

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: 5/23/2022

Below are the results of samples submitted to this laboratory on 5/11/2022

Laboratory ID	AF23633	Collection date and time	5/11/2022 9:30 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #395		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	0.73	I	mg/M3	0.5	2.0	5/16/2022	7:35 AM	SM21 10200 H
Pheophytin	2.71		mg/M3	0.5	2.0	5/16/2022	7:35 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	1.0	I	mg/L	0.3	1.2	5/12/2022	10:36 AM	SM 5210 B
Color	30.2		CU	1.25	5.00	5/11/2022	2:13 PM	SM21 2120 C
Specific Conductance, By Client	18300		µmhos/cm			5/11/2022	9:30 AM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	6.98		mg/L			5/11/2022	9:30 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		5/11/2022	2:10 PM	Enterolert®
Ammonia	0.014	U	mg/L as N	0.014	0.056	5/13/2022	9:14 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	5/12/2022	10:24 AM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	5/12/2022	10:24 AM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	5/12/2022	10:24 AM	EPA 353.2
Nitrogen, Organic	0.86		mg/L as N	0.10	0.4	5/16/2022	8:38 AM	TKN - NH3
Phosphorus, Ortho	0.047		mg/L as P	0.005	0.020	5/11/2022	3:01 PM	EPA 365.1
pH, Field (electrometric) by Client	7.92		units			5/11/2022	9:30 AM	FDEP FT1100
Salinity by meter by Client	10.78		SU			5/11/2022	9:30 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.55		meters			5/11/2022	9:30 AM	FDEP FT 1700
Silica, dissolved as SiO2	4.0		mg/L as SiO2	0.1	0.4	5/11/2022	1:45 PM	SM4500-SiO2 C
Depth of Water Body	2.1		Meters			5/11/2022	9:30 AM	FS2100
Field Temperature by client	26.1		°C			5/11/2022	9:30 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	0.86		mg/L as N	0.10	0.4	5/16/2022	8:38 AM	EPA 351.2
Nitrogen, Total	0.86		mg/L as N	0.10	0.4	5/16/2022	8:38 AM	TKN + NOX
Total Organic Carbon (NPOC)	11		mg/L	1	4	5/17/2022	2:52 PM	SM 5310 B
Phosphorus, Total	0.081		mg/L as P	0.006	0.024	5/16/2022	8:40 AM	EPA 365.1

Report Format: NELAC

DOH #E45049



Laboratory ID	AF23633	Collection date and time	5/11/2022 9:30 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #395		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Total Suspended Solids	4.65		mg/L	0.6	2.4	5/12/2022	9:21 AM	SM 2540 D
Turbidity (Nephelometric)	2.90		NTU	0.2	0.8	5/12/2022	6:37 AM	EPA 180.1

Laboratory ID	AF23634	Collection date and time	5/11/2022 10:30 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #435		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	0.88	I	mg/M3	0.5	2.0	5/16/2022	7:35 AM	SM21 10200 H
Pheophytin	6.32		mg/M3	0.5	2.0	5/16/2022	7:35 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.8	I	mg/L	0.3	1.2	5/12/2022	10:36 AM	SM 5210 B
Color	41.0		CU	1.25	5.00	5/11/2022	2:13 PM	SM21 2120 C
Specific Conductance, By Client	9700		µmhos/cm			5/11/2022	10:30 AM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	6.33		mg/L			5/11/2022	10:30 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		5/11/2022	2:10 PM	Enterolert®
Ammonia	0.014	U	mg/L as N	0.014	0.056	5/13/2022	9:14 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	5/12/2022	10:24 AM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	5/12/2022	10:24 AM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	5/12/2022	10:24 AM	EPA 353.2
Nitrogen, Organic	0.90		mg/L as N	0.10	0.4	5/18/2022	8:29 AM	TKN - NH3
Phosphorus, Ortho	0.062		mg/L as P	0.005	0.020	5/11/2022	3:01 PM	EPA 365.1
pH, Field (electrometric) by Client	7.87		units			5/11/2022	10:30 AM	FDEP FT1100
Salinity by meter by Client	5.41		SU			5/11/2022	10:30 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.75		meters			5/11/2022	10:30 AM	FDEP FT 1700
Silica, dissolved as SiO2	4.9		mg/L as SiO2	0.1	0.4	5/11/2022	1:45 PM	SM4500-SiO2 C
Depth of Water Body	1.2		Meters			5/11/2022	10:30 AM	FS2100
Field Temperature by client	25.9		°C			5/11/2022	10:30 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	0.90		mg/L as N	0.10	0.4	5/18/2022	8:29 AM	EPA 351.2
Nitrogen, Total	0.90		mg/L as N	0.10	0.4	5/18/2022	8:29 AM	TKN + NOX
Total Organic Carbon (NPOC)	13		mg/L	1	4	5/17/2022	2:52 PM	SM 5310 B
Phosphorus, Total	0.11		mg/L as P	0.006	0.024	5/18/2022	8:31 AM	EPA 365.1
Total Suspended Solids	5.70		mg/L	0.6	2.4	5/12/2022	9:21 AM	SM 2540 D
Turbidity (Nephelometric)	3.67		NTU	0.2	0.8	5/12/2022	6:37 AM	EPA 180.1



