL DATA



Project: Surface Water Central cty

Pace Project No.: 35460696

SAMPLE DUPLICATE: 2881652

Parameter	Units	35462057001 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(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	0.38 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	J(v1)
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)	%	107	107		40	
4-Bromofluorobenzene (S)	%	100	99		40	Y
Toluene-d8 (S)	%	99	100		40	

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QUALITY CONTROL DATA

Project: Surface Water Central cty

Pace Project No.: 35460696

QC Batch: 532443 Analysis Method: EPA 8011
QC Batch Method: EPA 8011 Analysis Description: 8011 EDB DBCP
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004, 35460696006, 35460696007

METHOD BLANK: 2884393 Matrix: Water
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004, 35460696006, 35460696007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.0064 U	0.020	0.0064	04/22/19 16:36	
1,2-Dibromoethane (EDB)	ug/L	0.0075 U	0.010	0.0075	04/22/19 16:36	

LABORATORY CONTROL SAMPLE: 2884394

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.25	102	60-140	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.29	117	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2885620 2885621

Parameter	Units	35461078001 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	0.0062 U	0.44	0.44	0.50	0.51	115	116	60-140	0	40	
1,2-Dibromoethane (EDB)	ug/L	0.0073 U	0.44	0.44	0.57	0.59	130	135	60-140	4	40	

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QUALITY CONTROL DATA



Project: Surface Water Central cty
Pace Project No.: 35460696

QC Batch: 530859 Analysis Method: EPA 1631E
QC Batch Method: EPA 1631E Analysis Description: 1631E Mercury, Low Level
Associated Lab Samples: 35460696001, 35460696002, 35460696003

METHOD BLANK: 2875233 Matrix: Water
Associated Lab Samples: 35460696001, 35460696002, 35460696003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	0.00020 U	0.00050	0.00020	04/16/19 07:38	

METHOD BLANK: 2875234 Matrix: Water
Associated Lab Samples: 35460696001, 35460696002, 35460696003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	0.00020 U	0.00050	0.00020	04/16/19 07:43	

METHOD BLANK: 2875235 Matrix: Water
Associated Lab Samples: 35460696001, 35460696002, 35460696003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	0.00020 U	0.00050	0.00020	04/16/19 07:48	

LABORATORY CONTROL SAMPLE: 2875236

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	0.005	0.00526	105	77-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2875237 2875238

Parameter	Units	35460678001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	1.66 ng/L	0.005	0.005	0.00539	0.00572	74	81	71-125	6	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2875239 2875240

Parameter	Units	35460696003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	0.00132	0.005	0.005	0.00482	0.00553	70	84	71-125	14	24 J(M1)	

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QUALITY CONTROL DATA

Project: Surface Water Central cty
Pace Project No.: 35460696

QC Batch: 530861 Analysis Method: EPA 1631E
QC Batch Method: EPA 1631E Analysis Description: 1631E Mercury, Low Level
Associated Lab Samples: 35460696004

METHOD BLANK: 2875243 Matrix: Water
Associated Lab Samples: 35460696004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	0.00020 U	0.00050	0.00020	04/16/19 10:43	

METHOD BLANK: 2875244 Matrix: Water
Associated Lab Samples: 35460696004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	0.00020 U	0.00050	0.00020	04/16/19 10:48	

METHOD BLANK: 2875245 Matrix: Water
Associated Lab Samples: 35460696004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	0.00020 U	0.00050	0.00020	04/16/19 10:53	

LABORATORY CONTROL SAMPLE: 2875246

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	0.005	0.00390	78	77-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2875247 2875248

Parameter	Units	35460774001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	0.640 ng/L	0.002	0.002	0.00203	0.00260	69	98	71-125	25	24	J(M1), J(R1)

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2875249 2875250

Parameter	Units	35460790001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	2.25 ng/L	0.01	0.01	0.0102	0.0115	80	92	71-125	11	24	

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QUALITY CONTROL DATA

Project: Surface Water Central cty
Pace Project No.: 35460696



QC Batch: 533057 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004

METHOD BLANK: 2887678 Matrix: Water
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	5.0 U	5.0	5.0	04/23/19 14:06	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	5.0 U	5.0	5.0	04/23/19 14:06	
Alkalinity,Carbonate (CaCO ₃)	mg/L	5.0 U	5.0	5.0	04/23/19 14:06	

LABORATORY CONTROL SAMPLE: 2887679

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	252	266	106	90-110	

SAMPLE DUPLICATE: 2887680

Parameter	Units	35461940001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	604	609	1	20	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	604	609	1	20	
Alkalinity,Carbonate (CaCO ₃)	mg/L	5.0 U	5.0 U		20	

