



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

Pace Project Number: 3550181  
Report Period: 2012/Q1

Client Project ID: Central Transfer Station SW

**Lab Sample ID**

**Client Sample ID**

3550181001  
3550181002  
3550181003

CTSSE Blank -021612  
CTSW-1  
Metals Trip Blank 021612

RECEIVED

MAY 03 2012

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Sincerely,

A handwritten signature in cursive script that reads 'Martha Montero'.

Martha Montero

**Florida Certifications:**

E83079 - Ormond Beach  
E86240 - South Florida



## CASE NARRATIVE SUMMARY

**Client Name: Palm Beach Solid Waste Authority**  
**Project Name: Central Transfer Station SW**

Pace Project Number: 3550181

Date Received: 02/16/2012

Report Date: 03/04/2012

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Order #: 3550181001

Pace Analytical Services, Inc.

Client: Palm Beach Solid Waste Authority

Project Name: Central Transfer Station

Diameter (in):  
 Depth to Water (ft):  
 Total Depth (ft):  
 Top of Casing (ft):  
 Evacuation (gal):

Sheen: No sheen  
 Color: Clear  
 Odor: No odor  
 Matrix: DI Water

**PARAMETER MONITORING REPORT**

Part III Analytical Results

Facility GMS #: C.O.A.F.5.E I & II  
 Test Side ID #: NA  
 Well Name: CTSSE Blank -021612  
 Classification of Ground Water: Equipment Blank  
 Groundwater Elevation (NGVD): \_\_\_\_\_

Sampling Date/Time: 02/16/2012 11:11  
 Report Period: 2012/Q1  
 Well Purge (Y/N): N  
 Well Type: ( ) Background  
 ( ) Intermediate  
 ( ) Compliance  
 ( 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		02/16/2012 11:11	3.7 umhos/cm	1.0	1.0	umhos/cm	1
000010	Field Temperature	Grab	N		02/16/2012 11:11	23.7 deg C	0.50	0.50	deg C	1
000664	Field pH	Grab	N		02/16/2012 11:11	6.83 Std. Units	0.10	0.10	Std. Units	1
082078	Turbidity	Grab	N		02/16/2012 11:11	0.11 NTU	1.0	1.0	NTU	1

**OTHER**

000593	Chloride	Grab	N	EPA 300.0	02/17/2012 11:39	<2.5 mg/L	2.5	5.0	mg/L	1
000620	Nitrate as N	Grab	N	EPA 300.0	02/17/2012 11:39	<0.025 mg/L	0.025	0.050	mg/L	1
000945	Sulfate	Grab	N	EPA 300.0	02/17/2012 11:39	<2.5 mg/L	2.5	5.0	mg/L	1
000599	Nitrogen, Ammonia	Grab	N	EPA 350.1	02/17/2012 08:10	<0.020 mg/L	0.020	0.050	mg/L	1
000601	Nitrogen, Kjeldahl, Total	Grab	N	EPA 351.2	02/21/2012 10:17	<0.086 mg/L	0.086	0.50	mg/L	1
000340	Chemical Oxygen Demand	Grab	N	EPA 410.4	02/21/2012 08:54	<12.5 mg/L	12.5	20.0	mg/L	1
000410	Alkalinity, Total as CaCO3	Grab	N	SM 2320B	02/21/2012 08:33	<5.0 mg/L	5.0	5.0	mg/L	1
000515	Total Dissolved Solids	Grab	N	SM 2540C	02/22/2012 14:43	<5.0 mg/L	5.0	5.0	mg/L	1
	Surfactants	Grab	N	SM 5540C	02/17/2012 13:40	<0.059 mg/L	0.059	0.20	mg/L	1

