



Hydrogeologist
Palm Beach Solid Waste Authority
7501 N. Jog Rd.
West Palm Beach, FL 33412

Pace Project Number: 35425626
Report Period: 2018/Q4

RECEIVED
NOV 29 2018

Client Project ID: Central Transfer Station Surfa

Lab Sample ID

Client Sample ID

35425626001
35425626002

CTSW-1
CTSS E BLANK 102218

Sincerely,

A handwritten signature in black ink that reads "Martha Montero".

Martha Montero

Florida Certifications:

E83079 - Ormond Beach
E86240 - South Florida
E87627 - Charlotte

Pace Analytical Services, Inc.

Project Name : Central Transfer Station Surfa
 Diameter (in) :
 Depth to Water (ft) :
 Total Depth (ft) :
 Top of Casing (ft) :

Order # : 35425626001
 Sheen : No sheen
 Color : Lt yellow
 Odor : None
 Matrix : Surface Water

PARAMETER MONITORING REPORT

Part III Analytical Results

Facility WACS ID : PBCC01
 Test Site ID # : PBCC09
 Well Name : CTSW-1
 Classification of Ground Water : SW-IIIF
 Groundwater Elevation (NGVD) : _____

Sampling Date/Time : 10/22/2018 13:25
 Report Period : 2018/Q4
 Well Purge (Y/N) : N
 Well Type : () Background () Compliance
 () Intermediat (X) Other

Storet Code	Parameter Monitored	Sampling Method	Field Filter	Analysis Method	Analysis Date/Time	Analysis Results/Units	Detection Limits/Units		Dilution Factor
							MDL	PQL	

FIELD PARAMETERS

000537	Field Specific Conductance	Grab	N		10/22/2018 13:25	291 umhos/cm			umhos/cm	1
000010	Field Temperature	Grab	N		10/22/2018 13:25	27.2 deg C			deg C	1
000664	Field pH	Grab	N		10/22/2018 13:25	6.65 Std. Units			Std. Units	1
082078	Turbidity	Grab	N		10/22/2018 13:25	0.88 NTU			NTU	1

OTHER

000593	Chloride	Grab	N	EPA 300.0	10/25/2018 18:39	19.6 mg/L	2.5	5.0	mg/L	1
000945	Sulfate	Grab	N	EPA 300.0	10/25/2018 18:39	12.1 mg/L	2.5	5.0	mg/L	1
000599	Nitrogen, Ammonia	Grab	N	EPA 350.1	10/23/2018 09:23	<0.035 mg/L	0.035	0.050	mg/L	1
000601	Nitrogen, Kjeldahl, Total	Grab	N	EPA 351.2	10/24/2018 15:32	0.64 mg/L	0.086	0.50	mg/L	1
000620	Nitrogen, Nitrate	Grab	N	EPA 353.2	10/23/2018 08:01	<0.025 mg/L	0.025	0.050	mg/L	1
000340	Chemical Oxygen Demand	Grab	N	EPA 410.4	10/30/2018 11:55	41.9 mg/L	12.5	20.0	mg/L	1
000410	Alkalinity, Total as CaCO3	Grab	N	SM 2320B	10/30/2018 14:38	99.2 mg/L	5.0	5.0	mg/L	1
000515	Total Dissolved Solids	Grab	N	SM 2540C	10/24/2018 11:04	173 mg/L	5.0	5.0	mg/L	1
038260	MBAS, Calculated as LAS	Grab	N	SM 5540C	10/23/2018 11:58	<0.099 mg/L	0.099	0.20	mg/L	1

INORGANICS

001002	Arsenic	Grab	N	EPA 6010	10/25/2018 20:57	<7.1 ug/L	7.1	10.0	ug/L	1
001007	Barium	Grab	N	EPA 6010	10/25/2018 20:57	8.2 ug/L	0.84	10.0	ug/L	1
001034	Chromium	Grab	N	EPA 6010	10/25/2018 20:57	<1.7 ug/L	1.7	5.0	ug/L	1
001045	Iron	Grab	N	EPA 6010	10/25/2018 20:57	45.6 ug/L	9.2	40.0	ug/L	1
000929	Sodium	Grab	N	EPA 6010	10/25/2018 20:57	13.9 mg/L	0.27	2.0	mg/L	1
001027	Cadmium	Grab	N	EPA 6020	10/29/2018 08:57	<0.050 ug/L	0.050	0.10	ug/L	1
001042	Copper	Grab	N	EPA 6020	10/26/2018 17:58	2.3 ug/L	0.93	1.0	ug/L	1
000572	Lead	Grab	N	EPA 6020	10/29/2018 08:57	0.51 ug/L	0.50	1.0	ug/L	1
001147	Selenium	Grab	N	EPA 6020	10/29/2018 08:57	<0.50 ug/L	0.50	1.0	ug/L	1
000576	Mercury	Grab	N	EPA 7470	10/31/2018 00:32	<0.10 ug/L	0.10	0.20	ug/L	1