SAMPLE DUPLICATE: 2887681

Parameter	Units	35460839003 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	157	156	0	20	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	157	156	0	20	
Alkalinity,Carbonate (CaCO ₃)	mg/L	5.0 U	5.0 U		20	

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QUALITY CONTROL DATA

Project: Surface Water Central cty
Pace Project No.: 35460696



QC Batch: 532072 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004

METHOD BLANK: 2882152 Matrix: Water
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	5.0 U	5.0	5.0	04/18/19 20:29	

LABORATORY CONTROL SAMPLE: 2882153

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	300	288	96	90-110	

SAMPLE DUPLICATE: 2883134

Parameter	Units	35461182001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	790	818	3	5	

SAMPLE DUPLICATE: 2883135

Parameter	Units	35462319001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	8640	8820	2	5	

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QUALITY CONTROL DATA

Project: Surface Water Central cty

Pace Project No.: 35460696



QC Batch: 531759 Analysis Method: SM 2540D
QC Batch Method: SM 2540D Analysis Description: 2540D Total Suspended Solids
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004

METHOD BLANK: 2879976 Matrix: Water
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Suspended Solids	mg/L	5.0 U	5.0	5.0	04/17/19 14:08	

LABORATORY CONTROL SAMPLE: 2879977

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Suspended Solids	mg/L	100	104	104	90-110	

SAMPLE DUPLICATE: 2879978

Parameter	Units	35460285001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	180	184	2	5	

SAMPLE DUPLICATE: 2879979

Parameter	Units	35460618001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	172	180	5	5	

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QUALITY CONTROL DATA



Project: Surface Water Central cty

Pace Project No.: 35460696

QC Batch: 530513 Analysis Method: SM 5210B
QC Batch Method: SM 5210B Analysis Description: 5210B BOD, 5 day
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004

METHOD BLANK: 2872812 Matrix: Water
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
BOD, 5 day	mg/L	2.0 U	2.0	2.0	04/17/19 16:43	

LABORATORY CONTROL SAMPLE: 2872814

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
BOD, 5 day	mg/L	199	208	105	85-115	

SAMPLE DUPLICATE: 2872815

Parameter	Units	35460655001 Result	Dup Result	RPD	Max RPD	Qualifiers
BOD, 5 day	mg/L	80.2	88.7	10	20	

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QUALITY CONTROL DATA

Project: Surface Water Central cty

Pace Project No.: 35460696

QC Batch: 530798 Analysis Method: SM10200
QC Batch Method: SM10200 Analysis Description: Chlorophyll & Pheophytin
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004

METHOD BLANK: 2874890 Matrix: Water
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chlorophyll a	ug/L	2.2 U	5.0	2.2	04/13/19 13:49	

LABORATORY CONTROL SAMPLE: 2874891

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chlorophyll a	ug/L	10	9.7	97	85-115	

SAMPLE DUPLICATE: 2874892

Parameter	Units	35460993002 Result	Dup Result	RPD	Max RPD	Qualifiers
Chlorophyll a	ug/L	6.9 I mg/m3	10.8 I		40	

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QUALITY CONTROL DATA



Project: Surface Water Central cty

Pace Project No.: 35460696

QC Batch: 533332

Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0

Analysis Description: 300.0 IC Anions

Associated Lab Samples: 35460696001, 35460696002, 35460696004

METHOD BLANK: 2889207

Matrix: Water

Associated Lab Samples: 35460696001, 35460696002, 35460696004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	2.5 U	5.0	2.5	04/24/19 15:46	

LABORATORY CONTROL SAMPLE: 2889208

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	50	49.3	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2889359 2889360

Parameter	Units	20101290001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	27.9	50	50	81.3	81.1	107	107	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2889361 2889362

Parameter	Units	35460842001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	2.5 U	50	50	50.4	50.4	97	97	90-110	0	20	

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QUALITY CONTROL DATA

Project: Surface Water Central cty

Pace Project No.: 35460696

QC Batch: 533343

Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0

Analysis Description: 300.0 IC Anions

Associated Lab Samples: 35460696003

METHOD BLANK: 2889264

Matrix: Water

Associated Lab Samples: 35460696003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	2.5 U	5.0	2.5	04/24/19 11:02	

LABORATORY CONTROL SAMPLE: 2889265

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	50	50.6	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2889414 2889415

Parameter	Units	35461719001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	13.3	50	50	64.5	64.9	102	103	90-110	1	20	

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QUALITY CONTROL DATA



Project: Surface Water Central cty

Pace Project No.: 35460696

QC Batch: 533084 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004

METHOD BLANK: 2887817 Matrix: Water
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	0.035 U	0.050	0.035	04/23/19 12:29	

