

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: 3/27/2020

Below are the results of samples submitted to this laboratory on 3/18/2020

Laboratory ID	AE42778	Collection date and time	3/18/2020 12:15 PM
Location Code	CRNEP_RS	Sample Collector	REISTADT/HORMUTH
Sample Description	Grid #437		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	4.31		mg/M3	0.5	2.0	3/19/2020	2:00 PM	SM21 10200 H
Pheophytin	1.49	I	mg/M3	0.5	2.0	3/19/2020	2:00 PM	SM21 10200 H
Biochemical Oxygen Demand 5 day	2.0		mg/L	0.3	1.2	3/19/2020	10:02 AM	SM 5210 B
Color	40.2		CU	1.6	6.4	3/19/2020	11:18 AM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	9.31		mg/L			3/18/2020	12:15 PM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		3/18/2020	2:54 PM	Enterolert®
E.coli Enumeration	10		MPN/100mL	10		3/18/2020	2:54 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	3/19/2020	9:16 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	3/19/2020	10:47 AM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	3/19/2020	10:47 AM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	3/19/2020	10:47 AM	EPA 353.2
Nitrogen, Organic	0.84		mg/L as N	0.05	0.2	3/23/2020	8:53 AM	TKN - NH3
Phosphorus, Ortho	0.051		mg/L as P	0.004	0.016	3/18/2020	2:51 PM	EPA 365.1
Salinity by meter by Client	13.51		SU			3/18/2020	12:15 PM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.85	S	meters			3/18/2020	12:15 PM	FDEP FT 1700
Silica, dissolved as SiO2	3.8		mg/L as SiO2	0.1	0.4	3/18/2020	2:55 PM	SM4500-SiO2 C
Depth of Water Body	0.85		Meters			3/18/2020	12:15 PM	FS2100
Nitrogen, Kjeldahl, Total	0.84		mg/L as N	0.05	0.2	3/23/2020	8:53 AM	EPA 351.2
Nitrogen, Total	0.84		mg/L as N	0.05	0.2	3/23/2020	8:53 AM	TKN + NOX
Total Organic Carbon	13		mg/L	1	4	3/19/2020	11:39 AM	SM 5310 B
Phosphorus, Total	0.094		mg/L as P	0.006	0.024	3/23/2020	9:03 AM	EPA 365.1

Report Format: NELAC

DOH #E45049



Laboratory ID	AE42778	Collection date and time	3/18/2020 12:15 PM
Location Code	CRNEP_RS	Sample Collector	REISTADT/HORMUTH
Sample Description	Grid #437		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Total Suspended Solids	9.90		mg/L	0.6	2.4	3/19/2020	8:20 AM	SM 2540 D
Turbidity (Nephelometric)	1.49		NTU	0.2	0.8	3/19/2020	7:19 AM	EPA 180.1

Laboratory ID	AE42779	Collection date and time	3/18/2020 11:40 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/HORMUTH
Sample Description	Grid #428		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	3.18		mg/M3	0.5	2.0	3/19/2020	2:00 PM	SM21 10200 H
Pheophytin	0.66	I	mg/M3	0.5	2.0	3/19/2020	2:00 PM	SM21 10200 H
Biochemical Oxygen Demand 5 day	1.0	I	mg/L	0.3	1.2	3/19/2020	10:02 AM	SM 5210 B
Color	33.9		CU	1.6	6.4	3/19/2020	11:18 AM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	7.66		mg/L			3/18/2020	11:40 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		3/18/2020	2:54 PM	Enterolert®
E.coli Enumeration	10		MPN/100mL	10		3/18/2020	2:54 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	3/19/2020	9:16 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	3/19/2020	10:47 AM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	3/19/2020	10:47 AM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	3/19/2020	10:47 AM	EPA 353.2
Nitrogen, Organic	0.73		mg/L as N	0.05	0.2	3/23/2020	8:53 AM	TKN - NH3
Phosphorus, Ortho	0.046		mg/L as P	0.004	0.016	3/18/2020	2:51 PM	EPA 365.1
Salinity by meter by Client	12.45		SU			3/18/2020	11:40 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	2.1	S	meters			3/18/2020	11:40 AM	FDEP FT 1700
Silica, dissolved as SiO2	3.3		mg/L as SiO2	0.1	0.4	3/18/2020	2:55 PM	SM4500-SiO2 C
Depth of Water Body	2.1		Meters			3/18/2020	11:40 AM	FS2100
Nitrogen, Kjeldahl, Total	0.73		mg/L as N	0.05	0.2	3/23/2020	8:53 AM	EPA 351.2
Nitrogen, Total	0.73		mg/L as N	0.05	0.2	3/23/2020	8:53 AM	TKN + NOX
Total Organic Carbon	12		mg/L	1	4	3/19/2020	11:39 AM	SM 5310 B
Phosphorus, Total	0.081		mg/L as P	0.006	0.024	3/23/2020	9:03 AM	EPA 365.1
Total Suspended Solids	6.55		mg/L	0.6	2.4	3/19/2020	8:20 AM	SM 2540 D
Turbidity (Nephelometric)	0.520	I	NTU	0.2	0.8	3/19/2020	7:19 AM	EPA 180.1