ORGANICS

	Oil and Grease	Grab	N	EPA 1664B	10/31/2018 03:46	<1.1 mg/L	1.1	5.0	mg/L	1
	Petroleum Range Organics	Grab	N	FL-PRO	10/28/2018 15:23	<0.80 mg/L	0.80	1.0	mg/L	1

Pace Analytical Services, Inc.

Project Name : Central Transfer Station Surfa
 Diameter (in) :
 Depth to Water (ft) :
 Total Depth (ft) :
 Top of Casing (ft) :

Order # : 35425626002
 Sheen : No sheen
 Color : Clear
 Odor : None
 Matrix : DI Water

PARAMETER MONITORING REPORT

Part III Analytical Results

Facility WACS ID : PBCC01
 Test Site ID # : NA
 Well Name : CTSS E BLANK 102218
 Classification of Ground Water : Equipment Blank
 Groundwater Elevation (NGVD) : _____

Sampling Date/Time : 10/22/2018 13:10
 Report Period : 2018/Q4
 Well Purge (Y/N) : N
 Well Type : () Background () Compliance
 () Intermediat (X) Other

Storet Code	Parameter Monitored	Sampling Method	Field Filter	Analysis Method	Analysis Date/Time	Analysis Results/Units	Detection Limits/Units		Dilution Factor
							MDL	PQL	

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000537	Field Specific Conductance	Grab	N		10/22/2018 13:10	4.2 umhos/cm			umhos/cm	1
000010	Field Temperature	Grab	N		10/22/2018 13:10	26.7 deg C			deg C	1
000664	Field pH	Grab	N		10/22/2018 13:10	6.87 Std. Units			Std. Units	1
082078	Turbidity	Grab	N		10/22/2018 13:10	0.30 NTU			NTU	1

OTHER

000593	Chloride	Grab	N	EPA 300.0	10/25/2018 19:01	<2.5 mg/L	2.5	5.0	mg/L	1
000945	Sulfate	Grab	N	EPA 300.0	10/25/2018 19:01	<2.5 mg/L	2.5	5.0	mg/L	1
000599	Nitrogen, Ammonia	Grab	N	EPA 350.1	10/23/2018 09:25	<0.035 mg/L	0.035	0.050	mg/L	1
000601	Nitrogen, Kjeldahl, Total	Grab	N	EPA 351.2	10/24/2018 15:33	<0.086 mg/L	0.086	0.50	mg/L	1
000620	Nitrogen, Nitrate	Grab	N	EPA 353.2	10/23/2018 08:02	<0.025 mg/L	0.025	0.050	mg/L	1
000340	Chemical Oxygen Demand	Grab	N	EPA 410.4	10/30/2018 11:55	<12.5 mg/L	12.5	20.0	mg/L	1
000410	Alkalinity, Total as CaCO3	Grab	N	SM 2320B	10/31/2018 11:23	<5.0 mg/L	5.0	5.0	mg/L	1
000515	Total Dissolved Solids	Grab	N	SM 2540C	10/24/2018 11:04	<5.0 mg/L	5.0	5.0	mg/L	1
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INORGANICS

