



NELAP Certificate No. E86006



1460 West McNab Road
Fort Lauderdale, FL 33309
1-800-ANALYTE Phone
(954) 978-6400 Phone
(954) 978-2233 Fax

RECEIVED
MARCH 3, 2023

Ground Water Monitoring Report

Solid Waste Authority - Palm Beach County
Hydrogeologist
7501 North Jog Road
West Palm Beach, FL 33412

Date Received: 01/26/2023 15:55
Date Reported: 02/24/2023 15:53
Report Period: 2023Q1

Project Name: Central County Transfer Station Surface Water
Lab Work Order (COC): 23A0968

Laboratory Sample #

23A0968-01
23A0968-02
23A0968-03

Client Sample #

CTSSE Blank 012623
CTSW-1
Metal Trip Blank 012623



Central County Transfer Station Surface Water

Lab ID: 23A0968-01

Diameter (in):

Sheen: No

Depth to Water (ft):

Color: Clear

Top of Casing (ft):

Odor: No

Total Depth (ft):

Matrix: DI Water

Parameter Monitoring Report

WACS Facility ID #:	PBCC01	Sampling Date/Time:	01/26/23 09:30
WACS Test Site ID#:	N/A	Report Period:	2023Q1
Well Name:	CTSSE Blank 012623	Well Purge (Y/N):	
GW Classification:	N/A	Well Type:	Background Compliance
GW Elevation (NGVD):			Intermediate Other (X)

Storet Code	Parameter	Sample Method Grab/Comp	Field Filter Y/N	Analysis Method	Analysis Date/Time	Analysis Results/Units	Detection Limits/Units MDL	PQL	Dil Factor
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Field Parameter (s) (See Notes and Definitions Page)

00402	Specific Conductance (field)	GRAB	N	FDEP SOP	01/26/2023 09:30	3.55 umhos/cm@25°C	umhos/cm@25°C		1
00406	pH (Field) at 25°C	GRAB	N	FDEP SOP	01/26/2023 09:30	6.17 S.U.	S.U.		1
	Temperature (field)	GRAB	N	FDEP SOP	01/26/2023 09:30	22.3 °C	°C		1
	Turbidity (Field)	GRAB	N	FDEP SOP	01/26/2023 09:30	0.15 NTU	NTU		1

Classical Chemistry Parameters

	Oil & Grease (HEM)	GRAB	N	EPA 1664	01/30/2023 18:12	<1.30 mg/L	1.30	3.90 mg/L	1
	TRPH	GRAB	N	EPA 1664	01/31/2023 17:15	<1.39 mg/L	1.39	4.18 mg/L	1

Wet Chemistry

	Total Alkalinity	GRAB	N	EPA 310.2	01/28/2023 13:34	<3.74 mg/L	3.74	10.0 mg/L	1
00151	Ammonia as N	GRAB	N	EPA 350.1	01/27/2023 13:05	<0.00620 mg/L	0.00620	0.0200 mg/L	1
00940	Chloride	GRAB	N	EPA 300.0	01/27/2023 20:35	<0.126 mg/L	0.126	0.500 mg/L	1
	Chemical Oxygen Demand	GRAB	N	EPA 410.4	01/28/2023 13:15	<2.54 mg/L	2.54	10.0 mg/L	1
	MBAS as LAS, mol wt. 340	GRAB	N	SM5540C	01/27/2023 16:00	<0.0220 mg/L	0.0220	0.100 mg/L	1
71851	Nitrate as N	GRAB	N	EPA 300.0	01/27/2023 20:35	<0.00720 mg/L	0.00720	0.0750 mg/L	1
00945	Sulfate	GRAB	N	EPA 300.0	01/27/2023 20:35	<0.0953 mg/L	0.0953	0.500 mg/L	1
00134	Total Dissolved Solids	GRAB	N	SM 2540C	02/01/2023 20:05	<10.0 mg/L	10.0	30.0 mg/L	1
81393	Total Kjeldahl Nitrogen	GRAB	N	EPA 351.2	02/07/2023 14:25	<0.184 mg/L	0.184	0.552 mg/L	1