**INORGANICS**

001002	Arsenic	Grab	N	EPA 6010	02/17/2012 10:30	<5.0 ug/L	5.0	10.0	ug/L	1
001007	Barium	Grab	N	EPA 6010	02/17/2012 10:30	<5.0 ug/L	5.0	10.0	ug/L	1
001034	Chromium	Grab	N	EPA 6010	02/17/2012 10:30	<2.5 ug/L	2.5	5.0	ug/L	1
001045	Iron	Grab	N	EPA 6010	02/17/2012 10:30	<20.0 ug/L	20.0	40.0	ug/L	1
000572	Lead	Grab	N	EPA 6010	02/17/2012 10:30	<5.0 ug/L	5.0	10.0	ug/L	1
000929	Sodium	Grab	N	EPA 6010	02/17/2012 10:30	<0.50 mg/L	0.50	1.0	mg/L	1
001027	Cadmium	Grab	N	EPA 6020	02/29/2012 16:33	<0.050 ug/L	0.050	0.10	ug/L	1
001042	Copper	Grab	N	EPA 6020	02/20/2012 10:38	<0.93 ug/L	0.93	1.0	ug/L	1
001147	Selenium	Grab	N	EPA 6020	02/29/2012 16:33	<0.50 ug/L	0.50	1.0	ug/L	1
000576	Mercury	Grab	N	EPA 7470	02/23/2012 16:31	<0.10 ug/L	0.10	0.20	ug/L	1

**ORGANICS**

	Oil and Grease	Grab	N	EPA 1664A	02/24/2012 14:00	<1.5 mg/L	1.5	5.2	mg/L	1
	Total Petroleum Hydrocarbons	Grab	N	EPA 1664A	02/25/2012 18:07	<1.5 mg/L	1.5	5.2	mg/L	1

Order #: 3550181002

Pace Analytical Services, Inc.

Client: Palm Beach Solid Waste Authority

Project Name: Central Transfer Station

Diameter (in):  
 Depth to Water (ft):  
 Total Depth (ft):  
 Top of Casing (ft):  
 Evacuation (gal):

Sheen: No Sheen  
 Color: Very light yellow  
 Odor: No odor  
 Matrix: Surface Water

**PARAMETER MONITORING REPORT**

Part III Analytical Results

Facility GMS #: C.O.A.F.5.E I & II  
 Test Side ID #: PBCC09  
 Well Name: CTSW-1  
 Classification of Ground Water: SW-IIIIF  
 Groundwater Elevation (NGVD): \_\_\_\_\_

