

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

MARATHON BRANCH OFFICE 2796 OVERSEAS HIGHWAY, SUITE 221 MARATHON, FLORIDA 33050 RICK SCOTT GOVERNOR

CARLOS LOPEZ-CANTERA LT. GOVERNOR

JONATHAN P. STEVERSON SECRETARY

SENT VIA ELECTRONIC MAIL

February 23, 2015

Mr. Roy Coley, Director of Operations 1100 Kennedy Drive Key West, Florida 33040

Email: rcoley@fkaa.com

Re: Compliance Assistance Offer

Big Coppitt Regional Wastewater Treatment Plant

FLA567591 Monroe County

Dear Mr. Coley,

A Compliance Sampling Inspection was conducted at your Facility on January 28, 2015, under the authority of Section 403.091, Florida Statutes (F.S.). During this inspection, possible violations of Chapter 403, F.S. and Chapters 62-620 and 62-160 Florida Administrative Code (F.A.C.) were observed. The purpose of this letter is to offer you compliance assistance as a means of resolving these matters.

Please see the attached inspection report for a full account of Department observations and be advised this Compliance Assistance Offer is part of an agency investigation preliminary to agency action in accordance with Section 120.57(5), F.S. We request you review the items of concern noted in the attached inspection report and respond in writing within 15 days of receipt of this Compliance Assistance Offer. Your written response should either:

- 1. Describe what you have done to resolve the issue
- 2. Provide information that either mitigates the concerns or demonstrates them to be invalid, or
- 3. Arrange for one of our inspectors to visit your Facility to offer suggested actions to return to compliance without enforcement.

It is the Department's desire that you are able to document compliance or corrective actions concerning the possible violations identified in the attached inspection report so that this matter can be closed without enforcement. Your failure to respond promptly in writing (or by e-mail) may result in the initiation of formal enforcement proceedings.



Big Coppitt Regional Wastewater Treatment Plant FLA567591 Compliance Assistance Offer Page 2 of 2

Please address your response and any questions to Devon Villareal of the Marathon Branch Office at (305)289-7075 or via e-mail at Devon.Villareal@dep.state.fl.us. We look forward to your cooperation with this matter.

Sincerely,

Jennifer Carpenter

Jennefer L. Carperter

Assistant Director South District Office

South District Office

Enclosure: Inspection Report

ec: Teddy Knowles, Lead Operator, (tknowles@fkaa.com)

Tom Pfiester, Operations Manager, (tpfiester@fkaa.com)

Maria Labrador, Environmental Protection Agency, (labrador.maria@epa.gov)

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

@ = Optional

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

Name :	Name and Physical Location of Facility WAFR ID: County Entry Date/Time									
Big (Coppitt WWTP	FLA567591	Monroe		1/28/2015 10	:17:00 AM				
1100	Kennedy Drive P. O. Bo	x 1239)			Phone		@ Exit Date/Time		
Key	West, FL 33041 - 1239					(305) 296-245	54	1/28/2015 1:3	34:00 PM	
Name(s) of Field Representatives(s)		Title			Email		Phone		
Tedo	dy Knowles		Lead Operator			tknowles@fkaa.c	<u>om</u>	305-393-597	0	
Name	and Address of Permittee or Desi	gnated R	epresentative Title			Phone		@ Operator Cer	tification #	
Roy	Coley		Director	of Ope	erations	(305) 296-24	454	WWA001528	32	
1100 Kennedy Drive Email										
Key	Key West, FL 33040 <u>rcoley@fkaa.com</u>									
Inspec	tion Type: C S I	Sam	ples Taken(Y/N): Y	a	Sample ID#:	BC012815	s	Samples Split (Y/N): Y	
<u>X</u> I	Domestic Industr	ial	Were Photos Taken(Y/	N): Y		@ Log book Volume	:	@ Pag	e	
			LITY COMPLIA! Minor Out of Compliance; NA: Not Applicable;	NC: O	ut of Comp	oliance SC: Significa		n-Compliance;		
		e Critei	ria Should be Reviewed Wh		of Complia	ance Ratings Are Gi	ven in			
	PERMITS/ORDERS		SELF MONITORING PROGRAM		FACILIT	Y OPERATIONS		EFFLUENT/DI	SPOSAL	
IC	1.♦Permit	IC	3. Laboratory	IC		ty Site Review	IC	9. ♦Effluent (
NE	2.♦Compliance Schedules	MC	4. Sampling	IC		Measurement	IC	10. ♦ Effluent I		
	IC 5.◆Records & Reports IC 8.◆Operation & Maintenance IC 11. Biosolids/Sludge NA 12. Groundwater									
NA	14. Other:						NE NE	13. SSO Surv		
Facility and/or Order Compliance Status: _ In-Compliance _ Significant-Out-Of-Compliance _ Significant-Out-Of-Compliance										
Recom	mended Actions:									
Name(Name(s) and Signature(s) of Inspector(s) District Office/Phone Number Date									
Devon Villareal										
Devo	on Villareal Leven	Villar	eal			SDB/ (305)289	9-7070	2/0/13		
Devo	on Villareal Auon	Villar	eal			SDB/ (305)289	<i>9</i> -7070	2/0/13		
	enature of Reviewer e Loughlin					District Office/Phone SD/ (239) 344-:	· Number			