LABORATORY CONTROL SAMPLE: 2887818

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	1	1.0	102	90-110	

MATRIX SPIKE SAMPLE: 2887820

Parameter	Units	35461773009 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	1.9	1	3.0	109	90-110	

SAMPLE DUPLICATE: 2887819

Parameter	Units	35461773009 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	1.9	1.9	0	20	

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QUALITY CONTROL DATA



Project: Surface Water Central cty
Pace Project No.: 35460696

QC Batch: 530520 Analysis Method: EPA 351.2
QC Batch Method: EPA 351.2 Analysis Description: 351.2 TKN
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004

METHOD BLANK: 2872844 Matrix: Water
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	0.086 U	0.50	0.086	04/15/19 12:54	

LABORATORY CONTROL SAMPLE: 2872845

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	20	18.5	93	90-110	

MATRIX SPIKE SAMPLE: 2872849

Parameter	Units	35460696001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	0.86	20	19.7	94	90-110	

MATRIX SPIKE SAMPLE: 2873426

Parameter	Units	35460657001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	67.1	20	87.9	104	90-110	

SAMPLE DUPLICATE: 2872848

Parameter	Units	35460696001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	0.86	0.83	4	20	

SAMPLE DUPLICATE: 2873425

Parameter	Units	35460657001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	67.1	68.6	2	20	

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QUALITY CONTROL DATA

Project: Surface Water Central cty
Pace Project No.: 35460696

QC Batch: 530470 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004

METHOD BLANK: 2872658 Matrix: Water
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	0.025 U	0.050	0.025	04/12/19 05:13	
Nitrogen, NO2 plus NO3	mg/L	0.033 U	0.050	0.033	04/12/19 05:13	

LABORATORY CONTROL SAMPLE: 2872659

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2	2.1	103	90-110	

MATRIX SPIKE SAMPLE: 2872661

Parameter	Units	92424907004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.64	2	2.6	100	90-110	

MATRIX SPIKE SAMPLE: 2872663

Parameter	Units	35460667001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.25	2	2.4	107	90-110	

SAMPLE DUPLICATE: 2872660

Parameter	Units	92424907004 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.64	0.65	1	20	
Nitrogen, NO2 plus NO3	mg/L	0.64	0.65	1	20	

SAMPLE DUPLICATE: 2872662

Parameter	Units	35460667001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.25	0.25	0	20	
Nitrogen, NO2 plus NO3	mg/L	0.25	0.25	0	20	

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QUALITY CONTROL DATA



Project: Surface Water Central cty
Pace Project No.: 35460696

QC Batch: 530523 Analysis Method: EPA 365.4
QC Batch Method: EPA 365.4 Analysis Description: 365.4 Phosphorus
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004

METHOD BLANK: 2872859 Matrix: Water
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Phosphorus, Total (as P)	mg/L	0.050 U	0.10	0.050	04/15/19 13:28	

LABORATORY CONTROL SAMPLE: 2872860

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphorus, Total (as P)	mg/L	4	3.8	94	90-110	

MATRIX SPIKE SAMPLE: 2872864

Parameter	Units	35460696001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Phosphorus, Total (as P)	mg/L	0.050 U	4	3.9	96	80-120	

MATRIX SPIKE SAMPLE: 2873429

Parameter	Units	35460657001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Phosphorus, Total (as P)	mg/L	6.8	4	11.0	103	80-120 L	

SAMPLE DUPLICATE: 2872863

Parameter	Units	35460696001 Result	Dup Result	RPD	Max RPD	Qualifiers
Phosphorus, Total (as P)	mg/L	0.050 U	0.050 U		20	

SAMPLE DUPLICATE: 2873428

Parameter	Units	35460657001 Result	Dup Result	RPD	Max RPD	Qualifiers
Phosphorus, Total (as P)	mg/L	6.8	7.1	4	20	

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QUALITY CONTROL DATA

Project: Surface Water Central cty
Pace Project No.: 35460696



QC Batch: 532746 Analysis Method: EPA 410.4
QC Batch Method: EPA 410.4 Analysis Description: 410.4 COD
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004

METHOD BLANK: 2886166 Matrix: Water
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	12.5 U	20.0	12.5	04/22/19 16:22	

LABORATORY CONTROL SAMPLE: 2886167

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	494	494	100	90-110	

MATRIX SPIKE SAMPLE: 2886169

Parameter	Units	35460328001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	519	494	988	95	90-110	

MATRIX SPIKE SAMPLE: 2886171

Parameter	Units	35461206001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	138	494	629	99	90-110	

SAMPLE DUPLICATE: 2886168

Parameter	Units	35460328001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chemical Oxygen Demand	mg/L	519	523	1	20	

SAMPLE DUPLICATE: 2886170

Parameter	Units	35461206001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chemical Oxygen Demand	mg/L	138	140	2	20	