001002	Arsenic	Grab	N	EPA 6010	10/25/2018 21:00	<7.1 ug/L	7.1	10.0	ug/L	1
001007	Barium	Grab	N	EPA 6010	10/25/2018 21:00	8.4 ug/L	0.84	10.0	ug/L	1
001034	Chromium	Grab	N	EPA 6010	10/25/2018 21:00	<1.7 ug/L	1.7	5.0	ug/L	1
001045	Iron	Grab	N	EPA 6010	10/25/2018 21:00	<9.2 ug/L	9.2	40.0	ug/L	1
000929	Sodium	Grab	N	EPA 6010	10/25/2018 21:00	<0.27 mg/L	0.27	2.0	mg/L	1
001027	Cadmium	Grab	N	EPA 6020	10/29/2018 08:58	<0.050 ug/L	0.050	0.10	ug/L	1
001042	Copper	Grab	N	EPA 6020	10/26/2018 18:00	<0.93 ug/L	0.93	1.0	ug/L	1
000572	Lead	Grab	N	EPA 6020	10/29/2018 08:58	<0.50 ug/L	0.50	1.0	ug/L	1
001147	Selenium	Grab	N	EPA 6020	10/29/2018 08:58	<0.50 ug/L	0.50	1.0	ug/L	1
000576	Mercury	Grab	N	EPA 7470	10/31/2018 00:35	<0.10 ug/L	0.10	0.20	ug/L	1

ORGANICS

	Oil and Grease	Grab	N	EPA 1664B	10/31/2018 03:46	<1.1 mg/L	1.1	5.0	mg/L	1
	Petroleum Range Organics	Grab	N	FL-PRO	10/28/2018 15:23	<0.80 mg/L	0.80	1.0	mg/L	1

W0#: 35425626



35425626

D

Container Type Codes

- ES Ennore Sampler
- AV Amber Vial
- PLV Plastic Vial
- PLC Plastic Container
- PLJ Plastic Jar
- CL Clear Liter
- AP Amber Plastic
- AG Amber Glass
- SJ Seal Jar
- TC Terra-cote
- Other: _____

Example: 4ozP = 4oz Plastic, 8ozS = 8oz Soil Jar

Matrix Codes

- SD Solid Waste
- GW Ground Water
- EF Effluent
- AFW Aqueous
- WW Waste Water
- DW Drinking Water
- SW Surface Water
- ML Misc. Liquid
- OL Oil
- SL Sludge
- SO Soil Sediment
- NA Nucleos
- PE Polystyrene
- O Other (Please Specify)

Preservative Type Codes

- A. None
- B. HNO3
- C. H2SO4
- D. NaOH
- E. HCL
- F. MeOH
- G. Na2S2O3
- H. NaHSO4
- I. Ice
- J. MCAA
- K. Zn Acetate
- O. Other

REMARKS

Profile 3193

SEE FIELD SHEETS FOR FIELD PARAMETERS

Coolers #'s - Temp °C

1 2 3 4 5

Lab Use Only

Non-Conformance Found? _____
 Samples INTACT upon arrival? _____
 Received on Wet Ice? _____
 Proper Preservatives Indicated? _____
 Received within holding time? _____
 Custody seals intact? _____
 Vials/containers used without headspace? _____
 Proper Containers Used? _____

C.O.C. Serial # 144896

LAB ANALYSIS

Sample #	Sample ID	Collect Date	Collect Time	Matrix Code	Field Filtered (Integer)	Total # of containers	Parameters		# of Containers Size/Type	Required State Certification	COC Condition	Date	Time
							pH	TRC					
1	1CTSW-1	11/22/18	13:25	SW		7			1 10ozP	FL GA SC NC NJ PA LA TX IL	OK	10/22/18	13:45
2	2CTSSBLANZ-1032AB	11/22/18	13:10	AFW		7			1 10ozP		Incomplete	10/22/18	16:40
3													
4													
5													
6													
7													
8													
9													
10													

See page 4 Letter of: 10/18

Pace Analytical
 www.pacelabs.com

Company Name: PBC SWA
 Address: 7501 N. Jog Road, WPB, FL 33412
 Contact: Managing Hydrogeologist
 City: Phone: 561 640-4000 State: Zip:
 Alt: Fax: 561 640-3400 Fax#
 email: Phone:
 Project Name: CENTRAL COUNTY TRANSFER STATION
 Project: SURFACE WATER
 Sampler Signature: Bill Ryan
 Signature: _____
 Circle One Event: Daily Weekly Monthly Annual N/A
 Quarterly Semi-Annual

SOLID WASTE AUTHORITY DIVISION OF ENVIRONMENTAL PROGRAMS EQUIPMENT BLANK DATA SHEET

Facility Identification: Central County Transfer Station Facility GMS#

Sample Type: Grab

Sample Name: **CTSSEBLANK-102218** Date: **10-22-18**
Time: **13:10**

Equipment blanks are collected before sampling .

