

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: 5/11/2021

Below are the results of samples submitted to this laboratory on 4/28/2021

Laboratory ID	AE84017	Collection date and time	4/28/2021 11:25 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/MULLEN
Sample Description	Grid #424		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	4.59		mg/M3	0.5	2.0	5/5/2021	3:01 PM	SM21 10200 H
Pheophytin	4.55		mg/M3	0.5	2.0	5/5/2021	3:01 PM	SM21 10200 H
Biochemical Oxygen Demand 5 day	1.3		mg/L	0.3	1.2	4/29/2021	10:15 AM	SM 5210 B
Color	41.1		CU	1.25	5.00	4/29/2021	2:15 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	7.16		mg/L			4/28/2021	11:25 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		4/28/2021	2:56 PM	Enterolert®
Ammonia	0.014	I	mg/L as N	0.014	0.056	4/30/2021	9:23 AM	EPA 350.1
Nitrite	0.005	I	mg/L as N	0.003	0.012	4/29/2021	12:00 PM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	4/29/2021	12:00 PM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	4/29/2021	12:00 PM	EPA 353.2
Nitrogen, Organic	0.89		mg/L as N	0.05	0.2	5/6/2021	9:11 AM	TKN - NH3
Phosphorus, Ortho	0.055		mg/L as P	0.004	0.016	4/29/2021	1:41 PM	EPA 365.1
Salinity by meter by Client	8.71		SU			4/28/2021	11:25 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.95		meters			4/28/2021	11:25 AM	FDEP FT 1700
Silica, dissolved as SiO2	6.1		mg/L as SiO2	0.1	0.4	4/29/2021	1:08 PM	SM4500-SiO2 C
Depth of Water Body	3.5		Meters			4/28/2021	11:25 AM	FS2100
Nitrogen, Kjeldahl, Total	0.90		mg/L as N	0.05	0.2	5/6/2021	9:11 AM	EPA 351.2
Nitrogen, Total	0.90		mg/L as N	0.05	0.2	5/6/2021	9:11 AM	TKN + NOX
Total Organic Carbon	11		mg/L	1	4	4/30/2021	2:39 PM	SM 5310 B
Phosphorus, Total	0.097		mg/L as P	0.006	0.024	5/6/2021	9:13 AM	EPA 365.1
Total Suspended Solids	3.55		mg/L	0.6	2.4	4/29/2021	9:21 AM	SM 2540 D
Turbidity (Nephelometric)	3.45		NTU	0.2	0.8	4/29/2021	8:18 AM	EPA 180.1



Laboratory ID	AE84018	Collection date and time	4/28/2021 10:15 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/MULLEN
Sample Description	Grid #388		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	1.36	I	mg/M3	0.5	2.0	5/5/2021	3:01 PM	SM21 10200 H
Pheophytin	2.13		mg/M3	0.5	2.0	5/5/2021	3:01 PM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.8	I	mg/L	0.3	1.2	4/29/2021	10:15 AM	SM 5210 B
Color	28.8		CU	1.25	5.00	4/29/2021	2:15 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	6.63		mg/L			4/28/2021	10:15 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		4/28/2021	2:56 PM	Enterolert®
Ammonia	0.030	I	mg/L as N	0.014	0.056	4/30/2021	9:23 AM	EPA 350.1
Nitrite	0.005	I	mg/L as N	0.003	0.012	4/29/2021	12:00 PM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	4/29/2021	12:00 PM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	4/29/2021	12:00 PM	EPA 353.2
Nitrogen, Organic	0.73		mg/L as N	0.05	0.2	5/6/2021	9:11 AM	TKN - NH3
Phosphorus, Ortho	0.045		mg/L as P	0.004	0.016	4/29/2021	1:41 PM	EPA 365.1
Salinity by meter by Client	17.09		SU			4/28/2021	10:15 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.6	S	meters			4/28/2021	10:15 AM	FDEP FT 1700
Silica, dissolved as SiO2	4.5		mg/L as SiO2	0.1	0.4	4/29/2021	1:08 PM	SM4500-SiO2 C
Depth of Water Body	0.6		Meters			4/28/2021	10:15 AM	FS2100
Nitrogen, Kjeldahl, Total	0.76		mg/L as N	0.05	0.2	5/6/2021	9:11 AM	EPA 351.2
Nitrogen, Total	0.76		mg/L as N	0.05	0.2	5/6/2021	9:11 AM	TKN + NOX
Total Organic Carbon	9.1		mg/L	1	4	4/30/2021	2:39 PM	SM 5310 B
Phosphorus, Total	0.077		mg/L as P	0.006	0.024	5/6/2021	9:13 AM	EPA 365.1
Total Suspended Solids	7.65		mg/L	0.6	2.4	4/29/2021	9:21 AM	SM 2540 D
Turbidity (Nephelometric)	3.95		NTU	0.2	0.8	4/29/2021	8:18 AM	EPA 180.1