Laboratory ID	AE42780	Collection date and time	3/18/2020 10:05 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	1.45	I	mg/M3	0.5	2.0	3/19/2020	2:00 PM	SM21 10200 H
Pheophytin	0.60	I	mg/M3	0.5	2.0	3/19/2020	2:00 PM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.6	I	mg/L	0.3	1.2	3/19/2020	10:02 AM	SM 5210 B
Color	21.2		CU	1.6	6.4	3/19/2020	11:18 AM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	7.16		mg/L			3/18/2020	10:05 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		3/18/2020	2:54 PM	Enterolert®
E.coli Enumeration	10	U	MPN/100mL	10		3/18/2020	2:54 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	3/19/2020	9:16 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	3/19/2020	10:47 AM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	3/19/2020	10:47 AM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	3/19/2020	10:47 AM	EPA 353.2
Nitrogen, Organic	0.82		mg/L as N	0.05	0.2	3/23/2020	8:53 AM	TKN - NH3
Phosphorus, Ortho	0.034		mg/L as P	0.004	0.016	3/18/2020	2:51 PM	EPA 365.1
Salinity by meter by Client	21.35		SU			3/18/2020	10:05 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	2.6		meters			3/18/2020	10:05 AM	FDEP FT 1700
Silica, dissolved as SiO2	2.3		mg/L as SiO2	0.1	0.4	3/18/2020	2:55 PM	SM4500-SiO2 C
Depth of Water Body	3.4		Meters			3/18/2020	10:05 AM	FS2100
Nitrogen, Kjeldahl, Total	0.82		mg/L as N	0.05	0.2	3/23/2020	8:53 AM	EPA 351.2
Nitrogen, Total	0.82		mg/L as N	0.05	0.2	3/23/2020	8:53 AM	TKN + NOX
Total Organic Carbon	8.9		mg/L	1	4	3/19/2020	11:39 AM	SM 5310 B
Phosphorus, Total	0.057		mg/L as P	0.006	0.024	3/23/2020	9:03 AM	EPA 365.1
Total Suspended Solids	18.2		mg/L	0.6	2.4	3/19/2020	8:20 AM	SM 2540 D
Turbidity (Nephelometric)	0.20	U	NTU	0.2	0.8	3/19/2020	7:19 AM	EPA 180.1

Laboratory ID	AE42781	Collection date and time	3/18/2020 11:20 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/HORMUTH
Sample Description	Grid #423		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	1.88	I	mg/M3	0.5	2.0	3/19/2020	2:00 PM	SM21 10200 H
Pheophytin	0.53	I	mg/M3	0.5	2.0	3/19/2020	2:00 PM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.7	I	mg/L	0.3	1.2	3/19/2020	10:02 AM	SM 5210 B
Color	30.6		CU	1.6	6.4	3/19/2020	11:18 AM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	7.52		mg/L			3/18/2020	11:20 AM	FDEP FT1500

