

Laboratory Results

Lee County Environmental Laboratory

60-2 Danley Drive
Fort Myers, FL 33907
239-533-8600



To: Natural Resources Management
1500 Monroe St
Fort Myers FL 33901
RE: Tidal Caloosa

Report Date: 4/2/2021

Below are the results of samples submitted to this laboratory on 3/17/2021

Laboratory ID	AE80513	Collection date and time	3/17/2021 9:35 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/HORMUTH
Sample Description	Grid #395		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	2.24		mg/M3	0.5	2.0	3/23/2021	7:47 AM	SM21 10200 H
Pheophytin	1.10	I	mg/M3	0.5	2.0	3/23/2021	7:47 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	1.0	V1 I J3	mg/L	0.3	1.2	3/18/2021	10:46 AM	SM 5210 B
Color	37.2		CU	1.6	6.4	3/18/2021	12:11 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	7.26		mg/L			3/17/2021	9:35 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		3/17/2021	2:40 PM	Enterolert®
Ammonia	0.014	U	mg/L as N	0.014	0.056	3/19/2021	9:19 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	3/17/2021	2:30 PM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	3/17/2021	2:30 PM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	3/17/2021	2:30 PM	EPA 353.2
Nitrogen, Organic	0.75		mg/L as N	0.05	0.2	3/24/2021	8:50 AM	TKN - NH3
Phosphorus, Ortho	0.024		mg/L as P	0.004	0.016	3/17/2021	2:30 PM	EPA 365.1
Salinity by meter by Client	12.97		SU			3/17/2021	9:35 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.25		meters			3/17/2021	9:35 AM	FDEP FT 1700
Silica, dissolved as SiO2	2.6		mg/L as SiO2	0.1	0.4	3/17/2021	2:30 PM	SM4500-SiO2 C
Depth of Water Body	1.8		Meters			3/17/2021	9:35 AM	FS2100
Nitrogen, Kjeldahl, Total	0.75		mg/L as N	0.05	0.2	3/24/2021	8:50 AM	EPA 351.2
Nitrogen, Total	0.75		mg/L as N	0.05	0.2	3/24/2021	8:50 AM	TKN + NOX
Total Organic Carbon	11		mg/L	1	4	3/30/2021	2:27 PM	SM 5310 B
Phosphorus, Total	0.051		mg/L as P	0.006	0.024	3/24/2021	8:52 AM	EPA 365.1
Total Suspended Solids	1.20	I	mg/L	0.6	2.4	3/18/2021	9:42 AM	SM 2540 D
Turbidity (Nephelometric)	1.54		NTU	0.2	0.8	3/18/2021	10:15 AM	EPA 180.1



Laboratory ID	AE80514	Collection date and time	3/17/2021 11:55 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/HORMUTH
Sample Description	Grid #449		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	9.07		mg/M3	0.5	2.0	3/23/2021	7:47 AM	SM21 10200 H
Pheophytin	4.22		mg/M3	0.5	2.0	3/23/2021	7:47 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	1.2	V1 I J3	mg/L	0.3	1.2	3/18/2021	10:46 AM	SM 5210 B
Color	67.0		CU	1.6	6.4	3/18/2021	12:11 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	8.03		mg/L			3/17/2021	11:55 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		3/17/2021	2:40 PM	Enterolert®
Ammonia	0.014	U	mg/L as N	0.014	0.056	3/19/2021	9:19 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	3/17/2021	2:30 PM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	3/17/2021	2:30 PM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	3/17/2021	2:30 PM	EPA 353.2
Nitrogen, Organic	0.99		mg/L as N	0.05	0.2	3/24/2021	8:50 AM	TKN - NH3
Phosphorus, Ortho	0.032		mg/L as P	0.004	0.016	3/17/2021	2:30 PM	EPA 365.1
Salinity by meter by Client	1.34		SU			3/17/2021	11:55 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.55		meters			3/17/2021	11:55 AM	FDEP FT 1700
Silica, dissolved as SiO2	4.1		mg/L as SiO2	0.1	0.4	3/17/2021	2:30 PM	SM4500-SiO2 C
Depth of Water Body	1.1		Meters			3/17/2021	11:55 AM	FS2100
Nitrogen, Kjeldahl, Total	0.99		mg/L as N	0.05	0.2	3/24/2021	8:50 AM	EPA 351.2
Nitrogen, Total	0.99		mg/L as N	0.05	0.2	3/24/2021	8:50 AM	TKN + NOX
Total Organic Carbon	17		mg/L	1	4	3/30/2021	2:27 PM	SM 5310 B
Phosphorus, Total	0.095		mg/L as P	0.006	0.024	3/24/2021	8:52 AM	EPA 365.1
Total Suspended Solids	7.85		mg/L	0.6	2.4	3/18/2021	9:42 AM	SM 2540 D
Turbidity (Nephelometric)	6.69		NTU	0.2	0.8	3/18/2021	10:15 AM	EPA 180.1