Laboratory ID	AE84019	Collection date and time	4/28/2021 10:55 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/MULLEN
Sample Description	Grid #412		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	1.71	I	mg/M3	0.5	2.0	5/5/2021	3:01 PM	SM21 10200 H
Pheophytin	1.95	I	mg/M3	0.5	2.0	5/5/2021	3:01 PM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.7	I	mg/L	0.3	1.2	4/29/2021	10:15 AM	SM 5210 B
Color	40.5		CU	1.25	5.00	4/29/2021	2:15 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	7.19		mg/L			4/28/2021	10:55 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		4/28/2021	2:56 PM	Enterolert®
Ammonia	0.031	I	mg/L as N	0.014	0.056	4/30/2021	9:23 AM	EPA 350.1
Nitrite	0.006	I	mg/L as N	0.003	0.012	4/29/2021	12:00 PM	EPA 353.2

Report Format: NELAC

DOH #E45049



Laboratory ID	AE84019	Collection date and time	4/28/2021 10:55 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/MULLEN
Sample Description	Grid #412		

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	4/29/2021	12:00 PM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	4/29/2021	12:00 PM	EPA 353.2
Nitrogen, Organic	0.85		mg/L as N	0.05	0.2	5/6/2021	9:11 AM	TKN - NH3
Phosphorus, Ortho	0.062		mg/L as P	0.004	0.016	4/29/2021	1:41 PM	EPA 365.1
Salinity by meter by Client	8.08		SU			4/28/2021	10:55 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.25		meters			4/28/2021	10:55 AM	FDEP FT 1700
Silica, dissolved as SiO2	6.1		mg/L as SiO2	0.1	0.4	4/29/2021	1:08 PM	SM4500-SiO2 C
Depth of Water Body	1.9		Meters			4/28/2021	10:55 AM	FS2100
Nitrogen, Kjeldahl, Total	0.88		mg/L as N	0.05	0.2	5/6/2021	9:11 AM	EPA 351.2
Nitrogen, Total	0.88		mg/L as N	0.05	0.2	5/6/2021	9:11 AM	TKN + NOX
Total Organic Carbon	12		mg/L	1	4	4/30/2021	2:39 PM	SM 5310 B
Phosphorus, Total	0.095		mg/L as P	0.006	0.024	5/6/2021	9:13 AM	EPA 365.1
Total Suspended Solids	3.70		mg/L	0.6	2.4	4/29/2021	9:21 AM	SM 2540 D
Turbidity (Nephelometric)	2.96		NTU	0.2	0.8	4/29/2021	8:18 AM	EPA 180.1

Laboratory ID	AE84020	Collection date and time	4/28/2021 9:45 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/MULLEN
Sample Description	Grid #387		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	1.58	I	mg/M3	0.5	2.0	5/5/2021	3:01 PM	SM21 10200 H
Pheophytin	0.93	I	mg/M3	0.5	2.0	5/5/2021	3:01 PM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.7	I	mg/L	0.3	1.2	4/29/2021	10:15 AM	SM 5210 B
Color	28.5		CU	1.25	5.00	4/29/2021	2:15 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	6.58		mg/L			4/28/2021	9:45 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		4/28/2021	2:56 PM	Enterolert®
Ammonia	0.014	U	mg/L as N	0.014	0.056	4/30/2021	9:23 AM	EPA 350.1
Nitrite	0.005	I	mg/L as N	0.003	0.012	4/29/2021	12:00 PM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	4/29/2021	12:00 PM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	4/29/2021	12:00 PM	EPA 353.2
Nitrogen, Organic	0.73		mg/L as N	0.05	0.2	5/6/2021	9:11 AM	TKN - NH3
Phosphorus, Ortho	0.041		mg/L as P	0.004	0.016	4/29/2021	1:41 PM	EPA 365.1
Salinity by meter by Client	17.53		SU			4/28/2021	9:45 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.3		meters			4/28/2021	9:45 AM	FDEP FT 1700
Silica, dissolved as SiO2	4.6		mg/L as SiO2	0.1	0.4	4/29/2021	1:08 PM	SM4500-SiO2 C
Depth of Water Body	2.8		Meters			4/28/2021	9:45 AM	FS2100