Report Format: NELAC

DOH #E45049



Laboratory ID AE42781
 Location Code CRNEP_RS
 Sample Description Grid #423

Collection date and time 3/18/2020 11:20 AM
 Sample Collector REISTADT/HORMUTH

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Enterococci	10	U	MPN/100mL	10		3/18/2020	2:54 PM	Enterolert®
E.coli Enumeration	10	U	MPN/100mL	10		3/18/2020	2:54 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	3/19/2020	9:16 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	3/19/2020	10:47 AM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	3/19/2020	10:47 AM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	3/19/2020	10:47 AM	EPA 353.2
Nitrogen, Organic	0.75		mg/L as N	0.05	0.2	3/23/2020	8:53 AM	TKN - NH3
Phosphorus, Ortho	0.045		mg/L as P	0.004	0.016	3/18/2020	2:51 PM	EPA 365.1
Salinity by meter by Client	14.34		SU			3/18/2020	11:20 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.7	S	meters			3/18/2020	11:20 AM	FDEP FT 1700
Silica, dissolved as SiO2	2.9		mg/L as SiO2	0.1	0.4	3/18/2020	2:55 PM	SM4500-SiO2 C
Depth of Water Body	1.7		Meters			3/18/2020	11:20 AM	FS2100
Nitrogen, Kjeldahl, Total	0.75		mg/L as N	0.05	0.2	3/23/2020	8:53 AM	EPA 351.2
Nitrogen, Total	0.75		mg/L as N	0.05	0.2	3/23/2020	8:53 AM	TKN + NOX
Total Organic Carbon	11		mg/L	1	4	3/20/2020	12:49 PM	SM 5310 B
Phosphorus, Total	0.073		mg/L as P	0.006	0.024	3/23/2020	9:03 AM	EPA 365.1
Total Suspended Solids	12.7		mg/L	0.6	2.4	3/19/2020	8:20 AM	SM 2540 D
Turbidity (Nephelometric)	0.20	U	NTU	0.2	0.8	3/19/2020	7:19 AM	EPA 180.1

Laboratory ID AE42782
 Location Code CRNEP_RS
 Sample Description Grid #413

Collection date and time 3/18/2020 10:55 AM
 Sample Collector REISTADT/HORMUTH

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	2.09		mg/M3	0.5	2.0	3/19/2020	2:00 PM	SM21 10200 H
Pheophytin	0.50	U	mg/M3	0.5	2.0	3/19/2020	2:00 PM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.8	I	mg/L	0.3	1.2	3/19/2020	10:02 AM	SM 5210 B
Color	27.3		CU	1.6	6.4	3/19/2020	11:18 AM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	7.51		mg/L			3/18/2020	10:55 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		3/18/2020	2:54 PM	Enterolert®
E.coli Enumeration	10	U	MPN/100mL	10		3/18/2020	2:54 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	3/19/2020	9:16 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	3/19/2020	10:47 AM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	3/19/2020	10:47 AM	EPA 353.2

Report Format: NELAC

DOH #E45049



Laboratory ID	AE42782	Collection date and time	3/18/2020 10:55 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
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	3/19/2020	10:47 AM	EPA 353.2
Nitrogen, Organic	0.61		mg/L as N	0.05	0.2	3/23/2020	8:53 AM	TKN - NH3
Phosphorus, Ortho	0.038		mg/L as P	0.004	0.016	3/18/2020	2:51 PM	EPA 365.1
Salinity by meter by Client	16.4		SU			3/18/2020	10:55 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.8	S	meters			3/18/2020	10:55 AM	FDEP FT 1700
Silica, dissolved as SiO2	2.5		mg/L as SiO2	0.1	0.4	3/18/2020	2:55 PM	SM4500-SiO2 C
Depth of Water Body	1.8		Meters			3/18/2020	10:55 AM	FS2100
Nitrogen, Kjeldahl, Total	0.61		mg/L as N	0.05	0.2	3/23/2020	8:53 AM	EPA 351.2
Nitrogen, Total	0.61		mg/L as N	0.05	0.2	3/23/2020	8:53 AM	TKN + NOX
Total Organic Carbon	11		mg/L	1	4	3/20/2020	12:49 PM	SM 5310 B
Phosphorus, Total	0.068		mg/L as P	0.006	0.024	3/23/2020	9:03 AM	EPA 365.1
Total Suspended Solids	14.5		mg/L	0.6	2.4	3/19/2020	8:20 AM	SM 2540 D
Turbidity (Nephelometric)	0.20	U	NTU	0.2	0.8	3/19/2020	7:19 AM	EPA 180.1

Laboratory ID	AE42783	Collection date and time	3/18/2020 12:30 PM
Location Code	CRNEP_EQ	Sample Collector	REISTADT/HORMUTH
Sample Description	EB Site #437		