Laboratory ID	AF23635	Collection date and time	5/11/2022 11:30 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #467		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	28.45		mg/M3	0.5	2.0	5/18/2022	7:36 AM	SM21 10200 H
Pheophytin	5.70		mg/M3	0.5	2.0	5/18/2022	7:36 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	3.2		mg/L	0.3	1.2	5/12/2022	10:36 AM	SM 5210 B
Color	47.7		CU	1.25	5.00	5/11/2022	2:13 PM	SM21 2120 C
Specific Conductance, By Client	500		µmhos/cm			5/11/2022	11:30 AM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	8.56		mg/L			5/11/2022	11:30 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		5/11/2022	2:10 PM	Enterolert®
Ammonia	0.014	U	mg/L as N	0.014	0.056	5/13/2022	9:14 AM	EPA 350.1
Nitrite	0.013		mg/L as N	0.003	0.012	5/12/2022	10:24 AM	EPA 353.2
Nitrate	0.013	I	mg/L as N	0.01	0.04	5/12/2022	10:24 AM	EPA 353.2
Nitrate + Nitrite	0.026	I	mg/L as N	0.01	0.04	5/12/2022	10:24 AM	EPA 353.2
Nitrogen, Organic	1.3		mg/L as N	0.10	0.4	5/18/2022	8:29 AM	TKN - NH3
Phosphorus, Ortho	0.056		mg/L as P	0.005	0.020	5/11/2022	3:01 PM	EPA 365.1
pH, Field (electrometric) by Client	8.34		units			5/11/2022	11:30 AM	FDEP FT1100
Salinity by meter by Client	0.24		SU			5/11/2022	11:30 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.55		meters			5/11/2022	11:30 AM	FDEP FT 1700
Silica, dissolved as SiO2	6.3		mg/L as SiO2	0.1	0.4	5/11/2022	1:45 PM	SM4500-SiO2 C
Depth of Water Body	4.4		Meters			5/11/2022	11:30 AM	FS2100
Field Temperature by client	27.4		°C			5/11/2022	11:30 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	1.3		mg/L as N	0.10	0.4	5/18/2022	8:29 AM	EPA 351.2
Nitrogen, Total	1.3		mg/L as N	0.10	0.4	5/18/2022	8:29 AM	TKN + NOX
Total Organic Carbon (NPOC)	15		mg/L	1	4	5/17/2022	2:52 PM	SM 5310 B
Phosphorus, Total	0.16		mg/L as P	0.006	0.024	5/18/2022	8:31 AM	EPA 365.1
Total Suspended Solids	8.80		mg/L	0.6	2.4	5/12/2022	9:21 AM	SM 2540 D
Turbidity (Nephelometric)	6.55		NTU	0.2	0.8	5/12/2022	6:37 AM	EPA 180.1

Laboratory ID	AF23636	Collection date and time	5/11/2022 9:55 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #404		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	1.59	I	mg/M3	0.5	2.0	5/18/2022	7:36 AM	SM21 10200 H
Pheophytin	1.51	I	mg/M3	0.5	2.0	5/18/2022	7:36 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.8	I	mg/L	0.3	1.2	5/12/2022	10:36 AM	SM 5210 B
Color	29.8		CU	1.25	5.00	5/11/2022	2:13 PM	SM21 2120 C
Specific Conductance, By Client	17700		µmhos/cm			5/11/2022	9:55 AM	FDEP FT1200