INSPECTION REPORT SUMMARY

Facility Name: Big Coppitt WWTP

Facility ID: FLA567591 **Inspection Type:** CSI

Inspection Date: 1/28/2015 4:28:00 PM

FACILITY BACKGROUND:

Facility Address: 1100 Kennedy Drive P. O. Box 1239, Key West, FL 33041 - 1239, Monroe County **Program/ Permit Information:** DW, permit issue date: 11/6/2012, expiration date: 11/5/2017

Treatment Summary: Three SBRs with filtration and chlorinated effluent to injection wells or reuse

Permitted Capacity: 0.323 MGD

1. **Permit:** RATING – IN COMPLIANCE

1.1 Observation: A copy of the permit was onsite and available to plant personnel.

2. Compliance Schedules: RATING – NOT EVALUATED

2.1 Observation: No observations were recorded.

- 3. Laboratory: RATING IN COMPLIANCE
 - 3.1 <u>Observation:</u> The laboratory is certified by the Department of Health.

<u>Additional Comments</u>: The Facility utilizes Flowers Chemical Laboratories Altamonte (E83018) and Marathon (E35824) for analysis of influent and effluent samples.

4. Sampling: RATING – MINOR OUT-OF-COMPLIANCE

4.1 Deficiency Description: Field meters were not properly calibrated.

Additional Comments: Primary calibration verification for Field Chlorine must be performed at least annually. In addition, a pH meter calibration could not be performed at the time of the inspection. The pH field meter did not appear to be functioning as intended. The operator stated that he is researching a new field pH meter. In addition, upon procurement of a primary standard, he will perform the primary chlorine verification.

Permit/Rule or Other Reference: Florida Administrative Code (F.A.C.) Rule 62-620.610(1) and Section 403.161, Florida Statutes (F.S.) state that the Facility shall be operated in compliance with the Permit. Section IX(18)(e) of the Permit states that field activities, including on-site tests and sample collection, shall follow the applicable Standard Operating Procedures (SOPs) described in DEP-SOP-001/01 adopted by reference in Chapter 62-160, F.A.C. Please review DEP SOP FT 2000. Field Measurement of Residual Chlorine and DEP SOP FT 1100. Field Measurement of pH.

http://www.dep.state.fl.us/water/sas/sop/sops.htm

4.2 Deficiency Description: DEP SOPs were not being followed.

Additional Comments: The influent flow proportioned composite sampler (ISCO 6712FR) did not collect a sufficient aliquot of 100 mL at the time of the inspection. The operator stated on February 16, 2015 that he worked with an ISCO technician and was able to adjust the aliquot volume to collect the correct amount.