Sampling Date/Time: 02/16/2012 11:30  
 Report Period: 2012/Q1  
 Well Purge (Y/N): N  
 Well Type: ( ) Background  
 ( ) Intermediate  
 ( ) Compliance  
 ( 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	
<b>FIELD PARAMETERS</b>									
000537	Field Specific Conductance	Grab	N		02/16/2012 11:30	259 umhos/cm	1.0	1.0	umhos/cm 1
000010	Field Temperature	Grab	N		02/16/2012 11:30	22.8 deg C	0.50	0.50	deg C 1
000664	Field pH	Grab	N		02/16/2012 11:30	7.61 Std. Units	0.10	0.10	Std. Units 1
082078	Turbidity	Grab	N		02/16/2012 11:30	0.68 NTU	1.0	1.0	NTU 1
<b>OTHER</b>									
000593	Chloride	Grab	N	EPA 300.0	02/17/2012 11:51	29.0 mg/L	2.5	5.0	mg/L 1
000620	Nitrate as N	Grab	N	EPA 300.0	02/17/2012 11:51	<0.025 mg/L	0.025	0.050	mg/L 1
000945	Sulfate	Grab	N	EPA 300.0	02/17/2012 11:51	21.4 mg/L	2.5	5.0	mg/L 1
000599	Nitrogen, Ammonia	Grab	N	EPA 350.1	02/17/2012 08:11	<0.020 mg/L	0.020	0.050	mg/L 1
000601	Nitrogen, Kjeldahl, Total	Grab	N	EPA 351.2	02/21/2012 10:18	0.39 l mg/L	0.086	0.50	mg/L 1
000340	Chemical Oxygen Demand	Grab	N	EPA 410.4	02/21/2012 08:54	<12.5 mg/L	12.5	20.0	mg/L 1
000410	Alkalinity, Total as CaCO3	Grab	N	SM 2320B	02/21/2012 08:38	49.6 mg/L	5.0	5.0	mg/L 1
000515	Total Dissolved Solids	Grab	N	SM 2540C	02/22/2012 14:44	139 mg/L	5.0	5.0	mg/L 1
	Surfactants	Grab	N	SM 5540C	02/17/2012 13:40	0.060 l mg/L	0.059	0.20	mg/L 1
<b>INORGANICS</b>									
001002	Arsenic	Grab	N	EPA 6010	02/17/2012 10:34	<5.0 ug/L	5.0	10.0	ug/L 1
001007	Barium	Grab	N	EPA 6010	02/17/2012 10:34	<5.0 ug/L	5.0	10.0	ug/L 1
001034	Chromium	Grab	N	EPA 6010	02/17/2012 10:34	<2.5 ug/L	2.5	5.0	ug/L 1
001045	Iron	Grab	N	EPA 6010	02/17/2012 10:34	25.1 l ug/L	20.0	40.0	ug/L 1
000572	Lead	Grab	N	EPA 6010	02/17/2012 10:34	<5.0 ug/L	5.0	10.0	ug/L 1
000929	Sodium	Grab	N	EPA 6010	02/17/2012 10:34	19.1 mg/L	0.50	1.0	mg/L 1
001027	Cadmium	Grab	N	EPA 6020	02/29/2012 16:36	<0.050 ug/L	0.050	0.10	ug/L 1
001042	Copper	Grab	N	EPA 6020	02/20/2012 10:40	<0.93 ug/L	0.93	1.0	ug/L 1
001147	Selenium	Grab	N	EPA 6020	02/29/2012 16:36	<0.50 ug/L	0.50	1.0	ug/L 1
000576	Mercury	Grab	N	EPA 7470	02/24/2012 15:29	<0.10 ug/L	0.10	0.20	ug/L 1
<b>ORGANICS</b>									
	Oil and Grease	Grab	N	EPA 1664A	02/24/2012 14:00	<1.5 mg/L	1.5	5.4	mg/L 1
	Total Petroleum Hydrocarbons	Grab	N	EPA 1664A	02/25/2012 18:07	<1.5 mg/L	1.5	5.4	mg/L 1

Order # : 3550181003

Pace Analytical Services, Inc.

Client : Palm Beach Solid Waste Authority

Project Name : Central Transfer Station

Diameter (in) : null  
Depth to Water (ft) : null  
Total Depth (ft) : null  
Top of Casing (ft) : null  
Evacuation (gal) : null

Sheen : null  
Color : null  
Odor : null  
Matrix : null

**PARAMETER MONITORING REPORT**

Part III Analytical Results

Facility GMS # : C.O.A.F.5.E I & II  
Test Side ID # : Trip blank  
Well Name : Metals Trip Blank 021612  
Classification of Ground Water : null  
Groundwater Elevation (NGVD) : \_\_\_\_\_

Sampling Date/Time : 02/16/2012 00:00  
Report Period : 2012/Q1  
Well Purge (Y/N) : null  
Well Type : ( ) Background  
( ) Intermediate  
( ) Compliance  
( ) Other

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

**INORGANICS**

000572	Lead	Grab	N	EPA 200.8	02/20/2012 16:49	<0.50 ug/L	0.50	1.0	ug/L	1
001002	Arsenic	Grab	N	EPA 6010	02/17/2012 10:38	<5.0 ug/L	5.0	10.0	ug/L	1
001007	Barium	Grab	N	EPA 6010	02/17/2012 10:38	<5.0 ug/L	5.0	10.0	ug/L	1
001034	Chromium	Grab	N	EPA 6010	02/17/2012 10:38	<2.5 ug/L	2.5	5.0	ug/L	1
001045	Iron	Grab	N	EPA 6010	02/17/2012 10:38	<20.0 ug/L	20.0	40.0	ug/L	1
000572	Lead	Grab	N	EPA 6010	02/17/2012 10:38	<5.0 ug/L	5.0	10.0	ug/L	1
000929	Sodium	Grab	N	EPA 6010	02/17/2012 10:38	<0.50 mg/L	0.50	1.0	mg/L	1
001027	Cadmium	Grab	N	EPA 6020	02/29/2012 16:39	<0.050 ug/L	0.050	0.10	ug/L	1
001147	Selenium	Grab	N	EPA 6020	02/29/2012 16:39	<0.50 ug/L	0.50	1.0	ug/L	1
000576	Mercury	Grab	N	EPA 7470	02/24/2012 15:31	<0.10 ug/L	0.10	0.20	ug/L	1