Report Format: NELAC

DOH #E45049



Laboratory ID	AF23636	Collection date and time	5/11/2022 9:55 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #404		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Oxygen, Dissolved, Electrode, by Client	7.11		mg/L			5/11/2022	9:55 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		5/11/2022	2:10 PM	Enterolert®
Ammonia	0.014	U	mg/L as N	0.014	0.056	5/13/2022	9:14 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	5/12/2022	10:24 AM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	5/12/2022	10:24 AM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	5/12/2022	10:24 AM	EPA 353.2
Nitrogen, Organic	0.74		mg/L as N	0.10	0.4	5/18/2022	8:29 AM	TKN - NH3
Phosphorus, Ortho	0.047		mg/L as P	0.005	0.020	5/11/2022	3:01 PM	EPA 365.1
pH, Field (electrometric) by Client	7.97		units			5/11/2022	9:55 AM	FDEP FT1100
Salinity by meter by Client	10.43		SU			5/11/2022	9:55 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.3	S	meters			5/11/2022	9:55 AM	FDEP FT 1700
Silica, dissolved as SiO2	3.9		mg/L as SiO2	0.1	0.4	5/11/2022	1:45 PM	SM4500-SiO2 C
Depth of Water Body	1.3		Meters			5/11/2022	9:55 AM	FS2100
Field Temperature by client	25.7		°C			5/11/2022	9:55 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	0.74		mg/L as N	0.10	0.4	5/18/2022	8:29 AM	EPA 351.2
Nitrogen, Total	0.74		mg/L as N	0.10	0.4	5/18/2022	8:29 AM	TKN + NOX
Total Organic Carbon (NPOC)	10		mg/L	1	4	5/17/2022	2:52 PM	SM 5310 B
Phosphorus, Total	0.086		mg/L as P	0.006	0.024	5/18/2022	8:31 AM	EPA 365.1
Total Suspended Solids	3.35		mg/L	0.6	2.4	5/12/2022	9:21 AM	SM 2540 D
Turbidity (Nephelometric)	2.62		NTU	0.2	0.8	5/12/2022	6:37 AM	EPA 180.1

Laboratory ID	AF23637	Collection date and time	5/11/2022 11:00 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #454		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	7.59		mg/M3	0.5	2.0	5/18/2022	7:36 AM	SM21 10200 H
Pheophytin	8.14		mg/M3	0.5	2.0	5/18/2022	7:36 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	1.2		mg/L	0.3	1.2	5/12/2022	10:36 AM	SM 5210 B
Color	49.9		CU	1.25	5.00	5/11/2022	2:13 PM	SM21 2120 C
Specific Conductance, By Client	1500		µmhos/cm			5/11/2022	11:00 AM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	7.35		mg/L			5/11/2022	11:00 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		5/11/2022	2:10 PM	Enterolert®
Ammonia	0.014	U	mg/L as N	0.014	0.056	5/13/2022	9:14 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	5/12/2022	10:24 AM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	5/12/2022	10:24 AM	EPA 353.2

Report Format: NELAC

DOH #E45049



Laboratory ID	AF23637	Collection date and time	5/11/2022 11:00 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #454		

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	5/12/2022	10:24 AM	EPA 353.2
Nitrogen, Organic	0.95		mg/L as N	0.10	0.4	5/18/2022	8:29 AM	TKN - NH3
Phosphorus, Ortho	0.058		mg/L as P	0.005	0.020	5/11/2022	3:01 PM	EPA 365.1
pH, Field (electrometric) by Client	7.96		units			5/11/2022	11:00 AM	FDEP FT1100
Salinity by meter by Client	0.75		SU			5/11/2022	11:00 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.75		meters			5/11/2022	11:00 AM	FDEP FT 1700
Silica, dissolved as SiO2	5.9		mg/L as SiO2	0.1	0.4	5/11/2022	1:45 PM	SM4500-SiO2 C
Depth of Water Body	1.4		Meters			5/11/2022	11:00 AM	FS2100
Field Temperature by client	26.4		°C			5/11/2022	11:00 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	0.95		mg/L as N	0.10	0.4	5/18/2022	8:29 AM	EPA 351.2
Nitrogen, Total	0.95		mg/L as N	0.10	0.4	5/18/2022	8:29 AM	TKN + NOX
Total Organic Carbon (NPOC)	14		mg/L	1	4	5/17/2022	2:52 PM	SM 5310 B
Phosphorus, Total	0.13		mg/L as P	0.006	0.024	5/18/2022	8:31 AM	EPA 365.1
Total Suspended Solids	8.55		mg/L	0.6	2.4	5/12/2022	9:21 AM	SM 2540 D
Turbidity (Nephelometric)	6.69		NTU	0.2	0.8	5/12/2022	6:37 AM	EPA 180.1