<u>Permit/Rule or Other Reference:</u> DEP SOP FS 2400. Wastewater Sampling, FS 2430. Wastewater Sampling Techniques, 2. Automatic Samplers, 2.1.1.6. requires, for a flow proportional sample, that the sampler be programmed to collect a minimum of 100 mL for each sample interval, with the interval predetermined based on the flow of the waste stream. Please review DEP SOP FS 2400. Wastewater Sampling.

4.3 Observation: Safe and dry access to influent and effluent sampling points are provided.

- 4.4 Observation: Calibration standards/buffers were within the expiration dates.
- 4.5 Deficiency Description: Please see specific comment

Additional Comments: Certification for the influent and effluent composite sampler NIST calibrated thermometers could not be located at the time of the inspection. The thermometers must be calibrated against a NIST thermometer annually or replaced annually with a new, calibrated thermometer. The operator stated on February 16, 2015 that new, calibrated thermometers were ordered February 12, 2015 and the certificates will be maintained in his field lab onsite.

<u>Permit/Rule or Other Reference:</u> DEP SOP FS 1000-12 requires thermometers in refrigerators to be checked annually against a certified thermometer.

4.6 Deficiency Description: Please see specific comment

Additional Comments: Please ensure that all samples are preserved as required within 15 minutes of the end of the composite. The operator has begun a 24 hour composite so that nutrient samples may be acidified within 15 minutes of the end of the composite when an operator is available onsite.

<u>Permit/Rule or Other Reference:</u> DEP SOP FS 1000. General Sampling Procedures, FS 1006. Preservation, Holding Times, and Container Types, 3. Preserving Composite Water Samples, 3.2. states that when chemical preservation is also required, begin the preservation process within 15 minutes of the last collected sample.

4.7 <u>Deficiency Description</u>: Please see specific comment.

<u>Additional Comments</u>: Please ensure that a record of the composite sampler tubing replacement is documented in the operator's maintenance log. Tubing must be replaced every six months and an equipment blank performed.

Permit/Rule or Other Reference: DEP SOP FS 2400. Wastewater Sampling, FS 2430. Wastewater Sampling Techniques, 2. Automatic Samplers, 2.1.1. recommends replacing the tubing for automatic samplers deployed for extended periods at a minimum of every six months. Further, if there is evidence of loss of elasticity or discoloration or other conditions that would impact the quality of the sample (such as algal growth), or the pumping flow rate, then replace the tubing. 2.1.1.1. Cut the proper length of precleaned tubing. 2.1.1.2. requires collection of equipment blanks each time the tubing is changed or at a frequency of 5% of the tubing changes, whichever is less. Collect a minimum of one blank each year by passing analyte-free water through the equipment that is exposed to the sample. FD 3000. Documentation of Equipment Maintenance, 1. Requires that all maintenance and repairs performed, including routine cleaning procedures, are logged including the calendar date for the procedures performed, record names of personnel performing the maintenance or repair tasks. Designate the identity of specific instrumentation in the documentation with a unique description code for each instrument including manufacturer name, model number, serial number, inventory number, or other unique identification.

5. **Records and Reports:** RATING – IN COMPLIANCE

5.1 <u>Observation:</u> *General* – A copy of the current laboratory certification was not available at the time of the inspection (62-620.350(1) F.A.C.).

<u>Additional Comments</u>: The operator received the current laboratory certifications on January 29, 2015 and placed them onsite.

- 5.2 Observation: General Operators' certifications were current and available on-site.
- 5.3 Observation: General The certified operator's daily logbook was complete.
- 5.4 Observation: General Entries in the operator log were clear, concise, informative, and relevant.
- 5.5 <u>Observation:</u> *General* A review of the Discharge Monitoring Reports (DMRs) revealed the following.

Additional Comments: Advised the operator to review turbidity at the time of the daily, Total Suspended Solids (TSS) reuse grab sample. TSS exceedances to reuse have been reported in the last twelve months (see "Effluent Quality" section). Additional information at the time of the TSS sample may aid in determining the cause or causes of the exceedances. Requested that the operator provide additional information in the DMR comments regarding the cause or causes of exceedances and corrective actions. The explanation provided for several TSS exceedances was related to storm events. Requested that operator review the Reuse Operating Protocol to determine whether all discharge should be diverted to the wells during storm events to avoid potential exceedances to reuse.