Laboratory ID	AE80515	Collection date and time	3/17/2021 10:10 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/HORMUTH
Sample Description	Grid #402		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	1.86	I	mg/M3	0.5	2.0	3/24/2021	7:55 AM	SM21 10200 H
Pheophytin	1.57	I	mg/M3	0.5	2.0	3/24/2021	7:55 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.7	V1 I J3	mg/L	0.3	1.2	3/18/2021	10:46 AM	SM 5210 B
Color	38.7		CU	1.6	6.4	3/18/2021	12:11 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	6.70		mg/L			3/17/2021	10:10 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		3/17/2021	2:40 PM	Enterolert®
Ammonia	0.014	U	mg/L as N	0.014	0.056	3/19/2021	9:19 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	3/17/2021	2:30 PM	EPA 353.2

Report Format: NELAC

DOH #E45049



Laboratory ID	AE80515	Collection date and time	3/17/2021 10:10 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/HORMUTH
Sample Description	Grid #402		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Nitrate	0.010	U	mg/L as N	0.01	0.04	3/17/2021	2:30 PM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	3/17/2021	2:30 PM	EPA 353.2
Nitrogen, Organic	0.73		mg/L as N	0.05	0.2	3/24/2021	8:50 AM	TKN - NH3
Phosphorus, Ortho	0.025		mg/L as P	0.004	0.016	3/17/2021	2:30 PM	EPA 365.1
Salinity by meter by Client	11.64		SU			3/17/2021	10:10 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.1	S	meters			3/17/2021	10:10 AM	FDEP FT 1700
Silica, dissolved as SiO2	2.6		mg/L as SiO2	0.1	0.4	3/17/2021	2:30 PM	SM4500-SiO2 C
Depth of Water Body	1.1		Meters			3/17/2021	10:10 AM	FS2100
Nitrogen, Kjeldahl, Total	0.73		mg/L as N	0.05	0.2	3/24/2021	8:50 AM	EPA 351.2
Nitrogen, Total	0.73		mg/L as N	0.05	0.2	3/24/2021	8:50 AM	TKN + NOX
Total Organic Carbon	12		mg/L	1	4	3/30/2021	2:27 PM	SM 5310 B
Phosphorus, Total	0.061		mg/L as P	0.006	0.024	3/24/2021	8:52 AM	EPA 365.1
Total Suspended Solids	4.05		mg/L	0.6	2.4	3/18/2021	9:42 AM	SM 2540 D
Turbidity (Nephelometric)	2.29		NTU	0.2	0.8	3/18/2021	10:15 AM	EPA 180.1

Laboratory ID	AE80516	Collection date and time	3/17/2021 10:40 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/HORMUTH
Sample Description	Grid #413		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	1.53	I	mg/M3	0.5	2.0	3/24/2021	7:55 AM	SM21 10200 H
Pheophytin	1.79	I	mg/M3	0.5	2.0	3/24/2021	7:55 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.9	V1 I J3	mg/L	0.3	1.2	3/18/2021	10:46 AM	SM 5210 B
Color	40.4		CU	1.6	6.4	3/18/2021	12:11 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	6.93		mg/L			3/17/2021	10:40 AM	FDEP FT1500
Enterococci	10		MPN/100mL	10		3/17/2021	2:40 PM	Enterolert®
Ammonia	0.014	U	mg/L as N	0.014	0.056	3/26/2021	9:35 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	3/17/2021	2:30 PM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	3/17/2021	2:30 PM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	3/17/2021	2:30 PM	EPA 353.2
Nitrogen, Organic	0.72		mg/L as N	0.05	0.2	3/24/2021	8:50 AM	TKN - NH3
Phosphorus, Ortho	0.024		mg/L as P	0.004	0.016	3/17/2021	2:30 PM	EPA 365.1
Salinity by meter by Client	12.29		SU			3/17/2021	10:40 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.3		meters			3/17/2021	10:40 AM	FDEP FT 1700
Silica, dissolved as SiO2	2.6		mg/L as SiO2	0.1	0.4	3/17/2021	2:30 PM	SM4500-SiO2 C
Depth of Water Body	1.4		Meters			3/17/2021	10:40 AM	FS2100