DI water supplied

by the Laboratory is poured into the precleaned equipment.

and then poured into the sample bottles.

This process is repeated until all sampling bottles are filled.

Notes and Comments
Weather: **CLOUDY & WARM**

Conductivity on scale X **US**
PH < **2** in preservative
PAGE DI WATER
8:28:18
LOT # 082818 4L 11

Bucket# **D**

Beaker# **M**

Field Parameters	Units	Standard Appearance
Temperature:	26.7 C	Color: CLEAR Odor: NO ODOR NO SHEEN
Specific Cond:	4.2 uMHOS/cm	
Redox Potential	---	
PH:	6.87 Std. Units	
Turb:	0.30 NTU	
D.O.	--- Mg/L	

Sample Container Inventory				
Quantity	Size	Type	Preservation	Analysis

Sampled By: **BILL ROGERS**
MANNY ALVAREZ

Method of Shipment **PAGE**

SOLID WASTE AUTHORITY DIVISION OF ENVIRONMENTAL PROGRAMS SURFACE SITE DATA SHEET

Facility Identification: **Central County Transfer Station**

Sample Type: **Grab**

Sample Name: **CTSW-1**
WACS Facility ID: **PBCC01**
WACS Test Site ID: **PBCC09**

Date: **10-22-18**
Time: **13:25**

Depth of Sample: **6" - 8"**
Description: Adjacent to Storm water structure in pond
Staff gauge north: **MISSING**
Staff gauge south: **9.18**
Master Pump station Meter: **483938**

Notes and Comments
Weather: **CLOUDY + WARM**
Conductivity on scale X **US**
PH < **2** in preservative

Field Parameters	Units	Standard Appearance
Temperature:	27.2 C	Color: LIGHT YELLOW Odor: NO ODOR NO SHEEN
Specific Cond:	— uMHOS/cm	
Specific Cond: ATC	291 uMHOS/cm	
PH:	6.65 Std. Units	
Turb:	0.88 NTU	
D.O.	— Mg/L	

Bucket# **D**
Beaker# **M**

Sample Container Inventory				
Quantity	Size	Type	Preservation	Analysis

Sampled By: **Bill ROGERS**

MANNY ALVAREZ

Method of Shipment **PACE**

Pace Container Order #409496

Addresses

Order By :	Ship To :	Return To:
Company <u>Palm Beach Solid Waste Authority</u>	Company <u>Palm Beach Solid Waste Authority</u>	Company <u>Pace Analytical Pompano Beach</u>
Contact <u>Downey, Brenda</u>	Contact <u>Downey, Brenda</u>	Contact <u>Montero, Martha</u>
Email <u>bdowney@swa.org</u>	Email <u>bdowney@swa.org</u>	Email <u>martha.montero@pacelabs.com</u>
Address <u>7501 N. Jog Rd.</u>	Address <u>7501 N. Jog Rd.</u>	Address <u>3610 Park Central Blvd North</u>
Address 2 _____	Address 2 _____	Address 2 _____
City <u>West Palm Beach</u>	City <u>West Palm Beach</u>	City <u>Pompano Beach</u>
State <u>FL</u> Zip <u>33412</u>	State <u>FL</u> Zip <u>33412</u>	State <u>FL</u> Zip <u>33064</u>
Phone <u>NONE</u>	Phone <u>NONE</u>	Phone <u>(386)672-5668</u>

Info

Project Name <u>Central County Transfer Station SW</u>	Due Date <u>10/12/2018</u>	Profile <u>3193</u>	Quote _____
Project Manager <u>Montero, Martha</u>	Return _____	Carrier <u>Courier</u>	Location <u>FL</u>

Trip Blanks

Include Trip Blanks

Bottle Labels

Blank
 Pre-Printed No Sample IDs
 Pre-Printed With Sample IDs

Bottles

Boxed Cases
 Individually Wrapped
 Grouped By Sample

Return Shipping Labels

No Shipper Number
 With Shipper Number

Misc

<input type="checkbox"/> Sampling Instructions	<input type="checkbox"/> Extra Bubble Wrap
<input type="checkbox"/> Custody Seal	<input type="checkbox"/> Short Hold/Rush Stickers
<input type="checkbox"/> Temp. Blanks	<input type="checkbox"/> DI Water <input type="text" value="Liter(s)"/>
<input type="checkbox"/> Coolers <input type="text"/>	<input type="checkbox"/> USDA Regulated Soils
<input type="checkbox"/> Syringes <input type="text"/>	