# CHAIN-OF-CUSTODY / Analytical Request Document

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

3550181

**Section A**  
 Required Client Information:  
 Company: **PBSWA**  
 Address: **7501 N. 305th Rd**  
 Email To: **WRB** | **F** | **33412**

**Section B**  
 Required Project Information:  
 Report To: **Thomas Sims**  
 Copy To:

**Section C**  
 Invoice Information:  
 Attention: **1533862**  
 Company Name:  
 Address:  
 Pace Order No.:  
 Project Name: **Central County Transfer Station Surface Water**  
 Project Number:  
 Site Location: **RCRA**  
 STATE:

ITEM #	Section D Required Client Information	Matrix Codes MATRIX CODE	COLLECTED		SAMPLE TYPE (G=GRAB C=COMP)	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	Analysis Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
			COMPOSITE START	COMPOSITE END/GRAB								
1	CTSSWB-02/6/12	DW	2/6/12 11:11		SG	60						
2	CTSW-1	WT	2/6/12 11:30		SG	60						Surface Water
3		WW										Surface Water
4	Pretest Trip Blank 02/6/12	P				1						
5		SL										
6		OL										
7		WP										
8		AR										
9		TS										
10		OT										
11												
12												

**Section E**  
 ADDITIONAL COMMENTS:  
 Branch Agency 2/6/12 16:00  
 MCV - Lead 2/6/12 17:24  
 MCV - Lead 2/6/12 17:24

**Section F**  
 Relinquished by / Affiliation: **Branch Agency** DATE: **2/6/12** TIME: **16:00**  
 Accepted by / Affiliation: **MVC Pace** DATE: **2/6/12** TIME: **16:00**  
 Signature of Sampler: **Branch Agency** DATE SIGNED: **2/6/12**  
 Signature of Sampler: **Branch Agency** DATE SIGNED: **2/6/12**

**Section G**  
 Temp in °C: **30**

**Section H**  
 Received on: **Temp in °C**  
 Custody Sealed Cooler: **Temp in °C**  
 Samples Intact: **Temp in °C**

ORIGINAL

SAMPLER NAME AND SIGNATURE  
 PRINT Name of SAMPLER: **Branch Agency**  
 SIGNATURE of SAMPLER: **Branch Agency**  
 DATE SIGNED (MM/DD/YYYY): **2/6/12**

\*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace, Christina Raschke  
Page 4 of 33  
1<sup>st</sup> Quarter Letter dated 12/30/2011

CENTRAL COUNTY TRANSFER STATION SURFACE WATER

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

1 Surface Water: CTSW-1

1 Equipment Blank CTSSEB-

Parameters (Matrix: Surface Water)

A. Metals

Arsenic	Chromium	Lead	Sodium
Barium	Copper	Mercury	Selenium
Cadmium	Iron		

B. Indicator Parameters

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

C. Field Parameters

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

2 of 2

col #

533862

# SOLID WASTE AUTHORITY DIVISION OF ENVIRONMENTAL PROGRAMS SURFACE SITE DATA SHEET

Facility Identification: Central County Transfer Station    Facility GMS#

Sample Type: Grab

Sample Name: **CTSSEB - 021612**    Date: **2-16-12**  
Time: **11:11**

Depth of Sample: \_\_\_\_\_  
Description: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Notes and Comments  
Weather: **Partly sunny & warm**  
  