5.6 Observation: General – Please see specific comment

<u>Additional Comments</u>: Please add analyst initials as well as the time of the test or calibration verification to all benchsheets. A record of monthly calibration verification of the continuous chlorine and turbidity meters must also be maintained.

<u>Permit/Rule or Other Reference:</u> Please review DEP SOP FD 1000. Documentation Procedures, FD 4100. General Documentation for all Field Testing, 2. Field Instrument Calibration Documentation and DEP SOP, FT 1900. Continuous Monitoring with Installed Meters, 5. Documentation.

6. Facility Site Review: RATING – IN COMPLIANCE

- 6.1 Observation: General The facility grounds were secured properly.
- 6.2 Observation: General The facility grounds were clean and well maintained.
- 6.3 <u>Observation:</u> General Foul odors did not permeate beyond the boundaries of the plant site at the time of the inspection.
- 6.4 Observation: AlternatePower An alternative power source is available at the WWTF.
- 6.5 Observation: AlternatePower The onsite generator is tested under load on a routine basis
- 6.6 Observation: *AlternatePower* A record of testing was available for the onsite generator.
- 6.7 Observation: Headworks Screening and grit are being collected in suitable containers.
- 6.8 <u>Observation:</u> *Headworks* There were no excessive odors emanating from the headworks at the time of the inspection.
- 6.9 Observation: *Headworks* The bar screen is cleaned on a routine basis.
- 6.10 <u>Observation:</u> *AerationBasins/Act.Sludge* The contents in the aeration chambers appeared to be adequately mixed.

Additional Comments: SBRs #1 and #3 are currently online. SBR #2 is offline. The SBRs are rotated to allow for preventative maintenance.

- 6.11 Observation: AerationBasins/Act.Sludge No problems or deficiencies noted.
- 6.12 Observation: Blowers/Motors The blower was operational at the time of the inspection.
- 6.13 Observation: *Blowers/Motors* The blowers were equipped with belt guards.

THIS SPACE LEFT BLANK INTENTIONALLY.

6.14 Observation: Blowers/Motors – Please see specific comment

Additional Comments: Rust and corrosion were observed on the blower covers (see photos).





- 6.15 Observation: Filtration The filter contained sufficient media.
- 6.16 Observation: *Filtration* No problems or deficiencies noted.
- 6.17 <u>Observation:</u> *Disinfection* The chlorine contact chamber was clean and the effluent leaving the plant was clear.
- 6.18 Observation: *Digestors* The tank contents in the aerobic digestor were well mixed.
- 6.19 Observation: *Digestors* The digestors were free from excessive odors.
- 6.20 Observation: *Digestors* The digestor was free from excessive foaming.

7. Flow Measurement: RATING – IN COMPLIANCE

7.1 Observation: The copy of the flow calibration report is current and satisfactory.

<u>Additional Comments</u>: All flow meters calibrated by Florida Rural Water Association Circuit Rider Allen Slater on December 4, 2014.

8. **Operation and Maintenance:** RATING – IN COMPLIANCE

- 8.1 <u>Observation:</u> *General* The facility was operated and maintained in accordance with the description in the Permit.
- 8.2 Observation: General A certified operator as required by Rule 62-602 and the Permit, was operating the WWTF.
- 8.3 <u>Observation:</u> General The operator is performing treatment plant operation and maintenance duties in a responsible and professional manner.

9. **Effluent Quality:** RATING – IN COMPLIANCE

9.1 <u>Observation:</u> The final effluent chlorine residual was within the acceptable range.

Additional Comments: Total Residual Chlorine > 2.20 mg/L @ 1131.

9.2 <u>Observation:</u> A review of the Discharge Monitoring Reports revealed the following effluent exceedances.