Total Recoverable Metals by EPA 200 Series Methods

01002	Arsenic	GRAB	N	EPA 200.8	01/30/2023 11:40	<0.115 ug/L	0.115	0.500 ug/L	1
01027	Cadmium	GRAB	N	EPA 200.8	01/30/2023 11:40	<0.0251 ug/L	0.0251	0.200 ug/L	1
01042	Copper	GRAB	N	EPA 200.8	01/30/2023 11:40	<1.01 ug/L	1.01	4.00 ug/L	1
01051	Lead	GRAB	N	EPA 200.8	01/30/2023 11:40	<0.0638 ug/L	0.0638	0.500 ug/L	1
71900	Mercury	GRAB	N	EPA 200.8	01/30/2023 17:56	<0.0116 ug/L	0.0116	0.100 ug/L	1

Metals by EPA 6000/7000 Series Methods

01007	Barium	GRAB	N	EPA 6010/3010	01/27/2023 15:38	<0.0962 ug/L	0.0962	1.00 ug/L	1
01034	Chromium	GRAB	N	EPA 6010/3010	01/27/2023 15:38	<0.513 ug/L	0.513	5.00 ug/L	1
01045	Iron	GRAB	N	EPA 6010/3010	01/27/2023 15:38	<1.69 ug/L	1.69	10.0 ug/L	1
01147	Selenium	GRAB	N	EPA 6010/3010	01/27/2023 15:38	<4.39 ug/L	4.39	15.0 ug/L	1
00934	Sodium	GRAB	N	EPA 6010/3010	01/27/2023 15:38	<0.521 mg/L	0.521	2.00 mg/L	1



Central County Transfer Station Surface Water

Lab ID: 23A0968-02

Diameter (in):

Sheen: No

Depth to Water (ft):

Color: Yellow

Top of Casing (ft):

Odor: No

Total Depth (ft):

Matrix: Surface Water

Parameter Monitoring Report

WACS Facility ID #:	PBCC01	Sampling Date/Time:	01/26/23 09:47
WACS Test Site ID#:	PBCC09	Report Period:	2023Q1
Well Name:	CTSW-1	Well Purge (Y/N):	
GW Classification:	SW-IIIF	Well Type:	Background Compliance
GW Elevation (NGVD):	N/A		Intermediate Other (X)

Storet Code	Parameter	Sample Method Grab/Comp	Field Filter Y/N	Analysis Method	Analysis Date/Time	Analysis Results/Units	Detection Limits/Units MDL	PQL	Dil Factor
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Field Parameter (s) (See Notes and Definitions Page)

00402	Specific Conductance (field)	GRAB	N	FDEP SOP	01/26/2023 09:47	383 umhos/cm@25°C	umhos/cm@25°C		1
00406	pH (Field) at 25°C	GRAB	N	FDEP SOP	01/26/2023 09:47	8.39 S.U.	S.U.		1
	Temperature (field)	GRAB	N	FDEP SOP	01/26/2023 09:47	23.0 °C	°C		1
	Turbidity (Field)	GRAB	N	FDEP SOP	01/26/2023 09:47	6.49 NTU	NTU		1

Classical Chemistry Parameters

	Oil & Grease (HEM)	GRAB	N	EPA 1664	01/30/2023 18:12	<1.30 mg/L	1.30	3.90 mg/L	1
	TRPH	GRAB	N	EPA 1664	01/31/2023 17:15	<1.39 mg/L	1.39	4.18 mg/L	1

Wet Chemistry

	Total Alkalinity	GRAB	N	EPA 310.2	01/28/2023 13:34	106 mg/L J3	3.74	10.0 mg/L	1
00151	Ammonia as N	GRAB	N	EPA 350.1	01/27/2023 13:05	<0.00620 mg/L	0.00620	0.0200 mg/L	1
00940	Chloride	GRAB	N	EPA 300.0	01/27/2023 20:52	44.2 mg/L	0.126	0.500 mg/L	1
	Chemical Oxygen Demand	GRAB	N	EPA 410.4	01/28/2023 13:15	61.7 mg/L	2.54	10.0 mg/L	1
	MBAS as LAS, mol wt. 340	GRAB	N	SM5540C	01/27/2023 16:00	0.0260 mg/L I	0.0220	0.100 mg/L	1
71851	Nitrate as N	GRAB	N	EPA 300.0	01/27/2023 20:52	<0.00720 mg/L	0.00720	0.0750 mg/L	1
00945	Sulfate	GRAB	N	EPA 300.0	01/27/2023 20:52	13.8 mg/L	0.0953	0.500 mg/L	1
00134	Total Dissolved Solids	GRAB	N	SM 2540C	02/01/2023 20:05	228 mg/L	20.0	60.0 mg/L	2
81393	Total Kjeldahl Nitrogen	GRAB	N	EPA 351.2	02/07/2023 14:25	0.601 mg/L	0.184	0.552 mg/L	1

