

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Devan R Cobb
DEP-Chemistry Section
2600 Blirstone Road
Tallahassee, Florida 32399-2400

Generated 2/23/2023 12:11:22 AM

JOB DESCRIPTION

OV431

JOB NUMBER

670-14578-1

Eurofins Orlando

Job Notes

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. This report may not be reproduced, except in full, without the written approval of the laboratory. Questions should be directed to the person who signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



Generated
2/23/2023 12:11:22 AM

Authorized for release by
Noel Savoie, Project Manager I
Noel.Savoie@et.eurofinsus.com
(850)254-0107

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
QC Sample Results	7
QC Association Summary	8
Lab Chronicle	9
Certification Summary	10
Method Summary	11
Sample Summary	12
Chain of Custody	13
Receipt Checklists	16



Definitions/Glossary

Client: DEP-Chemistry Section
Project/Site: OV431

Job ID: 670-14578-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
U	Indicates that the compound was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: DEP-Chemistry Section
Project/Site: OV431

Job ID: 670-14578-1

Job ID: 670-14578-1

Laboratory: Eurofins Orlando

Narrative

Job Narrative 670-14578-1

Receipt

The samples were received on 2/13/2023 12:39 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 19.5°C 

General Chemistry

Method SM5210B_BODCalc: Test replicates showed >20% RPD between the highest and lowest replicate for the following sample: (670-14566-A-1) and (670-14566-A-1 DU).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: DEP-Chemistry Section
Project/Site: OV431

Job ID: 670-14578-1

Client Sample ID: 2387106

Date Collected: 02/13/23 10:38

Date Received: 02/13/23 12:39

Lab Sample ID: 670-14578-1

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand (SM5210B)	1.0	U	2.0	1.0	mg/L			02/14/23 13:12	1

Client Sample ID: 2387104

Date Collected: 02/13/23 11:28

Date Received: 02/13/23 12:39

Lab Sample ID: 670-14578-2

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand (SM5210B)	1.2	I	2.0	1.0	mg/L			02/14/23 13:16	1

Client Sample ID: 2387105

Date Collected: 02/13/23 11:46

Date Received: 02/13/23 12:39

Lab Sample ID: 670-14578-3

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand (SM5210B)	1.0	U	2.0	1.0	mg/L			02/14/23 13:19	1

QC Sample Results

Client: DEP-Chemistry Section
Project/Site: OV431

Job ID: 670-14578-1

Method: SM5210B - BOD, 5 Day

Lab Sample ID: MB 670-23207/2

Matrix: Water

Analysis Batch: 23207

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	1.0	U	2.0	1.0	mg/L			02/14/23 12:09	1

Lab Sample ID: SCB 670-23207/4

Matrix: Water

Analysis Batch: 23207

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	SCB Result	SCB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	1.0	U	2.0	1.0	mg/L			02/14/23 12:12	1

Lab Sample ID: USB 670-23207/1

Matrix: Water

Analysis Batch: 23207

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	1.0	U	2.0	1.0	mg/L			02/14/23 12:06	1

Lab Sample ID: LCS 670-23207/3

Matrix: Water

Analysis Batch: 23207

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Biochemical Oxygen Demand	198	197		mg/L		99	85 - 115

Lab Sample ID: 670-14566-A-1 DU

Matrix: Water

Analysis Batch: 23207

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Biochemical Oxygen Demand	750		578	J3	mg/L		26	20

QC Association Summary

Client: DEP-Chemistry Section
Project/Site: OV431

Job ID: 670-14578-1

General Chemistry

Analysis Batch: 23207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
670-14578-1	2387106	Total/NA	Water	SM5210B	
670-14578-2	2387104	Total/NA	Water	SM5210B	
670-14578-3	2387105	Total/NA	Water	SM5210B	
MB 670-23207/2	Method Blank	Total/NA	Water	SM5210B	
SCB 670-23207/4	Method Blank	Total/NA	Water	SM5210B	
USB 670-23207/1	Method Blank	Total/NA	Water	SM5210B	
LCS 670-23207/3	Lab Control Sample	Total/NA	Water	SM5210B	
670-14566-A-1 DU	Duplicate	Total/NA	Water	SM5210B	

Lab Chronicle

Client: DEP-Chemistry Section
Project/Site: OV431

Job ID: 670-14578-1

Client Sample ID: 2387106

Date Collected: 02/13/23 10:38

Date Received: 02/13/23 12:39

Lab Sample ID: 670-14578-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM5210B		1	23207	AAM	EET ORL	02/14/23 13:12

Client Sample ID: 2387104

Date Collected: 02/13/23 11:28

Date Received: 02/13/23 12:39

Lab Sample ID: 670-14578-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM5210B		1	23207	AAM	EET ORL	02/14/23 13:16