Report Format: NELAC

DOH #E45049



Laboratory ID	AE80516	Collection date and time	3/17/2021 10:40 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/HORMUTH
Sample Description	Grid #413		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Nitrogen, Kjeldahl, Total	0.72		mg/L as N	0.05	0.2	3/24/2021	8:50 AM	EPA 351.2
Nitrogen, Total	0.72		mg/L as N	0.05	0.2	3/24/2021	8:50 AM	TKN + NOX
Total Organic Carbon	12		mg/L	1	4	3/30/2021	2:27 PM	SM 5310 B
Phosphorus, Total	0.055		mg/L as P	0.006	0.024	3/24/2021	8:52 AM	EPA 365.1
Total Suspended Solids	2.55		mg/L	0.6	2.4	3/18/2021	9:42 AM	SM 2540 D
Turbidity (Nephelometric)	1.68		NTU	0.2	0.8	3/18/2021	10:15 AM	EPA 180.1

Laboratory ID	AE80517	Collection date and time	3/17/2021 1:10 PM
Location Code	CRNEP_RS	Sample Collector	REISTADT/HORMUTH
Sample Description	Grid #470		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	27.41		mg/M3	0.5	2.0	3/24/2021	7:55 AM	SM21 10200 H
Pheophytin	4.15		mg/M3	0.5	2.0	3/24/2021	7:55 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	2.0	V1 J3	mg/L	0.3	1.2	3/18/2021	10:46 AM	SM 5210 B
Color	70.8		CU	1.6	6.4	3/18/2021	12:11 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	9.47		mg/L			3/17/2021	1:10 PM	FDEP FT1500
Enterococci	10		MPN/100mL	10		3/17/2021	2:40 PM	Enterolert®
Ammonia	0.014	U	mg/L as N	0.014	0.056	3/19/2021	9:19 AM	EPA 350.1
Nitrite	0.010	I	mg/L as N	0.003	0.012	3/17/2021	2:30 PM	EPA 353.2
Nitrate	0.026	I	mg/L as N	0.01	0.04	3/17/2021	2:30 PM	EPA 353.2
Nitrate + Nitrite	0.036	I	mg/L as N	0.01	0.04	3/17/2021	2:30 PM	EPA 353.2
Nitrogen, Organic	1.1		mg/L as N	0.05	0.2	3/24/2021	8:50 AM	TKN - NH3
Phosphorus, Ortho	0.030		mg/L as P	0.004	0.016	3/17/2021	2:30 PM	EPA 365.1
Salinity by meter by Client	0.35		SU			3/17/2021	1:10 PM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.75		meters			3/17/2021	1:10 PM	FDEP FT 1700
Silica, dissolved as SiO2	5.7		mg/L as SiO2	0.1	0.4	3/17/2021	2:30 PM	SM4500-SiO2 C
Depth of Water Body	8.0		Meters			3/17/2021	1:10 PM	FS2100
Nitrogen, Kjeldahl, Total	1.1		mg/L as N	0.05	0.2	3/24/2021	8:50 AM	EPA 351.2
Nitrogen, Total	1.1		mg/L as N	0.05	0.2	3/24/2021	8:50 AM	TKN + NOX
Total Organic Carbon	16		mg/L	1	4	3/30/2021	2:27 PM	SM 5310 B
Phosphorus, Total	0.098		mg/L as P	0.006	0.024	3/24/2021	8:52 AM	EPA 365.1
Total Suspended Solids	3.10		mg/L	0.6	2.4	3/18/2021	9:42 AM	SM 2540 D
Turbidity (Nephelometric)	4.11		NTU	0.2	0.8	3/18/2021	10:15 AM	EPA 180.1



Laboratory ID AE80518
 Location Code CRNEP_EQ
 Sample Description EB Site #470

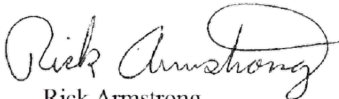
Collection date and time 3/17/2021 1:45 PM
 Sample Collector REISTADT/HORMUTH

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	0.50	U	mg/M3	0.5	2.0	3/23/2021	7:47 AM	SM21 10200 H
Pheophytin	0.50	U	mg/M3	0.5	2.0	3/23/2021	7:47 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.5	I J3	mg/L	0.3	1.2	3/18/2021	10:46 AM	SM 5210 B
Color	1.6	U	CU	1.6	6.4	3/18/2021	12:11 PM	SM21 2120 C
Enterococci	1	U	MPN/100mL	1		3/17/2021	2:40 PM	Enterolert®
Ammonia	0.014	U	mg/L as N	0.014	0.056	3/19/2021	9:19 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	3/17/2021	2:30 PM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	3/17/2021	2:30 PM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	3/17/2021	2:30 PM	EPA 353.2
Nitrogen, Organic	0.050	U	mg/L as N	0.05	0.2	3/24/2021	8:50 AM	TKN - NH3
Phosphorus, Ortho	0.004	U	mg/L as P	0.004	0.016	3/17/2021	2:30 PM	EPA 365.1
Silica, dissolved as SiO2	0.1	U	mg/L as SiO2	0.1	0.4	3/17/2021	2:30 PM	SM4500-SiO2 C
Nitrogen, Kjeldahl, Total	0.05	U	mg/L as N	0.05	0.2	3/24/2021	8:50 AM	EPA 351.2
Nitrogen, Total	0.050	U	mg/L as N	0.05	0.2	3/24/2021	8:50 AM	TKN + NOX
Total Organic Carbon	1.000	U	mg/L	1	4	3/30/2021	2:27 PM	SM 5310 B
Phosphorus, Total	0.006	U	mg/L as P	0.006	0.024	3/24/2021	8:52 AM	EPA 365.1
Total Suspended Solids	0.6	U	mg/L	0.6	2.4	3/18/2021	9:42 AM	SM 2540 D
Turbidity (Nephelometric)	0.20	U	NTU	0.2	0.8	3/18/2021	10:15 AM	EPA 180.1