Laboratory ID	AF23638	Collection date and time	5/11/2022 12:45 PM
Location Code	CRNEP_EQ	Sample Collector	REISTAD/JAEGER
Sample Description	EB Site #467		

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	5/16/2022	7:35 AM	SM21 10200 H
Pheophytin	0.50	U	mg/M3	0.5	2.0	5/16/2022	7:35 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.3	U	mg/L	0.3	1.2	5/12/2022	10:36 AM	SM 5210 B
Color	1.25	U	CU	1.25	5.00	5/11/2022	2:13 PM	SM21 2120 C
Enterococci	1	U	MPN/100mL	1		5/11/2022	2:10 PM	Enterolert®
Ammonia	0.014	U	mg/L as N	0.014	0.056	5/13/2022	9:14 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	5/12/2022	10:24 AM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	5/12/2022	10:24 AM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	5/12/2022	10:24 AM	EPA 353.2
Nitrogen, Organic	0.100	U	mg/L as N	0.10	0.4	5/16/2022	8:38 AM	TKN - NH3
Phosphorus, Ortho	0.005	U	mg/L as P	0.005	0.020	5/11/2022	3:01 PM	EPA 365.1
Silica, dissolved as SiO2	0.1	U	mg/L as SiO2	0.1	0.4	5/11/2022	1:45 PM	SM4500-SiO2 C
Nitrogen, Kjeldahl, Total	0.10	U	mg/L as N	0.10	0.4	5/16/2022	8:38 AM	EPA 351.2
Nitrogen, Total	0.100	U	mg/L as N	0.10	0.4	5/16/2022	8:38 AM	TKN + NOX
Total Organic Carbon (NPOC)	1.000	U	mg/L	1	4	5/17/2022	2:52 PM	SM 5310 B

Report Format: NELAC

DOH #E45049



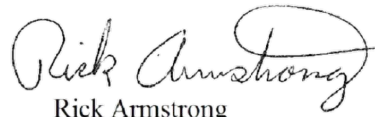
Laboratory ID	AF23638	Collection date and time	5/11/2022 12:45 PM
Location Code	CRNEP_EQ	Sample Collector	REISTAD/JAEGER
Sample Description	EB Site #467		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Phosphorus, Total	0.006	U	mg/L as P	0.006	0.024	5/16/2022	8:40 AM	EPA 365.1
Total Suspended Solids	0.6	U	mg/L	0.6	2.4	5/12/2022	9:21 AM	SM 2540 D
Turbidity (Nephelometric)	0.20	U	NTU	0.2	0.8	5/12/2022	6:37 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

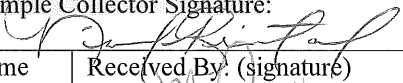
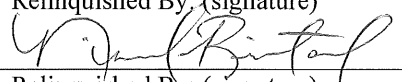
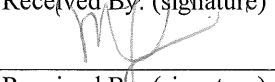
Lab Certification: E45049
LCEL F COC 20150828R1

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 Phone: (239) 344-5719		Name: DNRM 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					
Sample Collector(s) (please print): Nicole Reistad/Monica Jaeger		Sample Collector Signature: 		Analyses Required							
Relinquished By: (signature) 	Date 05/11/22	Time 1338	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: 3.1°C				NP	NPF	S	S	NP	ST		
Collection Date Time		Sample Description & Location		Matrix (see codes)		# of Sample Containers Submitted				Lab ID #	
05/11/22	0930	CRNEP_RS #395		SWE	1	1	1	1	2	1	AF23633
05/11/22	1030	CRNEP_RS #435		SWE	1	1	1	1	2	1	AF23634
05/11/22	1130	CRNEP_RS #467		SWE	1	1	1	1	2	1	AF23635
05/11/22	0955	CRNEP_RS #404		SWE	1	1	1	1	2	1	AF23636
05/11/22	1100	CRNEP_RS #454		SWE	1	1	1	1	2	1	AF23637
05/11/22	1245	CRNEP_EQ # @467		SWE	1	1	1	1	2	1	AF23638

**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.