Total Recoverable Metals by EPA 200 Series Methods

01002	Arsenic	GRAB	N	EPA 200.8	01/30/2023 11:45	1.50 ug/L	0.115	0.500 ug/L	1
01027	Cadmium	GRAB	N	EPA 200.8	01/30/2023 11:45	<0.0251 ug/L	0.0251	0.200 ug/L	1
01042	Copper	GRAB	N	EPA 200.8	01/30/2023 11:45	4.02 ug/L	1.01	4.00 ug/L	1
01051	Lead	GRAB	N	EPA 200.8	01/30/2023 11:45	0.164 ug/L I	0.0638	0.500 ug/L	1
71900	Mercury	GRAB	N	EPA 200.8	01/30/2023 17:58	<0.0116 ug/L	0.0116	0.100 ug/L	1

Metals by EPA 6000/7000 Series Methods

01007	Barium	GRAB	N	EPA 6010/3010	01/27/2023 15:49	10.6 ug/L	0.0962	1.00 ug/L	1
01034	Chromium	GRAB	N	EPA 6010/3010	01/27/2023 15:49	0.800 ug/L I	0.513	5.00 ug/L	1
01045	Iron	GRAB	N	EPA 6010/3010	01/27/2023 15:49	49.9 ug/L	1.69	10.0 ug/L	1
01147	Selenium	GRAB	N	EPA 6010/3010	01/27/2023 15:49	<4.39 ug/L	4.39	15.0 ug/L	1
00934	Sodium	GRAB	N	EPA 6010/3010	01/27/2023 15:49	24.4 mg/L	0.521	2.00 mg/L	1



Central County Transfer Station Surface Water

Lab ID: 23A0968-03

Diameter (in):

Sheen:

Depth to Water (ft):

Color:

Top of Casing (ft):

Odor:

Total Depth (ft):

Matrix: DI Water

Parameter Monitoring Report

WACS Facility ID #:

Sampling Date/Time: 01/26/23 09:47

WACS Test Site ID#:

Report Period: 2023Q1

Well Name: Metal Trip Blank 012623

Well Purge (Y/N):

GW Classification:

Well Type: Background

Compliance

GW Elevation (NGVD):

Intermediate

Other

(X)

Storet Code	Parameter	Sample Method Grab/Comp	Field Filter Y/N	Analysis Method	Analysis Date/Time	Analysis Results/Units	Detection Limits/Units		Dil Factor
							MDL	PQL	

Total Recoverable Metals by EPA 200 Series Methods

01002	Arsenic	GRAB		EPA 200.8	01/30/2023 11:49	<0.115 ug/L	0.115	0.500 ug/L	1
01027	Cadmium	GRAB		EPA 200.8	01/30/2023 11:49	<0.0251 ug/L	0.0251	0.200 ug/L	1
01042	Copper	GRAB		EPA 200.8	01/30/2023 11:49	<1.01 ug/L	1.01	4.00 ug/L	1
01051	Lead	GRAB		EPA 200.8	01/30/2023 11:49	<0.0638 ug/L	0.0638	0.500 ug/L	1
71900	Mercury	GRAB		EPA 200.8	01/30/2023 18:00	<0.0116 ug/L	0.0116	0.100 ug/L	1

Metals by EPA 6000/7000 Series Methods

01007	Barium	GRAB		EPA 6010/3010	01/27/2023 15:50	<0.0962 ug/L	0.0962	1.00 ug/L	1
01034	Chromium	GRAB		EPA 6010/3010	01/27/2023 15:50	<0.513 ug/L	0.513	5.00 ug/L	1
01045	Iron	GRAB		EPA 6010/3010	01/27/2023 15:50	<1.69 ug/L	1.69	10.0 ug/L	1
01147	Selenium	GRAB		EPA 6010/3010	01/27/2023 15:50	<4.39 ug/L	4.39	15.0 ug/L	1
00934	Sodium	GRAB		EPA 6010/3010	01/27/2023 15:50	<0.521 mg/L	0.521	2.00 mg/L	1