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QUALITY CONTROL DATA

Project: Surface Water Central cty
Pace Project No.: 35460696

QC Batch: 532365 Analysis Method: SM 5310B
QC Batch Method: SM 5310B Analysis Description: 5310B TOC
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004

METHOD BLANK: 2883865 Matrix: Water
Associated Lab Samples: 35460696001, 35460696002, 35460696003, 35460696004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Organic Carbon	mg/L	0.50 U	1.0	0.50	04/24/19 07:09	

LABORATORY CONTROL SAMPLE: 2883866

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	20	18.6	93	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2883867 2883868

Parameter	Units	35462060018 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Organic Carbon	mg/L	4.0	20	20	22.2	22.4	91	92	80-120	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2883869 2883870

Parameter	Units	35460843001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Organic Carbon	mg/L	11.0	20	20	30.2	30.4	96	97	80-120	0	20	

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QUALIFIERS

Project: Surface Water Central cty
Pace Project No.: 35460696

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.
J(M1) Estimated Value. Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
J(R1) Estimated Value. RPD value was outside control limits.
J(v1) The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.
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.
MS Analyte recovery in the matrix spike was outside QC limits for one or more of the constituent analytes used in the calculated result.
Y The laboratory analysis was from an improperly preserved sample.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Surface Water Central cty

Pace Project No.: 35460696

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
35460696001	Pond 1 28824				
35460696002	Pond 2 28825				
35460696003	Dup				
35460696001	Pond 1 28824	EPA 8011	532443	EPA 8011	532621
35460696002	Pond 2 28825	EPA 8011	532443	EPA 8011	532621
35460696003	Dup	EPA 8011	532443	EPA 8011	532621
35460696004	field blank	EPA 8011	532443	EPA 8011	532621
35460696006	trip 1	EPA 8011	532443	EPA 8011	532621
35460696007	trip 2	EPA 8011	532443	EPA 8011	532621
35460696001	Pond 1 28824	EPA 3010	533111	EPA 6010	533236
35460696002	Pond 2 28825	EPA 3010	533111	EPA 6010	533236
35460696003	Dup	EPA 3010	533111	EPA 6010	533236
35460696004	field blank	EPA 3010	533111	EPA 6010	533236
35460696001	Pond 1 28824	EPA 3010	533112	EPA 6020	533237
35460696002	Pond 2 28825	EPA 3010	533112	EPA 6020	533237
35460696003	Dup	EPA 3010	533112	EPA 6020	533237
35460696004	field blank	EPA 3010	533112	EPA 6020	533237
35460696001	Pond 1 28824	EPA 8260	532001		
35460696002	Pond 2 28825	EPA 8260	532001		
35460696003	Dup	EPA 8260	532001		
35460696004	field blank	EPA 8260	532001		
35460696006	trip 1	EPA 8260	532001		
35460696007	trip 2	EPA 8260	532001		
35460696001	Pond 1 28824	EPA 1631E	530859	EPA 1631E	531656
35460696002	Pond 2 28825	EPA 1631E	530859	EPA 1631E	531656
35460696003	Dup	EPA 1631E	530859	EPA 1631E	531656
35460696004	field blank	EPA 1631E	530861	EPA 1631E	531658
35460696001	Pond 1 28824	SM 2320B	533057		
35460696002	Pond 2 28825	SM 2320B	533057		
35460696003	Dup	SM 2320B	533057		
35460696004	field blank	SM 2320B	533057		
35460696001	Pond 1 28824	SM 2540C	532072		
35460696002	Pond 2 28825	SM 2540C	532072		
35460696003	Dup	SM 2540C	532072		
35460696004	field blank	SM 2540C	532072		
35460696001	Pond 1 28824	SM 2540D	531759		
35460696002	Pond 2 28825	SM 2540D	531759		
35460696003	Dup	SM 2540D	531759		
35460696004	field blank	SM 2540D	531759		
35460696001	Pond 1 28824	SM 5210B	530513	SM 5210B	531685
35460696002	Pond 2 28825	SM 5210B	530513	SM 5210B	531685
35460696003	Dup	SM 5210B	530513	SM 5210B	531685
35460696004	field blank	SM 5210B	530513	SM 5210B	531685