Conductivity on scale X US  
PH **2.0** in preservative

Field Parameters	Units	Standard Appearance
Temperature:	<b>23.7</b> C	Color: <b>clear</b>
Specific Cond:	<b>3.7</b> uMHOS/cm	
Redox Potential	<b>~</b>	Odor: <b>no odor no sheen</b>
PH:	<b>6.83</b> Std. Units	
Turb:	<b>0.11</b> NTU	
D.O.	Mg/L	

Bucket# **K**  
Beaker# **B**

Sample Container Inventory				
Quantity	Size	Type	Preservation	Analysis

Sampled By: *Brenda Ramsey*  
*M. J. ...*

Method of Shipment *Pace*



# 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: **2-16-12**  
Time: **11:30**

Depth of Sample: ≈ 4-6 "  
Description: Adjacent to Storm water structure in pond  
Meter in box 807610  
staff gauge (S)  
9.03  
staff gauge N  
8.06  
meter insd 050989  
meter insd 031013

Notes and Comments

Weather: Pty sunny  
warm  
Conductivity on scale X65  
PH < 2.0 in preservative

Field Parameters	Units	Standard Appearance
Temperature:	<u>22.8</u> C	Color: <u>Very light yellow</u> Odor: <u>no odor</u> <u>no sheen</u>
Specific Cond: <u>(B)</u> <u>259</u>	uMHOS/cm	
Specific Cond: ATC <u>259</u>	uMHOS/cm	
PH: <u>7.61</u>	Std. Units	
Turb: <u>0.68</u>	NTU	
D.O.	Mg/L	

Bucket# K  
Beaker# B

Sample Container Inventory

Quantity	Size	Type	Preservation	Analysis

Sampled By: Brandi Daemy  
Maulding

Method of Shipment Parcel

**Sample Condition Upon Receipt Form (SCUR)**

Table Number: \_\_\_\_\_



Client Name: PBSWA

Project # \_\_\_\_\_

3550181

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace

Other \_\_\_\_\_

Tracking # \_\_\_\_\_

Custody Seal on Cooler/Box Present:  yes  no    Seals intact:  yes  no

Date and Initials of person examining contents: JP 2/16/18

Packing Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_

Thermometer Used T109    Type of Ice:  Wet  Blue  None

Cooler Temperature °C 3.0 (Visual) 0.5 (Correction Factor) 3.5 (Actual)

(Temp should be above freezing to 0°-5°C). If below 0°C, then was sample frozen?

Yes  No

Receipt of samples satisfactory:  Yes  No

Rush TAT requested on COC: \_\_\_\_\_

If yes, then all conditions below were met

If no, then mark box & describe issue (use comments area if necessary):

Chain of Custody Present	<input type="checkbox"/>
Chain of Custody Filled Out	<input type="checkbox"/>
Relinquished Signature & Sampler Name COC	<input type="checkbox"/>
Samples Arrived within Hold Time	<input type="checkbox"/>
Sufficient Volume	<input type="checkbox"/>
Correct Containers Used	<input type="checkbox"/>
Containers Intact	<input type="checkbox"/>
Sample Labels match COC (sample IDs & date/time of collection)	<input type="checkbox"/>
	No Labels: <input type="checkbox"/> No Time/Date on Labels: <input type="checkbox"/>
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/>
No Headspace in VOA Vials (>6mm):	<input type="checkbox"/>

Client Notification/ Resolution:

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution (use back for additional comments):  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Project Manager Review: \_\_\_\_\_ Date: \_\_\_\_\_

**Finished Product Information Only**

F.P. Sample ID: \_\_\_\_\_

**Size & Qty of Bottles Received**

Production Code: \_\_\_\_\_

\_\_\_\_\_ x 5 Gal

Date/Time Opened: \_\_\_\_\_

\_\_\_\_\_ x 2.5 Gal

\_\_\_\_\_ x 1 Gal

Number of Unopened Bottles Remaining: \_\_\_\_\_

\_\_\_\_\_ x 1 Liter

\_\_\_\_\_ x 500 mL

\_\_\_\_\_ x 250 mL

\_\_\_\_\_ x Other: \_\_\_\_\_

Extra Sample in Shed:    Yes    No