Client Sample ID: 2387105

Date Collected: 02/13/23 11:46

Date Received: 02/13/23 12:39

Lab Sample ID: 670-14578-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM5210B		1	23207	AAM	EET ORL	02/14/23 13:19

Laboratory References:

EET ORL = Eurofins Orlando, 481 Newburyport Avenue, Altamonte Springs, FL 32701, TEL (407)339-5984

Accreditation/Certification Summary

Client: DEP-Chemistry Section
Project/Site: OV431

Job ID: 670-14578-1

Laboratory: Eurofins Orlando

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	42800	06-30-23
Florida	NELAP	E83018	06-30-23
North Carolina (DW)	State	12712	07-31-23

1
2
3
4
5
6
7
8
9
10
11
12
13

Method Summary

Client: DEP-Chemistry Section
Project/Site: OV431

Job ID: 670-14578-1

Method	Method Description	Protocol	Laboratory
SM5210B	BOD, 5 Day	SM	EET ORL

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET ORL = Eurofins Orlando, 481 Newburyport Avenue, Altamonte Springs, FL 32701, TEL (407)339-5984

Sample Summary

Client: DEP-Chemistry Section
Project/Site: OV431

Job ID: 670-14578-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
670-14578-1	2387106	Water	02/13/23 10:38	02/13/23 12:39
670-14578-2	2387104	Water	02/13/23 11:28	02/13/23 12:39
670-14578-3	2387105	Water	02/13/23 11:46	02/13/23 12:39

1

2

3

4

5

6

7

8

9

10

11

12

13

**STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
TASK ASSIGNMENT/NOTIFICATION FORM: LAB145**

Contract Manager: Linda Allen/Devan Cobb
2600 Blair Stone Rd., MS 6512
Tallahassee, FL 32399-2400

(850)-245-8084 / (850) 245-8078

Contractor: Eurofins Environmental Testing Southeast, LLC
5102 LaRoche Ave
Savannah, GA 31404
ATTN: Noel Savoie

DEP Approval By: Devan R. Cobb-Williams

Contractor Approval By: Noel Savoie
Project Manager

Contractor Representatives Contacted: Noel Savoie

Date: 1/25/2023

Means of Contact: Email

Task Assignment Number: OV431

Maximum Cost: \$124.50

Turnaround Time: 5 BD

Sample Delivery Date: 2/14/2022

Project Name/Description:

RQ-2023-02-13-17; BMAP - Sweetwater, Salt and Long

Deliverable Number/ Parameter Group/	Sample Matrix	# of Samples	# of Containers	DEP ID #	Unit Cost	% Mark- up (if any)	Cost
Method							
Quote/OV-BOD-UN	W	3	3		\$39.00		\$117.00
BOD, NOT nitrogen- inhibited							
5210B-2011							
217/Sample Disposal Fee:	3				\$2.50		\$7.50
Total Number of Containers Shipped:	3					Total:	\$124.50

QC Instructions:

Comments: Quote # 66018208 - 0

Samples released to Contract Lab by: Craig L. Sayer Date/Time: 2/13/23 1226

Delivery Method: Shipping

Samples Accepted by: Craig L. Sayer Date/Time 2/13/23 1226

* Please sign and return by email to Linda.S.Allen@FloridaDEP.gov and Devan.R.Cobb@dep.state.fl.us

20.0/19.5°C

Page 14 of 16

Vcr: 06/08/2021

REQUEST ID	EVENT ID	SAMPLE ID	FIELD ID	DATE SAMPLED	REFERENCE METHOD	COMPONENT	MATRIX	ANALYSIS
RQ_-2023-02-13-17	CEN-DIST-2023-02-14-	2387104	G2CE0123	2/13/2023 11:28	SM 5210 B	Biochemical Oxygen C	W-SURF-FRH	OV-BOD-UN
RQ_-2023-02-13-17	CEN-DIST-2023-02-14-	2387105	G2CE0088	2/13/2023 11:46	SM 5210 B	Biochemical Oxygen C	W-SURF-FRH	OV-BOD-UN
RQ_-2023-02-13-17	CEN-DIST-2023-02-14-	2387106	G2CE0036	2/13/2023 10:38	SM 5210 B	Biochemical Oxygen C	W-SURF-FRH	OV-BOD-UN

Login Sample Receipt Checklist

Client: DEP-Chemistry Section

Job Number: 670-14578-1

Login Number: 14578

List Number: 1

Creator: Ferguson, Craig

List Source: Eurofins Orlando

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	
Cooler Temperature is acceptable.	True	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	