

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: 7/31/2020

Below are the results of samples submitted to this laboratory on 7/15/2020

Laboratory ID	AE54224	Collection date and time	7/15/2020 11:00 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/HORMUTH
Sample Description	Grid #435		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	13.40		mg/M3	0.5	2.0	7/22/2020	3:07 PM	SM21 10200 H
Pheophytin	5.88		mg/M3	0.5	2.0	7/22/2020	3:07 PM	SM21 10200 H
Biochemical Oxygen Demand 5 day	1.8		mg/L	0.3	1.2	7/16/2020	10:37 AM	SM 5210 B
Color	61.5		CU	1.6	6.4	7/15/2020	2:34 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	6.57		mg/L			7/15/2020	11:00 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		7/15/2020	2:16 PM	Enterolert®
E.coli Enumeration	10		MPN/100mL	10		7/15/2020	2:27 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	7/16/2020	10:52 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	7/16/2020	10:52 AM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	7/16/2020	10:52 AM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	7/16/2020	10:52 AM	EPA 353.2
Nitrogen, Organic	1.1		mg/L as N	0.05	0.2	7/20/2020	10:12 AM	TKN - NH3
Phosphorus, Ortho	0.110		mg/L as P	0.004	0.016	7/15/2020	2:05 PM	EPA 365.1
Salinity by meter by Client	5.32		SU			7/15/2020	11:00 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.25		meters			7/15/2020	11:00 AM	FDEP FT 1700
Silica, dissolved as SiO2	8.1		mg/L as SiO2	0.1	0.4	7/15/2020	2:05 PM	SM4500-SiO2 C
Depth of Water Body	1.4		Meters			7/15/2020	11:00 AM	FS2100
Nitrogen, Kjeldahl, Total	1.1		mg/L as N	0.05	0.2	7/20/2020	10:12 AM	EPA 351.2
Nitrogen, Total	1.1		mg/L as N	0.05	0.2	7/20/2020	10:12 AM	TKN + NOX
Total Organic Carbon	15		mg/L	1	4	7/26/2020	10:26 AM	SM 5310 B
Phosphorus, Total	0.16		mg/L as P	0.006	0.024	7/20/2020	10:15 AM	EPA 365.1

Report Format: NELAC

DOH #E45049



Laboratory ID	AE54224	Collection date and time	7/15/2020 11:00 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/HORMUTH
Sample Description	Grid #435		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Total Suspended Solids	3.65		mg/L	0.6	2.4	7/16/2020	8:10 AM	SM 2540 D
Turbidity (Nephelometric)	1.82		NTU	0.2	0.8	7/16/2020	7:49 AM	EPA 180.1

Laboratory ID	AE54225	Collection date and time	7/15/2020 9:55 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/HORMUTH
Sample Description	Grid #386		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	2.94		mg/M3	0.5	2.0	7/22/2020	3:07 PM	SM21 10200 H
Pheophytin	1.08	I	mg/M3	0.5	2.0	7/22/2020	3:07 PM	SM21 10200 H
Biochemical Oxygen Demand 5 day	1.4		mg/L	0.3	1.2	7/16/2020	10:37 AM	SM 5210 B
Color	21.3		CU	1.6	6.4	7/15/2020	2:34 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	5.1		mg/L			7/15/2020	9:55 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		7/15/2020	2:16 PM	Enterolert®
E.coli Enumeration	20		MPN/100mL	10		7/15/2020	2:27 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	7/16/2020	10:52 AM	EPA 350.1
Nitrite	0.003	I	mg/L as N	0.003	0.012	7/16/2020	10:52 AM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	7/16/2020	10:52 AM	EPA 353.2
Nitrate + Nitrite	0.010	I	mg/L as N	0.01	0.04	7/16/2020	10:52 AM	EPA 353.2
Nitrogen, Organic	0.83		mg/L as N	0.05	0.2	7/22/2020	9:10 AM	TKN - NH3
Phosphorus, Ortho	0.028		mg/L as P	0.004	0.016	7/15/2020	2:05 PM	EPA 365.1
Salinity by meter by Client	22.50		SU			7/15/2020	9:55 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	2.0	S	meters			7/15/2020	9:55 AM	FDEP FT 1700
Silica, dissolved as SiO2	1.9		mg/L as SiO2	0.1	0.4	7/15/2020	2:05 PM	SM4500-SiO2 C
Depth of Water Body	2.0		Meters			7/15/2020	9:55 AM	FS2100
Nitrogen, Kjeldahl, Total	0.83		mg/L as N	0.05	0.2	7/22/2020	9:10 AM	EPA 351.2
Nitrogen, Total	0.84		mg/L as N	0.05	0.2	7/22/2020	9:10 AM	TKN + NOX
Total Organic Carbon	8.1	Y	mg/L	1	4	7/30/2020	3:07 PM	SM 5310 B
Phosphorus, Total	0.058		mg/L as P	0.006	0.024	7/22/2020	9:15 AM	EPA 365.1
Total Suspended Solids	2.55		mg/L	0.6	2.4	7/16/2020	8:10 AM	SM 2540 D
Turbidity (Nephelometric)	0.660	I	NTU	0.2	0.8	7/16/2020	7:49 AM	EPA 180.1