Qualifiers:

- I The value is less than, or equal to, the laboratory's practical quantitation limit (PQL) and greater than the minimum detection limit (MDL).
- I J3 The value is < or = to the PQL and > the MDL. The reported value failed to meet the established quality control criteria for either precision or accuracy.
- S Secchi disk visible to bottom of waterbody. Value reported is the depth of the waterbody at the location of Secchi disk measurement.
- U Indicates that the compound was analyzed for but not detected.
- V1 I J3 Analyte found in both sample & field blank @ <5X the blank value. The value is < or = to the PQL and > the MDL. Value failed to meet quality control criteria for either precision or accuracy.
- V1 J3 Analyte found in both sample & field blank @ <5X the blank value. Value failed to meet quality control criteria for either precision or accuracy.

Unless noted otherwise, these test results meet all the requirements of the 2016 NELAC/ TNI Standards.
 The results provided herein relate only to the samples cited as they were received by the laboratory. All questions regarding this report should be directed to Rick Armstrong, Laboratory Manager.


 Rick Armstrong
 Lab Manager
 Lee County Environmental Lab



LCEL

Lee County Environmental Laboratory
60 S Danley Dr Unit 2
Fort Myers, FL 33907
Phone: (239) 533-8600

Analysis Request & Chain of Custody Record

Lab Certification: E45049
LCEL F COC 20150828R1

LCEL does not accept any samples used for evidentiary purposes

Report/Result Information

Billing/Invoice Information

Page 1 of 1

Name: FDEP - South ATTN: Kirby Wolfe Address: 2295 Victoria Ave, Suite 364 PO Box 2549 Ft Myers FL 33901 Phone: (239) 344-5719	Name: DNR RE: CCHMN-Tidal Caloosa Address: 1500 Monroe St Ft Myers, FL 33901 Phone: (239) 533-8109	Matrix Codes: DW-Drinking water GW- Ground water WW-Waste water SW-Surface water WWS-Wastewater Sludge S-Sediment O-Other	Preservative Codes: NP-No Preservative N-Nitric Acid S-Sulfuric Acid H-Hydrochloric Acid SH-Sodium Hydroxide ST-Sodium Thiosulfate O-Other
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Sample Collector(s) (please print): Nicole Reistadt/Chris Hormuth		Sample Collector Signature: 		Analyses Required						
Relinquished By: (signature) 	Date 03/17/21	Time 1428	Received By: (signature) 	\$Chloro, _prep	O-PO4, Color, NOX	TOC	NH3, TKN, TN, T-PO4, NO3, ONIT	Turb, NO2, TSS, Silica, Bod, Bodi	Mug2QT, Entero	
Relinquished By: (signature)	Date	Time	Received By: (signature)							
Relinquished By: (signature)	Date	Time	Received By: (signature)							

Sample(s) on ice ☒ Yes or ☐ No?	Temperature °C: 3.1°C	NP	NPF	S	S	NP	ST
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Collection		Sample Description & Location	Matrix (see codes)	# of Sample Containers Submitted						Lab ID #
Date	Time									
03/17/21	0935	CRNEP_RS #395	SWE	1	1	1	1	2	1	AE80513
03/17/21	1155	CRNEP_RS #449	SWE	1	1	1	1	2	1	AE80514
03/17/21	1010	CRNEP_RS #402	SWE	1	1	1	1	2	1	AE80515
03/17/21	1040	CRNEP_RS #413	SWE	1	1	1	1	2	1	AE80516
03/17/21	1310	CRNEP_RS #470	SWE	1	1	1	1	2	1	AE80517
03/17/21	1345	CRNEP_EQ # @470	SWE	1	1	1	1	2	1	AE80518

**SAMPLES SHOULD BE IN WET ICE & LESS THAN 6° C (42.8°F)
OR THEY MAYBE QUALIFIED***

*Qualified = the data may not be accurate and regulatory agencies may not accept qualified data.