Notes and Definitions

U	Indicated that the compound was analyzed for but not detected. This shall be used to indicate that the specific component was not detected. The value associated with the qualifier shall be the laboratory method detection limit.
J3	The matrix spike recovery outside method acceptance limits indicating matrix interference.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the detection limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
N.O.O.	No Odor Observed
REP	Field parameter measured by client
V	Indicated that the analyte was detected in both the sample and the associated method blank.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
Z	Too many colonies were present for accurate counting.
SUB	Work performed by outside (subcontracted) labs denoted by SUB in analyst field.

QC=Qualifier Codes as defined by DEP 62-160

Unless indicated, soil results are reported on actual (wet) weight basis.

The Color SM2120B method is reported as (Color / pH)

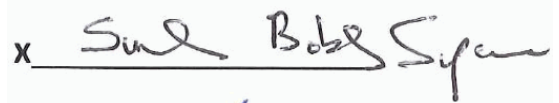
Legionella analyzed under CDC accreditation program

Dilution factors ≥ 1000 are abbreviated using k=1000 and M=1000000

Field parameters are not NELAP accredited.

Results relate only to this sample.

Suresh (Bobby) Supan - CSM



Authorized CSM Signature (954) 978-6400
Florida-Spectrum Environmental Services, Inc.
Certification# E86006

All NELAP certified analysis are performed in accordance with Chapter 64E-1 Florida Administrative code, which has been determined to be equivalent to NELAC standards. Analysis certified by programs other than NELAP are designated with a "-".

WORK ORDER #
PBC SWA



CHAIN OF CUSTODY RECORD

COC# A 08378

DUE DATE Requested
RUSH RESERVATION #

Tel: (954) 978-6400 Fax: (954) 978-2233
Tel: (912) 238-5050 Fax: (912) 234-4815
Tel: (863) 285-8145 Fax: (863) 285-7030
Tel: (863) 763-3336 Fax: (863) 763-1544
Tel: (863) 686-4271

1460 W. McNab Road, Ft. Lauderdale, FL 33309
108 Airport Park Dr., Garden City, GA 31408
1528 Gooch Rd., Fort Meade, FL 33841
40 Parrot Ave. N., Okeechobee, FL 34972
111 E. Easton Drive, Lakeland, FL 33803

Report to: Original-Return w/report **Yellow-Lab File Copy** **Pink - Sampler Copy**

Invoice to: (company name) **561 640-3400**

Project Name: Central county Transfu station sulfate water

Contact: Antonis Richards **Phone:** **561 640-3400**

Sampler Name: Manny Alvarez **Affiliation:**

ORDER #	Lab Control Number	Shaded Areas For Laboratory Use Only	Sample ID	Date Sampled	Time Sampled	Matrix	Bottle & Pres.	Number of Containers Received & NELAC Letter Suffixes A-?	Sampler Signature	Analysis Required				Date/Time	
										T	P	C	C		
										See page	Letter of:				
01			CTSSE BICINF G1223	1/26/23	9:30	DI	AP	4	Manny Alvarez	4	12/15/2022				
02			CTSW-1 MA	1/26/23	9:47	SW	↓	4							
03			Metal TNP Blank 012625	1/26/23	9:47	DI	AI	1							
Special Comments:										Relinquished by:		Affiliation		Date/Time	
"I waive TNI protocol" (emergency) (sig here) >										Manny Alvarez		1/26/23		12/12	
Deliverables:										Received by:					
Sample Custody & Field Comments										Relinquished by:					
Received on Ice:										Relinquished by:					
Temp as received:										Relinquished by:					
Custody seals?										Relinquished by:					
RAD-9										Relinquished by:					
FIELD TIME										Relinquished by:					
Sampling _____ hrs Pick Up _____ hrs										Relinquished by:					
Misc. Charges										Relinquished by:					

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 - (*Note: Arsenic, Cadmium & Lead by EPA Method 200.8)

Arsenic	Chromium	Lead	Sodium
Barium	Copper	Mercury	Selenium
Cadmium	Iron		

B. Indicator Parameters

Total Ammonia	Nitrate	Oil & Grease
Total Alkalinity	TKN	Sulfate
COD	TDS	Chloride
TRPH (Total Recoverable Petroleum Hydrocarbons)		
Foaming Agents (MBAS)		