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Surface Water Central cty

Pace Project No.: 35460696

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
35460696001	Pond 1 28824	SM10200	530798	SM10200	530832
35460696002	Pond 2 28825	SM10200	530798	SM10200	530832
35460696003	Dup	SM10200	530798	SM10200	530832
35460696004	field blank	SM10200	530798	SM10200	530832
35460696001	Pond 1 28824	TKN+NOx Calculation	531840		
35460696002	Pond 2 28825	TKN+NOx Calculation	531840		
35460696003	Dup	TKN+NOx Calculation	531840		
35460696004	field blank	TKN+NOx Calculation	531840		
35460696001	Pond 1 28824	EPA 300.0	533332		
35460696002	Pond 2 28825	EPA 300.0	533332		
35460696003	Dup	EPA 300.0	533343		
35460696004	field blank	EPA 300.0	533332		
35460696001	Pond 1 28824	EPA 350.1	533084		
35460696002	Pond 2 28825	EPA 350.1	533084		
35460696003	Dup	EPA 350.1	533084		
35460696004	field blank	EPA 350.1	533084		
35460696001	Pond 1 28824	EPA 351.2	530520	EPA 351.2	531010
35460696002	Pond 2 28825	EPA 351.2	530520	EPA 351.2	531010
35460696003	Dup	EPA 351.2	530520	EPA 351.2	531010
35460696004	field blank	EPA 351.2	530520	EPA 351.2	531010
35460696001	Pond 1 28824	EPA 353.2	530470		
35460696002	Pond 2 28825	EPA 353.2	530470		
35460696003	Dup	EPA 353.2	530470		
35460696004	field blank	EPA 353.2	530470		
35460696001	Pond 1 28824	EPA 365.4	530523	EPA 365.4	531011
35460696002	Pond 2 28825	EPA 365.4	530523	EPA 365.4	531011
35460696003	Dup	EPA 365.4	530523	EPA 365.4	531011
35460696004	field blank	EPA 365.4	530523	EPA 365.4	531011
35460696001	Pond 1 28824	EPA 410.4	532746	EPA 410.4	532892
35460696002	Pond 2 28825	EPA 410.4	532746	EPA 410.4	532892
35460696003	Dup	EPA 410.4	532746	EPA 410.4	532892
35460696004	field blank	EPA 410.4	532746	EPA 410.4	532892
35460696001	Pond 1 28824	SM 5310B	532365		
35460696002	Pond 2 28825	SM 5310B	532365		
35460696003	Dup	SM 5310B	532365		
35460696004	field blank	SM 5310B	532365		
35460696001	Pond 1 28824	FLDEP SOP 10/03/83	533457		
35460696002	Pond 2 28825	FLDEP SOP 10/03/83	533457		
35460696003	Dup	FLDEP SOP 10/03/83	533457		
35460696004	field blank	FLDEP SOP 10/03/83	533457		

REPORT OF LABORATORY ANALYSIS

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CHAIN-OF-CUSTODY / Analytical Request Document

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

WO# : 35460696



35460696

Section A

Required Client Information:

Company: Sarasota County
Address: 1255 T. Mabry Carlton Parkway
Venice, FL 34292
Email:
Phone: Fax:
Requested Due Date:

Section B

Required Project Information:

Report To: Mr. Cesar Rodriguez
Copy To:
Purchase Order #: 181191
Project Name: Surface Water Central city
Project #:

Section C

Invoice Information:

Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: Martha.Montero@pacelabs.com,
Pace Profile #: 833 #4

Regulatory Agency

State / Location

FL

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample IDs must be unique	MATRIX Drinking Water Water Waste Water Product Soil/Solid Oil Wipe Air Other Tissue	CODE DW WT WW P SL OL WP AR OT TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Y/N	Requested Analysis Filtered (Y/N)														Residual Chlorine (Y/N)	Need to ADD TDS, TSS, COD and TOC																																																																																																																																																																																																																																																																																																																																																																																																																
						START		END				Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2SO3	Methanol	Other		Analyses Test	VOC by 8260	EDB and DBCP EPA 8011	TOC	NH3, T-Nitrogen, T-Phos, COD	H2SO4	HNO3	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres			Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	Unpres	

Please use Adapt and
analyze all App 1
Compounds

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS		
surface waters for Central County	Ron L Moore	4/1/19	1350	Ron L Moore	4/1/19	1350	1350	1203	
	Ron L Moore	4/1/19	1530	Ron L Moore	4/1/19	1530	58	X	N K

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

Ron Moore

SIGNATURE of SAMPLER:

Ron Moore

DATE Signed:

4/1/19

TEMP in C

Received on
Ice (Y/N)

Custody
Sealed (Y/N)

Cooler
(Y/N)

Samples
Intact (Y/N)

	Document Name:	Document Revised:
	Sample Condition Upon Receipt Form	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# : 35460696**
Project Manager: PM: MIM **Due Date:** 04/25/19
Client: CLIENT: SARCOU

Date and Initials of person:

Examining contents: LS
 Label: 4-11-19
 Deliver: 4-11-19
 pH: ✓

Thermometer Used: T-203 Date: 4-11-19 Time: 1530 Initials: NOM

State of Origin: FL

☐ For WV projects, all containers verified to $\leq 6^{\circ}\text{C}$

Cooler #1 Temp. $^{\circ}\text{C}$ 5.8 (Visual) 0.0 (Correction Factor) 5.8 (Actual)

Cooler #2 Temp. $^{\circ}\text{C}$ 4.3 (Visual) 0.0 (Correction Factor) 4.3 (Actual)

Cooler #3 Temp. $^{\circ}\text{C}$ _____ (Visual) _____ (Correction Factor) _____ (Actual)

Cooler #4 Temp. $^{\circ}\text{C}$ _____ (Visual) _____ (Correction Factor) _____ (Actual)

Cooler #5 Temp. $^{\circ}\text{C}$ _____ (Visual) _____ (Correction Factor) _____ (Actual)

Cooler #6 Temp. $^{\circ}\text{C}$ _____ (Visual) _____ (Correction Factor) _____ (Actual)

☒ Samples on ice, cooling process has begun

☒ Samples on ice, cooling process has begun

☐ Samples on ice, cooling process has begun

☐ Samples on ice, cooling process has begun

☐ Samples on ice, cooling process has begun

☐ 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	Preservation Information: Preservative: _____ Lot #/Trace #: _____ Date: _____ Time: _____ Initials: _____
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	
All Containers needing preservation are found to be in compliance with EPA recommendation:	☒ Yes ☐ No ☐ N/A	
Exceptions: VOA, Coliform, TOC, O&G, Carbamates		
Headspace in VOA Vials? (>6mm):	☐ Yes ☒ No ☐ N/A	
Trip Blank Present:	☒ Yes ☐ No ☐ N/A	

Client Notification/ Resolution:

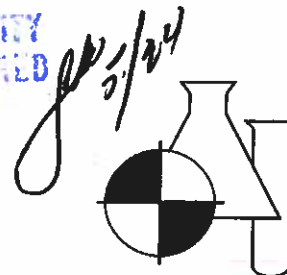
Person Contacted: _____ Date/Time: _____

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

Project Manager Review: _____

Date: _____ Page 50 of 50

QUALITY
ASSURED



BENCHMARK

EnviroAnalytical Inc.

NELAC Certification #E84167

ANALYTICAL TEST REPORT

THESE RESULTS MEET NELAC STANDARDS

Submission Number : 19040573

Sarasota County Utilities Oper
1255 T. Mabry Carlton Pkwy
Venice, FL 34293

Project Name : CENTRAL COUNTY SURFACE WATER
Date Received : 04/11/2019
Time Received : 1507

Cesar Rodriguez

Submission Number: 19040573
Sample Number: 001
Sample Description: Pond 1
Sample Date: 04/11/2019
Sample Time: 1245
Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
FECAL COLIFORM	10 U	#/100 ML	10	10	SM9222D	04/11/2019 16:04	KD

Submission Number: 19040573
Sample Number: 002
Sample Description: Pond 2
Sample Date: 04/11/2019
Sample Time: 1130
Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
FECAL COLIFORM	10 B	#/100 ML	10	10	SM9222D	04/11/2019 16:04	KD

Submission Number: 19040573
Sample Number: 003
Sample Description: Field Blank
Sample Date: 04/11/2019
Sample Time: 1115
Sample Method: Grab

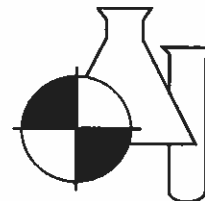
Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
FECAL COLIFORM	10 U	#/100 ML	10	10	SM9222D	04/11/2019 16:04	KD

Submission Number: 19040573
Sample Number: 004
Sample Description: Duplicate
Sample Date: 04/11/2019
Sample Time: 1130
Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
FECAL COLIFORM	10 B	#/100 ML	10	10	SM9222D	04/11/2019 16:04	KD

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification #E84167




04/17/2019

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.

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.

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.

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

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

Project Name: Central County Surface water Laboratory Submission #: 19040573
Purchase Order Number: 180708

Station ID:	Sample Matrix ²	Sample Type ¹	Analysis Requested:		Laboratory Sample #
			Fecal coliform		
			Preservative: Sodium Thiosulfate		
SW Pond-SW-1 (28824) <i>Pond 1</i>	surface	Grab	Date & Time: 4/11/19 1245	<i>Please use Adapt.</i>	1
NE Pond-SW-2 (28825) <i>Pond 2</i>	surface	Grab	Date & Time: 4/11/19 1130		2
Field Blank	surface	Grab	Date & Time: 4/11/19 1115		3
Duplicate	surface	Grab	Date & Time: 4/11/19 1130		4
			Date & Time:		
			Date & Time:		
			Date & Time:		

Please use Adapt.