Report Format: NELAC

DOH #E45049



Laboratory ID	AE84020	Collection date and time	4/28/2021 9:45 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/MULLEN
Sample Description	Grid #387		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Nitrogen, Kjeldahl, Total	0.73		mg/L as N	0.05	0.2	5/6/2021	9:11 AM	EPA 351.2
Nitrogen, Total	0.73		mg/L as N	0.05	0.2	5/6/2021	9:11 AM	TKN + NOX
Total Organic Carbon	9.8		mg/L	1	4	4/30/2021	2:39 PM	SM 5310 B
Phosphorus, Total	0.067		mg/L as P	0.006	0.024	5/6/2021	9:13 AM	EPA 365.1
Total Suspended Solids	3.55		mg/L	0.6	2.4	4/29/2021	9:21 AM	SM 2540 D
Turbidity (Nephelometric)	2.18		NTU	0.2	0.8	4/29/2021	8:18 AM	EPA 180.1

Laboratory ID	AE84022	Collection date and time	4/28/2021 12:10 PM
Location Code	CRNEP_RS	Sample Collector	REISTADT/MULLEN
Sample Description	Grid #448		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	11.08		mg/M3	0.5	2.0	5/5/2021	3:01 PM	SM21 10200 H
Pheophytin	11.95		mg/M3	0.5	2.0	5/5/2021	3:01 PM	SM21 10200 H
Biochemical Oxygen Demand 5 day	1.2		mg/L	0.3	1.2	4/29/2021	10:15 AM	SM 5210 B
Color	61.7		CU	1.25	5.00	4/29/2021	2:15 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	7.48		mg/L			4/28/2021	12:10 PM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		4/28/2021	2:56 PM	Enterolert®
Ammonia	0.014	U	mg/L as N	0.014	0.056	4/30/2021	9:23 AM	EPA 350.1
Nitrite	0.007	I	mg/L as N	0.003	0.012	4/29/2021	12:00 PM	EPA 353.2
Nitrate	0.013	I	mg/L as N	0.01	0.04	4/29/2021	12:00 PM	EPA 353.2
Nitrate + Nitrite	0.020	I	mg/L as N	0.01	0.04	4/29/2021	12:00 PM	EPA 353.2
Nitrogen, Organic	1.1		mg/L as N	0.05	0.2	5/6/2021	9:11 AM	TKN - NH3
Phosphorus, Ortho	0.077		mg/L as P	0.004	0.016	4/29/2021	1:41 PM	EPA 365.1
Salinity by meter by Client	1.24		SU			4/28/2021	12:10 PM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.75		meters			4/28/2021	12:10 PM	FDEP FT 1700
Silica, dissolved as SiO2	8.2		mg/L as SiO2	0.1	0.4	4/29/2021	1:08 PM	SM4500-SiO2 C
Depth of Water Body	1.8		Meters			4/28/2021	12:10 PM	FS2100
Nitrogen, Kjeldahl, Total	1.1		mg/L as N	0.05	0.2	5/6/2021	9:11 AM	EPA 351.2
Nitrogen, Total	1.1		mg/L as N	0.05	0.2	5/6/2021	9:11 AM	TKN + NOX
Total Organic Carbon	14		mg/L	1	4	4/30/2021	2:39 PM	SM 5310 B
Phosphorus, Total	0.16		mg/L as P	0.006	0.024	5/6/2021	9:13 AM	EPA 365.1
Total Suspended Solids	8.85		mg/L	0.6	2.4	4/29/2021	9:21 AM	SM 2540 D
Turbidity (Nephelometric)	8.71		NTU	0.2	0.8	4/29/2021	8:18 AM	EPA 180.1