Laboratory ID	AE54226	Collection date and time	7/15/2020 10:15 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/HORMUTH
Sample Description	Grid #393		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	3.52		mg/M3	0.5	2.0	7/22/2020	3:07 PM	SM21 10200 H
Pheophytin	0.70	I	mg/M3	0.5	2.0	7/22/2020	3:07 PM	SM21 10200 H
Biochemical Oxygen Demand 5 day	1.3		mg/L	0.3	1.2	7/16/2020	10:37 AM	SM 5210 B
Color	26.4		CU	1.6	6.4	7/15/2020	2:34 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	5.49		mg/L			7/15/2020	10:15 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		7/15/2020	2:16 PM	Enterolert®
E.coli Enumeration	10	U	MPN/100mL	10		7/15/2020	2:27 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	7/16/2020	10:52 AM	EPA 350.1
Nitrite	0.003	I	mg/L as N	0.003	0.012	7/16/2020	10:52 AM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	7/16/2020	10:52 AM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	7/16/2020	10:52 AM	EPA 353.2
Nitrogen, Organic	0.91		mg/L as N	0.05	0.2	7/22/2020	9:10 AM	TKN - NH3
Phosphorus, Ortho	0.042		mg/L as P	0.004	0.016	7/15/2020	2:05 PM	EPA 365.1
Salinity by meter by Client	18.78		SU			7/15/2020	10:15 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	2.1	S	meters			7/15/2020	10:15 AM	FDEP FT 1700
Silica, dissolved as SiO2	2.4		mg/L as SiO2	0.1	0.4	7/15/2020	2:05 PM	SM4500-SiO2 C
Depth of Water Body	2.1		Meters			7/15/2020	10:15 AM	FS2100
Nitrogen, Kjeldahl, Total	0.91		mg/L as N	0.05	0.2	7/22/2020	9:10 AM	EPA 351.2
Nitrogen, Total	0.91		mg/L as N	0.05	0.2	7/22/2020	9:10 AM	TKN + NOX
Total Organic Carbon	9.1	Y	mg/L	1	4	7/30/2020	3:07 PM	SM 5310 B
Phosphorus, Total	0.063		mg/L as P	0.006	0.024	7/22/2020	9:15 AM	EPA 365.1
Total Suspended Solids	1.50	I	mg/L	0.6	2.4	7/16/2020	8:10 AM	SM 2540 D
Turbidity (Nephelometric)	0.500	I	NTU	0.2	0.8	7/16/2020	7:49 AM	EPA 180.1

Laboratory ID	AE54227	Collection date and time	7/15/2020 9:25 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/HORMUTH
Sample Description	Grid #391		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	2.54		mg/M3	0.5	2.0	7/22/2020	3:07 PM	SM21 10200 H
Pheophytin	0.73	I	mg/M3	0.5	2.0	7/22/2020	3:07 PM	SM21 10200 H
Biochemical Oxygen Demand 5 day	1.1	I	mg/L	0.3	1.2	7/16/2020	10:37 AM	SM 5210 B
Color	20.0		CU	1.6	6.4	7/15/2020	2:34 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	4.63		mg/L			7/15/2020	9:25 AM	FDEP FT1500

