

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: 3/2/2020

Below are the results of samples submitted to this laboratory on 2/19/2020

Laboratory ID	AE39614	Collection date and time	2/19/2020 10:30 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/CARROLL
Sample Description	Grid #387		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	1.57	I	mg/M3	0.5	2.0	2/25/2020	8:03 AM	SM21 10200 H
Pheophytin	0.65	I	mg/M3	0.5	2.0	2/25/2020	8:03 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.9	I	mg/L	0.3	1.2	2/20/2020	11:24 AM	SM 5210 B
Color	23.7		CU	1.6	6.4	2/19/2020	3:00 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	7.19		mg/L			2/19/2020	10:30 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		2/19/2020	3:07 PM	Enterolert®
E.coli Enumeration	10	U	MPN/100mL	10		2/19/2020	3:20 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	2/20/2020	9:30 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	2/20/2020	11:09 AM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	2/20/2020	11:09 AM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	2/20/2020	11:09 AM	EPA 353.2
Nitrogen, Organic	0.51		mg/L as N	0.05	0.2	2/25/2020	9:16 AM	TKN - NH3
Phosphorus, Ortho	0.025		mg/L as P	0.004	0.016	2/20/2020	12:20 PM	EPA 365.1
Salinity by meter by Client	20.99		SU			2/19/2020	10:30 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	2.85		meters			2/19/2020	10:30 AM	FDEP FT 1700
Silica, dissolved as SiO2	1.6		mg/L as SiO2	0.1	0.4	2/21/2020	7:56 AM	SM4500-SiO2 C
Depth of Water Body	3.3		Meters			2/19/2020	10:30 AM	FS2100
Nitrogen, Kjeldahl, Total	0.51		mg/L as N	0.05	0.2	2/25/2020	9:16 AM	EPA 351.2
Nitrogen, Total	0.51		mg/L as N	0.05	0.2	2/25/2020	9:16 AM	TKN + NOX
Total Organic Carbon	8.8		mg/L	1	4	2/23/2020	12:19 PM	SM 5310 B
Phosphorus, Total	0.054		mg/L as P	0.006	0.024	2/25/2020	9:18 AM	EPA 365.1

Report Format: NELAC

DOH #E45049



Laboratory ID	AE39614	Collection date and time	2/19/2020 10:30 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/CARROLL
Sample Description	Grid #387		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Total Suspended Solids	0.6	U	mg/L	0.6	2.4	2/21/2020	9:50 AM	SM 2540 D
Turbidity (Nephelometric)	0.20	U	NTU	0.2	0.8	2/21/2020	8:55 AM	EPA 180.1

Laboratory ID	AE39615	Collection date and time	2/19/2020 12:15 PM
Location Code	CRNEP_RS	Sample Collector	REISTADT/CARROLL
Sample Description	Grid #454		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	6.73		mg/M3	0.5	2.0	2/25/2020	8:03 AM	SM21 10200 H
Pheophytin	3.16		mg/M3	0.5	2.0	2/25/2020	8:03 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.8	I	mg/L	0.3	1.2	2/20/2020	11:24 AM	SM 5210 B
Color	53.4		CU	1.6	6.4	2/19/2020	3:00 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	8.77		mg/L			2/19/2020	12:15 PM	FDEP FT1500
Enterococci	20		MPN/100mL	10		2/19/2020	3:07 PM	Enterolert®
E.coli Enumeration	42		MPN/100mL	10		2/19/2020	3:20 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	2/20/2020	9:30 AM	EPA 350.1
Nitrite	0.003	I	mg/L as N	0.003	0.012	2/20/2020	11:09 AM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	2/20/2020	11:09 AM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	2/20/2020	11:09 AM	EPA 353.2
Nitrogen, Organic	0.98		mg/L as N	0.05	0.2	2/26/2020	9:21 AM	TKN - NH3
Phosphorus, Ortho	0.043		mg/L as P	0.004	0.016	2/20/2020	12:20 PM	EPA 365.1
Salinity by meter by Client	2.30		SU			2/19/2020	12:15 PM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.85		meters			2/19/2020	12:15 PM	FDEP FT 1700
Silica, dissolved as SiO2	5.2		mg/L as SiO2	0.1	0.4	2/21/2020	7:56 AM	SM4500-SiO2 C
Depth of Water Body	2.0		Meters			2/19/2020	12:15 PM	FS2100
Nitrogen, Kjeldahl, Total	0.98		mg/L as N	0.05	0.2	2/26/2020	9:21 AM	EPA 351.2
Nitrogen, Total	0.98		mg/L as N	0.05	0.2	2/26/2020	9:21 AM	TKN + NOX
Total Organic Carbon	15		mg/L	1	4	2/23/2020	12:19 PM	SM 5310 B
Phosphorus, Total	0.087		mg/L as P	0.006	0.024	2/26/2020	9:23 AM	EPA 365.1
Total Suspended Solids	5.20		mg/L	0.6	2.4	2/21/2020	9:50 AM	SM 2540 D
Turbidity (Nephelometric)	3.58		NTU	0.2	0.8	2/21/2020	8:55 AM	EPA 180.1