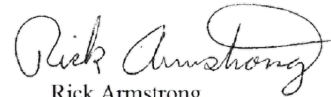
Laboratory ID	AE84023	Collection date and time	4/28/2021 1:10 PM
Location Code	CRNEP_EQ	Sample Collector	REISTADT/MULLEN
Sample Description	EB Site #		

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	5/4/2021	2:02 PM	SM21 10200 H
Pheophytin	0.56	I	mg/M3	0.5	2.0	5/4/2021	2:02 PM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.3	U	mg/L	0.3	1.2	4/29/2021	10:15 AM	SM 5210 B
Color	1.25	U	CU	1.25	5.00	4/29/2021	2:15 PM	SM21 2120 C
Enterococci	1	U	MPN/100mL	1		4/28/2021	2:56 PM	Enterolert®
Ammonia	0.014	U	mg/L as N	0.014	0.056	4/30/2021	9:23 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	4/30/2021	9:45 AM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	4/30/2021	9:45 AM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	4/29/2021	12:00 PM	EPA 353.2
Nitrogen, Organic	0.050	U	mg/L as N	0.05	0.2	5/6/2021	9:11 AM	TKN - NH3
Phosphorus, Ortho	0.004	U	mg/L as P	0.004	0.016	4/29/2021	1:41 PM	EPA 365.1
Silica, dissolved as SiO2	0.1	U	mg/L as SiO2	0.1	0.4	4/29/2021	1:08 PM	SM4500-SiO2 C
Nitrogen, Kjeldahl, Total	0.05	U	mg/L as N	0.05	0.2	5/6/2021	9:11 AM	EPA 351.2
Nitrogen, Total	0.050	U	mg/L as N	0.05	0.2	5/6/2021	9:11 AM	TKN + NOX
Total Organic Carbon	1.000	U	mg/L	1	4	4/30/2021	2:39 PM	SM 5310 B
Phosphorus, Total	0.006	U	mg/L as P	0.006	0.024	5/6/2021	9:13 AM	EPA 365.1
Total Suspended Solids	0.6	U	mg/L	0.6	2.4	4/29/2021	9:21 AM	SM 2540 D
Turbidity (Nephelometric)	0.20	U	NTU	0.2	0.8	4/29/2021	8:18 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).
- 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.

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 <i>william.mullen@FloridaDEP.gov</i> Phone: (239) 344-5719 Sample Collector(s) (please print): Nicole Reistad/Chris Hormuth <i>William Mullen</i>			Name: DNRM RE: CCHMN-Tidal Caloosa Address: 1500 Monroe St Ft Myers, FL 33901 Phone: (239) 533-8109 Sample Collector Signature: <i>[Signature]</i>			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				
Relinquished By: (signature) <i>[Signature]</i> Date 04/28/21 Time 1435			Received By: (signature) <i>[Signature]</i>			\$Chloroa, _prep O-PO4, Color, NOX TOC NH3, TKN, TN, T-PO4, NO3, ONIT Turb, NO2, TSS, Silica, Bod, Bodi Mug2QT, Entero									
Relinquished By: (signature) <i>[Signature]</i> Date Time			Received By: (signature)												
Relinquished By: (signature) Date Time			Received By: (signature)												
Sample(s) on ice ☒ Yes or ☐ No? Temperature °C: 3.6°C						Preservatives (see codes) NP NPF S S NP ST									
Collection		Sample Description & Location	Matrix (see codes)	# of Sample Containers Submitted						Lab ID #					
Date	Time														
04/28/21	1125	CRNEP_RS #424	SWE	1	1	1	1	2	1	AE84017					
04/28/21	1015	CRNEP_RS #388	SWE	1	1	1	1	2	1	AE84018					
04/28/21	1055	CRNEP_RS #412	SWE	1	1	1	1	2	1	AE84019					
04/28/21	0945	CRNEP_RS #387	SWE	1	1	1	1	2	1	AE84020					
		CRNEP_RSBOT #387 Bottom	SWE	1	1	1	1	2	1	AE84021					
04/28/21	1210	CRNEP_RS #448	SWE	1	1	1	1	2	1	AE84022					
04/28/21	1310	CRNEP_EQ #	SWE	1	1	1	1	2	1	AE84023					

**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.