Report Format: NELAC

DOH #E45049



Laboratory ID AE54227
 Location Code CRNEP_RS
 Sample Description Grid #391

Collection date and time 7/15/2020 9:25 AM
 Sample Collector REISTADT/HORMUTH

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Enterococci	10		MPN/100mL	10		7/15/2020	2:16 PM	Enterolert®
E.coli Enumeration	10	U	MPN/100mL	10		7/15/2020	2:27 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	7/16/2020	10:52 AM	EPA 350.1
Nitrite	0.003	I	mg/L as N	0.003	0.012	7/16/2020	10:52 AM	EPA 353.2
Nitrate	0.010	I	mg/L as N	0.01	0.04	7/16/2020	10:52 AM	EPA 353.2
Nitrate + Nitrite	0.013	I	mg/L as N	0.01	0.04	7/16/2020	10:52 AM	EPA 353.2
Nitrogen, Organic	0.83		mg/L as N	0.05	0.2	7/22/2020	9:10 AM	TKN - NH3
Phosphorus, Ortho	0.070		mg/L as P	0.004	0.016	7/15/2020	2:05 PM	EPA 365.1
Salinity by meter by Client	22.02		SU			7/15/2020	9:25 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.7	S	meters			7/15/2020	9:25 AM	FDEP FT 1700
Silica, dissolved as SiO2	1.9		mg/L as SiO2	0.1	0.4	7/15/2020	2:05 PM	SM4500-SiO2 C
Depth of Water Body	1.7		Meters			7/15/2020	9:25 AM	FS2100
Nitrogen, Kjeldahl, Total	0.83		mg/L as N	0.05	0.2	7/22/2020	9:10 AM	EPA 351.2
Nitrogen, Total	0.84		mg/L as N	0.05	0.2	7/22/2020	9:10 AM	TKN + NOX
Total Organic Carbon	7.8	Y	mg/L	1	4	7/30/2020	3:07 PM	SM 5310 B
Phosphorus, Total	0.070		mg/L as P	0.006	0.024	7/22/2020	9:15 AM	EPA 365.1
Total Suspended Solids	2.35	I	mg/L	0.6	2.4	7/16/2020	8:10 AM	SM 2540 D
Turbidity (Nephelometric)	0.400	I	NTU	0.2	0.8	7/16/2020	7:49 AM	EPA 180.1

Laboratory ID AE54229
 Location Code CRNEP_RS
 Sample Description Grid #443

Collection date and time 7/15/2020 11:35 AM
 Sample Collector REISTADT/HORMUTH

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	18.80		mg/M3	0.5	2.0	7/22/2020	3:07 PM	SM21 10200 H
Pheophytin	6.41		mg/M3	0.5	2.0	7/22/2020	3:07 PM	SM21 10200 H
Biochemical Oxygen Demand 5 day	2.5		mg/L	0.3	1.2	7/16/2020	10:37 AM	SM 5210 B
Color	77.5		CU	1.6	6.4	7/15/2020	2:34 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	9.77		mg/L			7/15/2020	11:35 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		7/15/2020	2:16 PM	Enterolert®
E.coli Enumeration	10	U	MPN/100mL	10		7/15/2020	2:27 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	7/16/2020	10:52 AM	EPA 350.1
Nitrite	0.003	I	mg/L as N	0.003	0.012	7/16/2020	10:52 AM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	7/16/2020	10:52 AM	EPA 353.2

Report Format: NELAC

DOH #E45049



Laboratory ID AE54229
 Location Code CRNEP_RS
 Sample Description Grid #443

Collection date and time 7/15/2020 11:35 AM
 Sample Collector REISTADT/HORMUTH

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	7/16/2020	10:52 AM	EPA 353.2
Nitrogen, Organic	1.0		mg/L as N	0.05	0.2	7/22/2020	9:10 AM	TKN - NH3
Phosphorus, Ortho	0.126		mg/L as P	0.004	0.016	7/15/2020	2:05 PM	EPA 365.1
Salinity by meter by Client	2.58		SU			7/15/2020	11:35 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.75		meters			7/15/2020	11:35 AM	FDEP FT 1700
Silica, dissolved as SiO2	10		mg/L as SiO2	0.1	0.4	7/15/2020	2:05 PM	SM4500-SiO2 C
Depth of Water Body	2.2		Meters			7/15/2020	11:35 AM	FS2100
Nitrogen, Kjeldahl, Total	1.0		mg/L as N	0.05	0.2	7/22/2020	9:10 AM	EPA 351.2
Nitrogen, Total	1.0		mg/L as N	0.05	0.2	7/22/2020	9:10 AM	TKN + NOX
Total Organic Carbon	17		mg/L	1	4	7/30/2020	3:07 PM	SM 5310 B
Phosphorus, Total	0.19		mg/L as P	0.006	0.024	7/22/2020	9:15 AM	EPA 365.1
Total Suspended Solids	3.80		mg/L	0.6	2.4	7/16/2020	8:10 AM	SM 2540 D
Turbidity (Nephelometric)	4.19		NTU	0.2	0.8	7/16/2020	7:49 AM	EPA 180.1