Laboratory ID	AE39616	Collection date and time	2/19/2020 10:00 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/CARROLL
Sample Description	Grid #326x		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	0.59	I	mg/M3	0.5	2.0	2/25/2020	8:03 AM	SM21 10200 H
Pheophytin	1.04	I	mg/M3	0.5	2.0	2/25/2020	8:03 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.7	I	mg/L	0.3	1.2	2/20/2020	11:24 AM	SM 5210 B
Color	19.4		CU	1.6	6.4	2/19/2020	3:00 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	6.74		mg/L			2/19/2020	10:00 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		2/19/2020	3:07 PM	Enterolert®
E.coli Enumeration	10	U	MPN/100mL	10		2/19/2020	3:20 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	2/20/2020	9:30 AM	EPA 350.1
Nitrite	0.003	I	mg/L as N	0.003	0.012	2/20/2020	11:09 AM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	2/20/2020	11:09 AM	EPA 353.2
Nitrate + Nitrite	0.010	I	mg/L as N	0.01	0.04	2/20/2020	11:09 AM	EPA 353.2
Nitrogen, Organic	0.71		mg/L as N	0.05	0.2	2/26/2020	9:21 AM	TKN - NH3
Phosphorus, Ortho	0.023		mg/L as P	0.004	0.016	2/20/2020	12:20 PM	EPA 365.1
Salinity by meter by Client	23.32		SU			2/19/2020	10:00 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	2.0	S	meters			2/19/2020	10:00 AM	FDEP FT 1700
Silica, dissolved as SiO2	1.5		mg/L as SiO2	0.1	0.4	2/21/2020	7:56 AM	SM4500-SiO2 C
Depth of Water Body	2.0		Meters			2/19/2020	10:00 AM	FS2100
Nitrogen, Kjeldahl, Total	0.71		mg/L as N	0.05	0.2	2/26/2020	9:21 AM	EPA 351.2
Nitrogen, Total	0.72		mg/L as N	0.05	0.2	2/26/2020	9:21 AM	TKN + NOX
Total Organic Carbon	7.6		mg/L	1	4	2/23/2020	12:19 PM	SM 5310 B
Phosphorus, Total	0.042		mg/L as P	0.006	0.024	2/26/2020	9:23 AM	EPA 365.1
Total Suspended Solids	2.55		mg/L	0.6	2.4	2/21/2020	9:50 AM	SM 2540 D
Turbidity (Nephelometric)	1.56		NTU	0.2	0.8	2/21/2020	8:55 AM	EPA 180.1

Laboratory ID	AE39617	Collection date and time	2/19/2020 11:50 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/CARROLL
Sample Description	Grid #450		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	10.68		mg/M3	0.5	2.0	2/25/2020	8:03 AM	SM21 10200 H
Pheophytin	3.08		mg/M3	0.5	2.0	2/25/2020	8:03 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	1.1	I	mg/L	0.3	1.2	2/20/2020	11:24 AM	SM 5210 B
Color	51.0		CU	1.6	6.4	2/19/2020	3:00 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	7.43		mg/L			2/19/2020	11:50 AM	FDEP FT1500