COC Options

Number of Blanks
 Pre-Printed

# of Samples	Matrix	Test	Container	Total	# of QC	Lot #	Notes
2	WT	Metals	500mL plastic HNO3	2	0	060418-2AIA	
2	WT	NH3, COD, TKN	1-250mL Plastic H2SO4	2	0	092418-4CFX	
2	WT	Alk, MBAS, NO3, SO4, Cl	500mL plastic unpres.	2	0	112717-2BXU	
2	WT	FL Pro Low Volume for Waters	2-100 mL Amber Glass w/ H2SO4	4	0	070218-1CWM	
2	WT	Oil and Grease by 1664 HEM	1-1L Amber Glass Wide Mouth w/ H2SO4	2	0	071618-1DBH	
2	WT	TDS	500mL Plastic Unpres.	2	0		

Hazard Shipping Placard In Place : NO

- *Sample receiving hours are Mon-Fri 8:00am-6:00pm unless special arrangements are made with your project manager.
- *Pace Analytical reserves the right to return hazardous, toxic, or radioactive samples to you.
- *Pace Analytical reserves the right to charge for unused bottles, as well as cost associated with sample storage and disposal.
- *Payment term are net 30 days.
- *Please include the proposal number on the chain of custody to insure proper billing.

Sample Notes	Ship Date : <input type="text" value="10/12/2018"/>
	Prepared By: <input type="text" value="JS"/>
	Verified By: <input type="text"/>
	Tracking Num: <input type="text"/>
Internal Notes	

CENTRAL COUNTY TRANSFER STATION Surface Water

SWA PERMIT # C.O.A. F.5.E. I & II

1 Surface Site CTSW-1

1 Equipment Blank (CTSSE Blank)

Parameters (Matrix: Surface Water)

A. Metals

Arsenic	Chromium	Lead	Sodium
Barium	Copper	Mercury	Selenium
Cadmium	Iron		

B. Indicator Parameters

- Ammonia Nitrogen
- Total Alkalinity
- C.O.D.
- TRPH (Total Recoverable Petroleum Hydrocarbons)
- Foaming Agents (MBAS)
- Nitrate N
- TKN (Total Kjeldahl Nitrogen)
- TDS (Total Dissolved Solids)
- Oil & Grease
- Sulfate
- Chloride

C. Field Parameters

- Conductivity (field)
- pH (field)
- Temperature (field)
- Turbidity (field)

READ STAFF GUAGE

READ METER AT MASTER PUMP STATION

2 of 2 COC# 144896



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

Document Revised
May 30, 2016
Issuing Authority
Pace Florida Quality Office

WO#: 35425626

(SCUR)

Project #
Project Manager:
Client:

PM: MIM
Due Date: 10/31/18
CLIENT: 36-PBCSWA

Date and Initials of person:
Examining contents: _____
Label: _____
Deliver: _____
pH: _____

Thermometer Used: T-330

Date: 10/22/18 Time: 1729

Initials: *[Signature]*

State of Origin: FL

For WW projects, all containers verified to ≤6 °C

Cooler #1 Temp. °C 4.3 (Visual) 0.0 (Correction Factor) 4.3 (Actual)
Cooler #2 Temp. °C 1.8 (Visual) 0.0 (Correction Factor) 1.8 (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	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Chain of Custody Filled Out	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Relinquished Signature & Sampler Name COC	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples Arrived within Hold Time	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Rush TAT requested on COC	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Sufficient Volume	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Correct Containers Used	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Sample Labels match COC (sample IDs & date/time of collection)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
All containers needing acid/base preservation have been checked	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Preservation Information Preservative _____ Lot #/Trace # _____ Date _____ Time _____ Initials _____
All Containers needing preservation are found to be in compliance with EPA recommendation Exceptions: VOA, Coliform, TOC, O&G, Carbamates	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Headspace in VOA Vials? (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

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

Comments/ Resolution (use back for additional comments):

Project Manager Review: _____ Date: _____