Laboratory ID AE54230
 Location Code CRNEP_EQ
 Sample Description EB Site #443

Collection date and time 7/15/2020 11:45 AM
 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	7/22/2020	3:07 PM	SM21 10200 H
Pheophytin	0.50	U	mg/M3	0.5	2.0	7/22/2020	3:07 PM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.3	U	mg/L	0.3	1.2	7/16/2020	10:37 AM	SM 5210 B
Color	1.6	U	CU	1.6	6.4	7/15/2020	2:34 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	7.51		mg/L			7/15/2020	11:45 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		7/15/2020	2:16 PM	Enterolert®
E.coli Enumeration	10	U	MPN/100mL	10		7/15/2020	2:27 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	7/16/2020	10:52 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	7/16/2020	10:52 AM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	7/16/2020	10:52 AM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	7/16/2020	10:52 AM	EPA 353.2
Nitrogen, Organic	0.050	U	mg/L as N	0.05	0.2	7/20/2020	10:12 AM	TKN - NH3
Phosphorus, Ortho	0.004	U	mg/L as P	0.004	0.016	7/15/2020	2:05 PM	EPA 365.1
Salinity by meter by Client	0.0		SU			7/15/2020	11:45 AM	FDEP FT 1300
Silica, dissolved as SiO2	0.1	U	mg/L as SiO2	0.1	0.4	7/15/2020	2:05 PM	SM4500-SiO2 C

Report Format: NELAC

DOH #E45049



Laboratory ID AE54230
Location Code CRNEP_EQ
Sample Description EB Site #443

Collection date and time 7/15/2020 11:45 AM
Sample Collector REISTADT/HORMUTH

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Nitrogen, Kjeldahl, Total	0.05	U	mg/L as N	0.05	0.2	7/20/2020	10:12 AM	EPA 351.2
Nitrogen, Total	0.050	U	mg/L as N	0.05	0.2	7/20/2020	10:12 AM	TKN + NOX
Total Organic Carbon	1.000	U	mg/L	1	4	7/26/2020	10:26 AM	SM 5310 B
Phosphorus, Total	0.006	U	mg/L as P	0.006	0.024	7/20/2020	10:15 AM	EPA 365.1
Total Suspended Solids	0.6	U	mg/L	0.6	2.4	7/16/2020	8:10 AM	SM 2540 D
Turbidity (Nephelometric)	0.20	U	NTU	0.2	0.8	7/16/2020	7:49 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.
Y Improperly preserved sample: Temp may be too high or frozen, may not have been field filtered and/or preservative may have been added at lab; therefore data may not be accurate.

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

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Report/Result Information				Billing/Invoice Information															
Name: FDEP - South				Name: DNRM				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							
ATTN: Kirby Wolfe				RE: CCHMN-Tidal Caloosa															
Address: 2295 Victoria Ave, Suite 364 PO Box 2549 Ft Myers FL 33901				Address: 1500 Monroe St Ft Myers, FL 33901															
Phone: (239) 344-5719				Phone: (239) 533-8109															
Sample Collector(s) (please print): Nicole Reistadt / Chris Hormuth				Sample Collector Signature:				Analyses Required \$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)		Date		Time		Received By: (signature)													
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: 2.1								NP		NPF		S		S		NP		ST	
Collection Date Time		Sample Description & Location		Matrix (see codes)		# of Sample Containers Submitted						Lab ID #							
07/15/20	1100	CRNEP_RS #435		SWE		1	1	1	1	2	1	AE54224							
07/15/20	0955	CRNEP_RS #386		SWE		1	1	1	1	2	1	AE54225							
07/15/20	1015	CRNEP_RS #393		SWE		1	1	1	1	2	1	AE54226							
07/15/20	0925	CRNEP_RS #391		SWE		1	1	1	1	2	1	AE54227							
		CRNEP_RSBOT #391 Bottom DID NOT SAMPLE		SWE		1	1	1	1	2	1	AE54228							
07/15/20	1135	CRNEP_RS #443		SWE		1	1	1	1	2	1	AE54229							
07/15/20	1145	CRNEP_EQ # @443		SWE		1	1	1	1	2	1	AE54230							

**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.