Report Format: NELAC

DOH #E45049



Laboratory ID AE39617
 Location Code CRNEP_RS
 Sample Description Grid #450

Collection date and time 2/19/2020 11:50 AM
 Sample Collector REISTADT/CARROLL

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Enterococci	10	U	MPN/100mL	10		2/19/2020	3:07 PM	Enterolert®
E.coli Enumeration	945		MPN/100mL	10		2/19/2020	3:20 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	2/20/2020	9:30 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	2/20/2020	11:09 AM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	2/20/2020	11:09 AM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	2/20/2020	11:09 AM	EPA 353.2
Nitrogen, Organic	0.98		mg/L as N	0.05	0.2	2/26/2020	9:21 AM	TKN - NH3
Phosphorus, Ortho	0.041		mg/L as P	0.004	0.016	2/20/2020	12:20 PM	EPA 365.1
Salinity by meter by Client	7.37		SU			2/19/2020	11:50 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.05		meters			2/19/2020	11:50 AM	FDEP FT 1700
Silica, dissolved as SiO2	5.0		mg/L as SiO2	0.1	0.4	2/21/2020	7:56 AM	SM4500-SiO2 C
Depth of Water Body	1.6		Meters			2/19/2020	11:50 AM	FS2100
Nitrogen, Kjeldahl, Total	0.98		mg/L as N	0.05	0.2	2/26/2020	9:21 AM	EPA 351.2
Nitrogen, Total	0.98		mg/L as N	0.05	0.2	2/26/2020	9:21 AM	TKN + NOX
Total Organic Carbon	16		mg/L	1	4	2/23/2020	12:19 PM	SM 5310 B
Phosphorus, Total	0.090		mg/L as P	0.006	0.024	2/26/2020	9:23 AM	EPA 365.1
Total Suspended Solids	5.55		mg/L	0.6	2.4	2/21/2020	9:50 AM	SM 2540 D
Turbidity (Nephelometric)	2.86		NTU	0.2	0.8	2/21/2020	8:55 AM	EPA 180.1

Laboratory ID AE39618
 Location Code CRNEP_RS
 Sample Description Grid #423

Collection date and time 2/19/2020 11:10 AM
 Sample Collector REISTADT/CARROLL

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	1.64	I	mg/M3	0.5	2.0	2/25/2020	8:03 AM	SM21 10200 H
Pheophytin	0.64	I	mg/M3	0.5	2.0	2/25/2020	8:03 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.9	I	mg/L	0.3	1.2	2/20/2020	11:24 AM	SM 5210 B
Color	36.9		CU	1.6	6.4	2/19/2020	3:00 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	7.40		mg/L			2/19/2020	11:10 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		2/19/2020	3:07 PM	Enterolert®
E.coli Enumeration	10		MPN/100mL	10		2/19/2020	3:20 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	2/20/2020	9:30 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	2/20/2020	11:09 AM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	2/20/2020	11:09 AM	EPA 353.2

Report Format: NELAC

DOH #E45049



Laboratory ID AE39618
 Location Code CRNEP_RS
 Sample Description Grid #423

Collection date and time 2/19/2020 11:10 AM
 Sample Collector REISTADT/CARROLL

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	2/20/2020	11:09 AM	EPA 353.2
Nitrogen, Organic	0.72		mg/L as N	0.05	0.2	2/26/2020	9:21 AM	TKN - NH3
Phosphorus, Ortho	0.042		mg/L as P	0.004	0.016	2/20/2020	12:20 PM	EPA 365.1
Salinity by meter by Client	11.87		SU			2/19/2020	11:10 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	2.1	S	meters			2/19/2020	11:10 AM	FDEP FT 1700
Silica, dissolved as SiO2	3.3		mg/L as SiO2	0.1	0.4	2/21/2020	7:56 AM	SM4500-SiO2 C
Depth of Water Body	2.1		Meters			2/19/2020	11:10 AM	FS2100
Nitrogen, Kjeldahl, Total	0.72		mg/L as N	0.05	0.2	2/26/2020	9:21 AM	EPA 351.2
Nitrogen, Total	0.72		mg/L as N	0.05	0.2	2/26/2020	9:21 AM	TKN + NOX
Total Organic Carbon	13		mg/L	1	4	2/23/2020	12:19 PM	SM 5310 B
Phosphorus, Total	0.068		mg/L as P	0.006	0.024	2/26/2020	9:23 AM	EPA 365.1
Total Suspended Solids	2.25	I	mg/L	0.6	2.4	2/21/2020	9:50 AM	SM 2540 D
Turbidity (Nephelometric)	0.20	U	NTU	0.2	0.8	2/21/2020	8:55 AM	EPA 180.1