Additional Comments: TSS exceedances to reuse were reported on the December 2014 (1 reported exceedance attributed to filter problems), October 2014 (1 reported exceedance attributed to process problems), September 2014 (4 reported exceedances attributed to heavy rain and a failed backwash blower), May 2014 (1 reported exceedance attributed to plant upset), and April 2014 (3 reported exceedances attributed to plant upset) DMRs. Department staff requested that additional information regarding the cause or causes of exceedances as well as corrective actions taken be included in the DMR comments. In addition, Department staff requested that the operator review the Facility O&M Plan and Reuse Operating Protocol regarding discharge to reuse

during storm events or other periods of plant upset. Department staff also advised that if the Facility is not discharging to reuse on a given day, reuse samples for TSS and fecal coliform sample do not need to be collected. The current, effluent annual averages are as follows: TSS = 1.6 mg/L, CBOD = 1.1 mg/L, fecal coliform = 0.6 cfu/100 mL, Total Nitrogen = 2.2 mg/L (report only), and Total Phosphorus = 0.5 mg/L (report only). The Facility is presently meeting Advanced Wastewater Treatment standards ahead of the statutory deadline of January 1, 2016.

9.3 Observation: No problems or deficiencies were identified.

<u>Additional Comments</u>: Effluent samples collected at the time of the inspection yielded the following results: TSS = 3 mg/L, CBOD = 0.20 mg/L, and fecal coliform < 9 cfu/100 mL.

10. **Effluent Disposal:** RATING – IN COMPLIANCE

- 10.1 <u>Observation:</u> *Reuse* All plastic reclaimed water piping, pipelines, valves, outlets, and other appurtenances were color-coded Pantone Purple.
- 10.2 <u>Observation:</u> Reuse A cross connection control program has been implemented within the areas where reclaimed water is provided for use.

Additional Comments: Annual Reuse Report received December 23, 2014.

10.3 Observation: Reuse – Please see specific comment

<u>Additional Comments</u>: The low TRC set point for autodiversion to the injection wells is 1.0 mg/L, which is the minimum. The high set point for turbidity for diversion to the injection wells is 2.9 NTU.

11. **Biosolids/Sludge:** RATING – IN COMPLIANCE

11.1 Observation: General – No problems or deficiencies were observed.

Additional Comments: The operator stated that Biosolids are hauled about every two weeks. Biosolids are transferred to the Sanford South Florida Water Resource Center Residual Management Facility in accordance with correspondence received by the Department on June 3, 2013. Final manifests are maintained at the administrative office located at 3333 Overseas Highway in Marathon, FL.

11.2 Observation: General – Please see specific comment

<u>Additional Comments</u>: Please document Biosolids going to the Residuals Management Facility as "Transferred" rather than "Landfilled" on the Biosolids DMR Form.

- 11.3 Observation: General Residuals were being disposed of in accordance with the permit.
- 12. **Groundwater Quality:** RATING NOT APPLICABLE
 - 12.1 Observation: No observations were recorded.
- 13. **SSO Survey:** RATING NOT EVALUATED
 - 13.1 Observation: No observations were recorded.
- 14. **Other:** RATING NOT APPLICABLE
 - 14.1 Observation: No observations were recorded.

SO-DIST-2015-01-29-02 Serial Number: 0078731 Biological Analysis Report Page 1 of 4

Biological Analysis Report SO-DIST-2015-01-29-02

Florida Department of Environmental Protection Central Laboratory 2600 Blair Stone Road Tallahassee, FL 32399-2400 DOH Accreditation E31780

Overflow Analyses Performed By: Flowers Chemical Laboratories Inc. 3980 Overseas Hwy, Suite 103 Marathon, FL 33050 DOH Accreditation E35834

Event Description: TSS, CBOD, fecal coliform for secondary WWTP CSI

Request ID: RQ-2015-01-19-29

Customer: SO-DIST Project ID: CSI

Send Reports to: FL Dept. of Environmental Protection South District Marathon Branch Office 2796 Overseas Highway, Suite 221 Marathon, FL 33050

Attn: Devon Villareal

For additional information please contact David D. Whiting - Administrator J. Marshall Faircloth - Aquatic Toxicology Elizabeth Miller - Bench Biology Jacqueline Savage - Microbiology Loretta Wolfe - Molecular Biology

Cheryl Swanson - Taxonomy (Invertebrate & Algal) Thekkekalathil Chandrasekhar, PhD, QA Officer

Phone (850) 245-8177

Certified by: Elizabeth Miller, Environmental Manager Date Certified: 06-FEB-2015 15:39



SO-DIST-2015-01-29-02 Serial Number: 0078731 Biological Analysis Report Page 2 of 4

Abbreviations and data remark codes

CERT # - NELAP (National Environmental Laboratory Accreditation Program) Certification Number of the laboratory that performed the analysis.