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).**
Under "Preservative," list any preservatives that were added to the sample container.

- 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.

Laboratory Sample Acceptability: pH < 9
BEAS Temperature:
BEA Temperature: 21.5

1	Collector - Relinquished by: <i>Randa L. Morgan</i>	Date: 4/11/19	Time: 1350	Received By: <i>[Signature]</i>	Date: 4-11-19	Time: 1:55
2	Relinquished by: <i>[Signature]</i>	Date: 4-11-19	Time:	Received By: <i>Thane m...</i>	Date: 4/11/19	Time: 1507
3	Relinquished by:	Date:	Time:	Received By:	Date:	Time:

SITE NAME: CCSWDC		SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: NAM-1	19.87	SAMPLE ID: 29091	DATE: 3/27/19

WELL DIAMETER (Inches): 2.0		TUBING DIAMETER (Inches): 0.25		WELL SCREEN INTERVAL DEPTH: feet to feet		STATIC DEPTH TO WATER (feet): 3.76		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) $= (14.5 \text{ feet} - 3.76 \text{ feet}) \times 0.16 \text{ gallons/foot} = 1.7 \text{ gallons}$											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 4.8			FINAL PUMP OR TUBING DEPTH IN WELL (feet): 4.8			PURGING INITIATED AT: 0825		PURGING ENDED AT: 0853		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) ($\mu\text{mhos/cm}$ or $\mu\text{S/cm}$)	DISSOLVED OXYGEN (circle units) (mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
0843	1.7	1.7	0.11	4.41	6.95	21.39	689	0.19	3.18	Clear	None
0848	0.5	2.2	0.11	4.42	6.97	21.45	704	0.24	3.08	Clear	None
0853	0.5	2.7	0.11	4.43	6.98	21.47	707	0.22	1.08	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" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 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)											

SAMPLED BY (PRINT) / AFFILIATION: Ronald L. Moore / Sarasota County				SAMPLER(S) SIGNATURE(S): 			SAMPLING INITIATED AT: 0900		SAMPLING ENDED AT: 0905	
PUMP OR TUBING DEPTH IN WELL (feet): 4.8				TUBING MATERIAL CODE: S / HDPE			FIELD-FILTERED: Y (N)		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				
B	1	HDPE	250 mL	HNO3 & wet ice	N/A	/	Metals		APP	400
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A		Total Ammonia		APP	400
A	1	HDPE	1 L	Wet ice	N/A		Misc. Inorganics		APP	400
REMARKS: EQUIP BLANK Taken 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; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (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	19-57 20.02	SAMPLE ID: 29092	DATE 3/27/19

PURGING DATA

WELL DIAMETER (Inches): 2.0	TUBING DIAMETER (Inches): 0.25	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 4.35	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 - 4.35 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				

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.78" = 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" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Baller; 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: 1040
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PUMP OR TUBING DEPTH IN WELL (feet): 5.5	TUBING MATERIAL CODE: S / HDPE	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ μm
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FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N (replaced)) DUPLICATE: (Y) ~~(N)~~ ~~RAY~~

[illegible]

REMARKS: DYP filled 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 = Baller; 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: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (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	20.02	SAMPLE ID: 29093	DATE: 3/27/19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): 0.25	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 4.08	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) = (14.5 feet - 4.08 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): 5.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 5.0	PURGING INITIATED AT: 1130	PURGING ENDED AT: 1156	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)
1146	1.7	1.7	0.11	4.72	6.54	21.06	558	0.13	1.24	Clear	None
1151	0.5	2.2	0.11	4.74	6.56	21.00	558	0.15	3.87	Clear	None
1156	0.5	2.7	0.11	4.75	6.55	21.08	560	0.18	1.17	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" = 0.0008; 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: 1200		SAMPLING ENDED AT: 1205		
PUMP OR TUBING DEPTH IN WELL (feet): 5.0				TUBING MATERIAL CODE: S / HDPE			FIELD-FILTERED: Y (N)		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					
B	1	HDPE	250mL	HNO3 & wet ice	N/A	/	Metals		APP		400
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A	/	Total Ammonia		APP		400
A	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorganics		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)

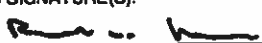
DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC		SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: NAM-4	22.66	SAMPLE ID: 29094	DATE: 3/27/19