Laboratory ID AE39620
 Location Code CRNEP_EQ
 Sample Description EB Site #454

Collection date and time 2/19/2020 12:25 PM
 Sample Collector REISTADT/CARROLL

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	2/25/2020	8:03 AM	SM21 10200 H
Pheophytin	0.50	U	mg/M3	0.5	2.0	2/25/2020	8:03 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.3	U	mg/L	0.3	1.2	2/20/2020	11:24 AM	SM 5210 B
Color	1.6	U	CU	1.6	6.4	2/19/2020	3:00 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	7.67		mg/L			2/19/2020	12:25 PM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		2/19/2020	3:07 PM	Enterolert®
E.coli Enumeration	10	U	MPN/100mL	10		2/19/2020	3:20 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	2/20/2020	9:30 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	2/20/2020	11:09 AM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	2/20/2020	11:09 AM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	2/20/2020	11:09 AM	EPA 353.2
Nitrogen, Organic	0.050	U	mg/L as N	0.05	0.2	2/25/2020	9:16 AM	TKN - NH3
Phosphorus, Ortho	0.004	U	mg/L as P	0.004	0.016	2/20/2020	12:20 PM	EPA 365.1
Salinity by meter by Client	0.1	U	SU	0.1		2/19/2020	12:25 PM	FDEP FT 1300
Silica, dissolved as SiO2	0.1	U	mg/L as SiO2	0.1	0.4	2/21/2020	7:56 AM	SM4500-SiO2 C

Report Format: NELAC

DOH #E45049



Laboratory ID AE39620
Location Code CRNEP_EQ
Sample Description EB Site #454

Collection date and time 2/19/2020 12:25 PM
Sample Collector REISTADT/CARROLL

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	2/25/2020	9:16 AM	EPA 351.2
Nitrogen, Total	0.050	U	mg/L as N	0.05	0.2	2/25/2020	9:16 AM	TKN + NOX
Total Organic Carbon	1.000	U	mg/L	1	4	2/23/2020	12:19 PM	SM 5310 B
Phosphorus, Total	0.006	U	mg/L as P	0.006	0.024	2/25/2020	9:18 AM	EPA 365.1
Total Suspended Solids	0.6	U	mg/L	0.6	2.4	2/21/2020	9:50 AM	SM 2540 D
Turbidity (Nephelometric)	0.20	U	NTU	0.2	0.8	2/21/2020	8:55 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

LCEL does not accept any samples used for evidentiary purposes

Lab Certification: E45049

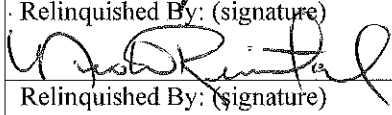
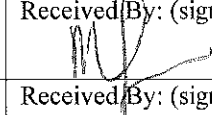
LCEL F COC 20150828R1

Report/Result Information

Billing/Invoice Information

Page 1 of 1

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 Reistad/Miranda Carroll		Sample Collector Signature:		Analyses Required						
Relinquished By: (signature) 	Date 02/19/20	Time 1457	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: 4.7	NP	NPF	S	S	NP	ST
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Collection Date Time		Sample Description & Location	Matrix (see codes)	# of Sample Containers Submitted						Lab ID #
02/19/20	1030	CRNEP_RS #387	SWE	1	1	1	1	2	1	AE39614
02/19/20	1215	CRNEP_RS #454	SWE	1	1	1	1	2	1	AE39615
02/19/20	1000	CRNEP_RS #326x	SWE	1	1	1	1	2	1	AE39616
02/19/20	1150	CRNEP_RS #450	SWE	1	1	1	1	2	1	AE39617
02/19/20	1110	CRNEP_RS #423	SWE	1	1	1	1	2	1	AE39618
		CRNEP_RSBOT #423 Bottom DID NOT SAMPLE	SWE	1	1	1	1	2	1	AE39619
02/19/20	1225	CRNEP_EQ # @454	SWE	1	1	1	1	2	1	AE39620

**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.