LCS - Laboratory Control Sample; in the QC Failures column, this notation indicates a batch recovery failure.

MS - Matrix Spike; in the QC Failures column, this notation indicates a batch recovery failure.

RPD - Relative Percent Difference; in the QC Failures column, this notation indicates a batch failure for precision.

CCV - Continuing Calibration Verification; in the QC Failures column, this notation indicates a failure of the calibration verification check sample.

SUR - Surrogate; in the QC Failures column, this notation indicates a recovery failure for the associated surrogate.

RSD - Relative Standard Deviation expressed as a percentage.

SMP - Sample.

- ** The laboratory is not NELAP certified for this analyte/method, or certification is not applicable.
- A Value reported is the mean of two or more determinations
- B Results based on colony counts outside the acceptable range.
- I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J Estimated value and/or the analysis did not meet established quality control criteria
- K Actual value is known to be less than value given
- L Actual value is known to be greater than value given
- N Presumptive evidence of presence of material.
- O Sampled, but analysis lost or not performed.
- Q Sample held beyond normal holding time.
- T Value reported is less than the criterion of detection.
- U Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V Analyte was detected in both sample and method blank.
- X Too few individuals to calculate SCI value.
- Y The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate
- Z Colonies were too numerous to count (TNTC).

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3 x 10³ or 1300.

Precision is reported as relative percent difference unless otherwise noted.

Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published test performance acceptance criteria.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

All sample collection performed by Bureau of Laboratories staff followed the field Standard Operating Procedures adopted by reference in Rule 62-160 FAC unless otherwise noted.

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Results for NELAP accredited tests contained in this report meet the requirements specified by the National Environmental Laboratory Accreditation Conference (NELAC). All samples received were in acceptable condition and met NELAC requirements unless otherwise noted. Results generated in this report pertain to the samples collected and submitted for analysis.

All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Job: TLH-2015-01-29-32 Group: Chlorophyll/Grain Size/BOD

Job: TLH-2015-01-29-33 Group: Overflow

Page 3 of 4

Sample Location: BIG COPPITT WWTP Collection Date/Time: 01/28/2015 08:00

Field ID: BC012815 Matrix: W-EFFLUENT

Sample ID Ref. Method Component Result Code Units Batch ID QC Failures

1670425 SM 5210 B Biochemical Oxygen Demand-5 0.20 UJQ mg/L P279987 LCS

Day,N-Inhib

Ref. Method and Comment:

SM 5210 B: Refer to QA report for QC exceeding limits. Laboratory duplicate result is 0.20 U mg/L. Precision data is unavailable due to the small

amount of analyte in the QC sample. Hold time exceeded by 1 hour.

Sample Location: BC012815 - GRAB Collection Date/Time: 01/28/2015 11:38

Field ID: BC012815 - GRAB Matrix: WATER

Sample ID Ref. Method Component Result Code Units Batch ID QC Failures

1672696 SM 9222 D Fecal Coliforms-Membrane Filter 9 U cfu/100 mL

Quality Assurance Report Method Blank Results

Reference Method: SM 5210 B

Batch ID: P279987

 Component
 Result
 Code
 Units

 Biochemical Oxygen Demand-5 Day,N-Inhib
 0.20
 U
 mg/L

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 5210 B

Batch ID: P279987

Component% Rec.1% Rec.2Pass/FailControl LimitsBiochemical Oxygen Demand-5 Day,N-Inhib62.1F70 - 96.5