C. Field Parameters

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

READ STAFF GUAGE

READ METER AT MASTER PUMP STATION

Page 2 of 2

COC# 08378

Dated: 01/26/23

Solid Waste Authority of Palm Beach County Equipment Blank – Surface Water

SITE NAME: Central County Transfer Station Surface Water	WACS Facility ID: PBCC01	DATE: 01/26/2023
Sample name: CTSSE Blank 012623	WACS Test Site ID: N/A	SAMPLE TIME: 9:30
Matrix: DI Water	Site Location: 1810 Lantana Road - Lantana, FL	

Description: Equipment Blanks are collected before sampling. Laboratory supplied DI water is poured into the pre-cleaned equipment and then poured into sample bottles.			
Classification of Ground Water: N/A		Weather Conditions: Overcast + cool	
Sample Method: GRAB	Stainless Steel Bucket #: J	Stainless Steel Beaker #: P	DI Water Lot # 11/16/22

Equipment Blank - Field Data

FIELD VALUES →	pH	TEMP. (°C)	COND. (µmhos)	DISSOLVED OXYGEN (mg/L) NOT REQUIRED	TURBIDITY (NTUs)
	6.17	22.3	3.55		0.15
Color: Clear	Odor: NO	Sheen: NO	Comments: Metal Trip Blank 012623		Cooler # 019

SAMPLING DATA

FIELD DECONTAMINATION: No			FIELD-FILTERED: No			DUPLICATE: Y <input type="radio"/> N <input checked="" type="radio"/>	
SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (mL)	FINAL pH		
1	HDPE	1- LITER	HNO3	None	<2.0	Metals	
2	HDPE		H2SO4	None	<2.0	Ammonia, COD, TKN	
3			H2SO4	None	<2.0	OIL & GREASE, TRPH	
MATERIAL CODES: AG = AMBER GLASS; CG = CLEAR GLASS; HDPE = HIGH DENSITY POLYETHYLENE; O = OTHER (SPECIFY)							
SAMPLED BY (PRINT) ANTONIO RICHARD Manny Alvarez				SAMPLER(S) SIGNATURE(S) 			

**Solid Waste Authority of Palm Beach County
SURFACE WATER SAMPLING LOG**

SITE NAME: Central County Transfer Station - Surface Water		WACS Facility ID: PBCC01		DATE: 01/26/2023
Sample name: CTSW-1	Matrix: Surface Water	WACS Test Site ID: PBCC09		SAMPLE TIME: 9:47
Sample Location: 1810 Lantana Road Lantana, FL.		Description: Adjacent to Storm Water Structure on East side in pond		Discharge Elevation: ft NGVD. N/A
Classification of Surface water: SW-IIIF	Depth of Sample: 6"-8"	Staff Gauge Reading: S Side of pond 7.88 (ft NGVD)		Weather Conditions: Overcast + cool
Discharging No Discharge Structure exists	Sample Method GRAB	Stainless Steel Bucket # J	Stainless Steel Beaker # P	Cooler # 019

Surface Water - Field Data

FIELD VALUES →			Other	pH	TEMP. (°C)	COND. (µmhos)	DISSOLVED OXYGEN (mg/L) NOT REQUIRED	TURBIDITY (NTUs)	
				8.39	23.0	383		6.49	
Color: Yellow	Odor: NO	Sheen: NO	Surface Water Conditions (Aquatic Vegetation coverage, is DS full or dry) NO vegetation Metal Trip Blank 012623					Meter Reading: 180199	

SAMPLING DATA

FIELD DECONTAMINATION: No			FIELD-FILTERED: No			DUPLICATE: Y <input checked="" type="radio"/> N		
SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (mL)	FINAL pH			
1	HDPE		HNO3	None	2.0	Metals		
2	HDPE		H2SO4	None	2.0	Ammonia, COD, TKN		
3	AG		H2SO4	None	2.0	OIL & GREASE, TRPH		
MATERIAL CODES: AG = AMBER GLASS; CG = CLEAR GLASS; HDPE = HIGH DENSITY POLYETHYLENE; O = OTHER (SPECIFY)								
SAMPLED BY (PRINT) Manuy Alvarez ANTONIO RICHARDS					SAMPLER(S) SIGNATURE(S) 			