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	3/19/2020	2:00 PM	SM21 10200 H
Pheophytin	0.50	U	mg/M3	0.5	2.0	3/19/2020	2:00 PM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.3	U	mg/L	0.3	1.2	3/19/2020	10:02 AM	SM 5210 B
Color	1.6	U	CU	1.6	6.4	3/19/2020	11:18 AM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	8.00		mg/L			3/18/2020	12:30 PM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		3/18/2020	2:54 PM	Enterolert®
E.coli Enumeration	10	U	MPN/100mL	10		3/18/2020	2:54 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	3/19/2020	9:16 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	3/19/2020	10:47 AM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	3/19/2020	10:47 AM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	3/19/2020	10:47 AM	EPA 353.2
Nitrogen, Organic	0.050	U	mg/L as N	0.05	0.2	3/23/2020	8:53 AM	TKN - NH3
Phosphorus, Ortho	0.006	I	mg/L as P	0.004	0.016	3/18/2020	2:51 PM	EPA 365.1
Salinity by meter by Client	0.0		SU			3/18/2020	12:30 PM	FDEP FT 1300
Silica, dissolved as SiO2	0.1	U	mg/L as SiO2	0.1	0.4	3/18/2020	2:55 PM	SM4500-SiO2 C

Report Format: NELAC

DOH #E45049



Laboratory ID AE42783
Location Code CRNEP_EQ
Sample Description EB Site #437

Collection date and time 3/18/2020 12:30 PM
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	3/23/2020	8:53 AM	EPA 351.2
Nitrogen, Total	0.050	U	mg/L as N	0.05	0.2	3/23/2020	8:53 AM	TKN + NOX
Total Organic Carbon	1.000	U	mg/L	1	4	3/19/2020	11:39 AM	SM 5310 B
Phosphorus, Total	0.006	U	mg/L as P	0.006	0.024	3/23/2020	9:03 AM	EPA 365.1
Total Suspended Solids	0.6	U	mg/L	0.6	2.4	3/19/2020	8:20 AM	SM 2540 D
Turbidity (Nephelometric)	0.20	U	NTU	0.2	0.8	3/19/2020	7:19 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

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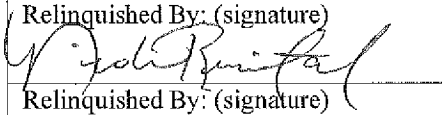
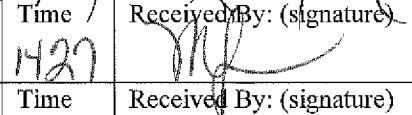
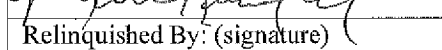
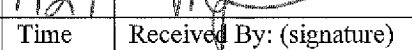
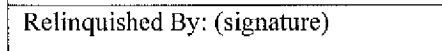
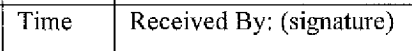
Chain of Custody Record

LCEL does not accept any samples used for evidentiary purposes

Lab Certification: E45049

LCEL F COC 20150828R1

Page 1 of 1

Report/Result Information			Billing/Invoice Information			Analyses Required									
Name: FDEP - South ATTN: Kirby Wolfe Address: 2295 Victoria Ave, Suite 364 PO Box 2549 Ft Myers FL 33901 Phone: (239) 344-5719 Sample Collector(s) (please print): Nicole Reistadt/Miranda Carroll/Chris Hornum			Name: DNRN RE: CCHMN-Tidal Caloosa Address: 1500 Monroe St Ft Myers, FL 33901 Phone: (239) 533-8109 Sample Collector Signature:			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) 		Date 03/18/20	Time 1427	Received By: (signature) 		\$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) 											
Sample(s) on ice ☒ Yes or ☐ No? Temperature °C: 3.7°C						NP	NPF	S	S	NP	ST				
Collection Date Time		Sample Description & Location		Matrix (see codes)	# of Sample Containers Submitted						Lab ID #				
03/18/20	1215	CRNEP_RS #437		SWE	1	1	1	1	2	1	AE42778				
03/18/20	1140	CRNEP_RS #428		SWE	1	1	1	1	2	1	AE42779				
03/18/20	1005	CRNEP_RS #393		SWE	1	1	1	1	2	1	AE42780				
03/18/20	1120	CRNEP_RS #423		SWE	1	1	1	1	2	1	AE42781				
03/18/20	1055	CRNEP_RS #413		SWE	1	1	1	1	2	1	AE42782				
03/18/20	1230	CRNEP_EQ #		SWE	1	1	1	1	2	1	AE42783				

**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.