Quality Assurance Report Summary

Ref. Method Analyte LCS % Recovery MS % Recovery Precision

LCS SMP MS

SM 5210 B Biochemical Oxygen Demand-5 62.1

Day,N-Inhib

Reference Method Descriptions

Method / NELAC Cert. # Description Associated Samples

SM 5210 B / E31780 BOD, nitrogen-inhibited (=CBOD) 1670425 SM 9222 D / E35834 Fecal coliforms by membrane filter method by FlowersOverflow Laboratory for SD 1672696

Preparation and Analysis Log

Analysis Date/Time 01/30/2015 09:00 01/28/2015 16:15 **Prepared By** Prep Date/Time 01/29/2015 01/28/2015 Received Date Ref. Method SM 5210 B SM 9222 D

Associated Samples 1670425 1672696

Analyzed By Rebecca Falter Flowers-Marathon

SO-DIST-2015-01-29-02 Serial Number: 0078659 Chemical Analysis Report Page 1 of 4

Chemical Analysis Report so-DIST-2015-01-29-02

Florida Department of Environmental Protection Central Laboratory 2600 Blair Stone Road Tallahassee, FL 32399-2400 DOH Accreditation E31780

Event Description: TSS, CBOD, fecal coliform for secondary WWTP CSI

Request ID: RQ-2015-01-19-29

Customer: **SO-DIST** Project ID: **CSI**

Send Reports to: FL Dept. of Environmental Protection South District Marathon Branch Office 2796 Overseas Highway, Suite 221 Marathon, FL 33050

Attn: Devon Villareal

For additional information please contact

Timothy W. Fitzpatrick Liang-Tsair Lin, Ph.D. Colin Wright, Ph.D.

Thekkekalathil Chandrasekhar, PhD, QA Officer

Phone (850) 245-8085

Certified by: Timothy Fitzpatrick, Program Administrator

Date Certified: 06-FEB-2015 08:46

SO-DIST-2015-01-29-02 Serial Number: 0078659 Chemical Analysis Report Page 2 of 4

Abbreviations and data remark codes

CERT # - NELAP (National Environmental Laboratory Accreditation Program) Certification Number of the laboratory that performed the analysis.

LCS - Laboratory Control Sample; in the QC Failures column, this notation indicates a batch recovery failure.

MS - Matrix Spike; in the QC Failures column, this notation indicates a batch recovery failure.

RPD - Relative Percent Difference; in the QC Failures column, this notation indicates a batch failure for precision.

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SMP - Sample.

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- B Results based on colony counts outside the acceptable range.
- I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J Estimated value and/or the analysis did not meet established quality control criteria
- K Actual value is known to be less than value given
- L Actual value is known to be greater than value given
- N Presumptive evidence of presence of material.
- O Sampled, but analysis lost or not performed.
- Q Sample held beyond normal holding time.
- T Value reported is less than the criterion of detection.
- U Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V Analyte was detected in both sample and method blank.
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Job: TLH-2015-01-29-34 Group: Nutrients

SO-DIST-2015-01-29-02 Serial Number: 0078659 Chemical Analysis Report Page 3 of 4

Sample Location: BIG COPPITT WWTP Collection Date/Time: 01/28/2015 08:00

Field ID: BC012815 Matrix: W-EFFLUENT

Sample ID Ref. Method Component Result Code Units Batch ID QC Failures

1670427 SM 2540 D-97 TSS 3 I mg/L P279799

Ref. Method and Comment:

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

Quality Assurance Report Method Blank Results

Reference Method: SM 2540 D-97

Batch ID: P279799

 Component
 Result
 Code
 Units

 TSS
 2
 U
 mg/L

Reference Method Descriptions

Method / NELAC Cert. # Description Associated Samples

SM 2540 D-97 / E31780 Total Suspended Solids in aqueous matrices 1670427

Preparation and Analysis Log

Prep Date/Time Received Date 01/29/2015

Ref. Method SM 2540 D-97

Prepared By

Analysis Date/Time 01/29/2015

Analyzed By Yijie Li

Associated Samples 1670427

Florida Department of Environmental Protection

Event ID *

Central Laboratory Sample Submittal Form

Request Number: RQ-2015-01-19-29 TSS, CBOD, fecal coliform for secondary WWTP CSI Customer: SO-DIST CS Project ID: PMAS:

FDEP Marathon Devon Villagea Collected By: Sampling Agency:

Devon Villareal

Requester:

Field Report Prepared By:

Devon Villareal Send Final Report To:

. Ol dell	الم	Grap Comp Collection (comp begin or grab) Eastern Composite end (Eastern Bottle Grab Date 12.1 15.1 Time OSOO Central Date 28/15 Time OSOO Central Group(s)** Tot Res Chlorine (mg/L) Diss Oxygen (mg/L) Storet Station Number
1		
	Matrix (include type e.g. Salt, Fresh, etc) Temp (C) pH	Sample Depth C m Samily (PiPTI) NPDES Number C (Mho/cm)
Û	Longitude Longitude	Jams W-TSS CROD-INHB W/CI
Lab ID •	Location	Comp Collection (comp begin or grab) Eastern Composite end Eastern Bottle
	Fleid ID	hlorine (mg/L) Diss Oxygen (mg/L) Storet Station Number
	Matrix (include type e.g. Saft, Fresh, etc) Temp (C) pH	Sample Depth m Salinity (PPTh) NPDES Number Sp Conductance (umho/cm)
	Latitude ☐ dd Longitude ☐ dd dms ☐ dms	Comments
Lab ID *	Location	Comp Collection (comp begin or grab) Eastern Composite end Eastern Bottle
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Lab ID •	Location	Comp Collection (comp begin or grab) Eastern Composite end Eastern Bottle Carbon Grab Date Time Central Date Time
	Freid ID	Tot Res Chlorine (mg/L) Diss Oxygen (mg/L) Storet Station Mumber
	Matrix (include type e.g. Salt, Fresh, etc), Temp (C) pH	Sample Depth m Salinfty (PPTh) NPDES Number Sp. Conductance (umho/can)
0	Latitude	Comments
Refinduished	BY: Mater Time 1628 Supering Method: Received By: Date	Date/Time Relinquished By: Date/Time Received By: Sy Date/Time Date/Time
* Shaded Area	* Shaded Areas for Lab use only.	

last revised-October-1,-2003

Please see reverse side for Bottle Group information.

Group: A Bottle Type: P-1L # of Bottles: 1 Preservative: ICE Enter Number of Bottles Sent to Lab		1					
Bottle Type: P-120ML-WC-THI # of Bottles: 1 Preservative: ICE Enter Number of Bottles Sent to Lab SD-FLR-FC Bottle Type: P-1L # of Bottles: 1 Preservative: ICE Enter Number of Bottles Sent to Lab	Group: A	Bottle Type: BOD-INHB		# of Bottles: 1	Preservative:	DG.	Enter Number of Bottles Sent to Lab
Bottle Type: P-1L # of Bottles: 1 Preservative: ICE Enter Number of Bottles Sent to Lab	Group: A	Bottle Type: SD-FLR-FC	P-120ML-WC-THI	# of Bottles: 1	Preservative:	ICE	
	Group: A	Bottle Type: W-TSS			Preservative:	5	

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Marathan, FL 33050	7.	3305	2	7			FCL Project	June Flore	Flowers			Person Villacea (Odoo state P) 45	larea 10,	100 state	4
305 - 289 - 7070	-707-	0,0					Request 10 Day §	Requested Due Date 10 Day Standard	OR MIM	DD	*	Rush Charges May Apply	lay Apply		
Sampled By (PRINT): // 116	Villarea 1						Pick-Up Fee	69		Vehicle Surcharge	69		Sampling \$		
7	Varior	20	Da	Date Sampled	.0		۵	PRESERVATIVES		ANALYSES REQUEST				COMMENTS	
GW - ground water SW - surface water	SC	W - drinking water SO - soil/solid	ater	SL - sludge	- wastewater	aste			52 O 3	Say			15	-TRC	# Contain
SAMPLEID		DATE	TIME	MATRIX	(LAB US	(LAB USE ONLY)	NON	HCI	Naz	E	/	//	6	pt- pont	Total
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