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): 0.25	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 6.98	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 - 6.98 feet) X 0.18 gallons/foot = 1.2 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): 8.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8.0	PURGING INITIATED AT: 1255	PURGING ENDED AT: 1312	TOTAL VOLUME PURGED (gallons): 1.8							
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)
1306	1.2	1.2	0.11	7.56	5.73	22.03	553	0.23	1.04	Clear	None
1309	0.3	1.5	0.11	7.55	5.85	22.03	555	0.30	1.40	Clear	None
1312	0.3	1.8	0.11	7.55	5.90	22.05	555	0.20	0.73	Clear	None
		/		/	/	/	/	/	/		
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.08; 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" = 0.0008; 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: 1315		SAMPLING ENDED AT: 1320		
PUMP OR TUBING DEPTH IN WELL (feet): 8.0				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					
B	1	HDPE	250 mL	HNO3 & wet ice	N/A	/	Metals		APP		400
C	1	HDPE	250 mL	H2SO4 & wet ice	N/A	/	Total Ammonia		APP		400
A	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorganics		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)

291b
17.88
95

95

SAMPLING DATA

REMARKS:

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: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

19.3.1970

gallons	1.5
gallons	
s): 1.6	

1.5

1.5

1.5

1.5

1.5

1.5

1.5

16.53
1940
2.36

16.53
1940
2.36

36

36

19.72
2.36

19.72
2.36

7.5

7.5

7.5

7.5

7.5

7.5

7.5

19.07 USD
7.34

19.0
7.34

7.34

7.34

7.34

7.34

7.34

7.34

7.34

19.65
PAID

12/

12/2

12/2

12/2

12/2

✓

✓

12/2

18.05
~~18.05~~
1.2

SITE NAME: CCGSWDC		SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO. MW-16	43.73	SAMPLE ID: 23032	DATE 4/10/19

WELL DIAMETER (Inches): 2.0	TUBING DIAMETER (Inches): 0.375	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 24.81	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 - 24.81 feet) X 0.16 gallons/foot = 0.9 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				

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.08; 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" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.018

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

SAMPLED BY (PRINT) / AFFILIATION: Ronald L. Moore / Sarasota County				SAMPLER(S) SIGNATURE(S): 			SAMPLING INITIATED AT: 1025		SAMPLING ENDED AT: 1040		
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)			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					
A, B, C	3	CG	40 mL	HCl & wet ice	N/A		8260-vocs App. I		ESP		200
D, E	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I		ESP		1
F	1	HDPE	250 mL	HNO3 & wet ice	N/A		Metals - App. I		ESP		1
G	1	HDPE	250 mL	H2SO4 & wet ice	N/A		Nutrients - App. I		ESP		1
H	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorg. App. I		ESP		1

REMARKS: Heavy Sheen on Water. Difficult to fill VOC with no bubbles due to interaction with preservative.

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)

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: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

17.44 NGVD
~~17.44~~ NGVD

3.0

3.0

3.0

3.0

3.0

3.0

3.0

3.0

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: CCSWDC		SITE LOCATION: 4000 Knights Trail Rd, Nokomis FL 34275	
WELL NO: MW-20A	27.38	SAMPLE ID: 27141	DATE: 4/2/19

PURGING DATA

WELL DIAMETER (Inches): 2.0	TUBING DIAMETER (Inches): 0.25	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 10.26	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 - 10.26 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): 12.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 13.0	PURGING INITIATED AT: 1045	PURGING ENDED AT: 1124	TOTAL VOLUME PURGED (gallons): 3.0
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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)
1110	2.0	2.0	0.08	11.92	6.43	22.65	793	0.66	0.40	Clear	None
1117	0.5	2.5	0.08	11.96	6.45	23.69	797	0.71	0.65	Clear	None
1124	0.5	3.0	0.08	12.03	6.51	23.79	801	0.69	0.62	Clear	None

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.08; 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" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 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): <i>Ronald L. Moore</i>	SAMPLING INITIATED AT: 1130	SAMPLING ENDED AT: 1145
--	--	--------------------------------	----------------------------

PUMP OR TUBING DEPTH IN WELL (feet): 13.0	TUBING MATERIAL CODE: S / HDPE	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: _____ µm
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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			
A, B, C	3	CG	40 mL	HCl & wet ice	N/A	NA	8260-vocs App. I	APP	300
D, E	2	CG	40 mL	Wet ice	N/A	N/A	8011-EDB App. I	APP	
F	1	HDPE	250 mL	HNO3 & wet ice	N/A	4.2	Metals - App. I	APP	
G	1	HDPE	250 mL	H2SO4 & wet ice	N/A	4.2	Nutrients - App. I	APP	
H	1	HDPE	1 L	Wet ice	N/A	N/A	Misc. Inorg. App. I	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;
 RFPF = 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)

FT 1100 Field Measurement of Hydrogen Ion Activity (pH)

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

SURVEY/PROJECT: Central County 1st Semi-Annual
SW

SAMPLERS: Ronald Moore / Darrell Garrett

METER # YSI-556
HACH 2100 Q

[illegible]

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

Revision Date: February 1, 2004