

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: 8/17/2023

Below are the results of samples submitted to this laboratory on 8/2/2023

Laboratory ID	AF65400	Collection date and time	8/2/2023 11:55 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #449		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	2.21		mg/M3	0.5	2.0	8/9/2023	7:34 AM	SM21 10200 H
Pheophytin	3.99		mg/M3	0.5	2.0	8/9/2023	7:34 AM	SM21 10200 H
Dissolved Oxygen % Saturation by Client	54.8		%	0.1		8/2/2023	11:55 AM	FDEP FT1500
Biochemical Oxygen Demand 5 day	1.0	I	mg/L	0.3	1.2	8/3/2023	9:55 AM	SM 5210 B
Color	123		CU	1.25	5.00	8/3/2023	7:58 AM	SM21 2120 C
Specific Conductance, By Client	600		µmhos/cm			8/2/2023	11:55 AM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	4.03		mg/L			8/2/2023	11:55 AM	FDEP FT1500
Enterococci	20		MPN/100mL	10		8/2/2023	2:23 PM	Enterolert®
Ammonia as N	0.015	I	mg/L as N	0.014	0.056	8/4/2023	8:40 AM	EPA 350.1
Nitrite as N	0.020		mg/L as N	0.003	0.012	8/3/2023	12:54 PM	EPA 353.2
Nitrate as N	0.197		mg/L as N	0.01	0.04	8/3/2023	12:54 PM	EPA 353.2
Nitrate + Nitrite as N	0.217		mg/L as N	0.01	0.04	8/3/2023	12:54 PM	EPA 353.2
Nitrogen, Organic	1.1		mg/L as N	0.10	0.4	8/8/2023	9:01 AM	TKN - NH3
Phosphorus, Ortho as P	0.097		mg/L as P	0.005	0.020	8/3/2023	8:01 AM	EPA 365.1
pH, Field (electrometric) by Client	7.66		units			8/2/2023	11:55 AM	FDEP FT1100
Salinity by meter by Client	0.27		SU			8/2/2023	11:55 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.85		meters			8/2/2023	11:55 AM	FDEP FT 1700
Depth of Water Body	1.6		Meters			8/2/2023	11:55 AM	FS2100
Field Temperature by client	31.5		°C			8/2/2023	11:55 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	1.1		mg/L as N	0.10	0.4	8/8/2023	9:01 AM	EPA 351.2
Nitrogen, Total	1.3		mg/L as N	0.10	0.4	8/8/2023	9:01 AM	TKN + NOX
Total Organic Carbon (NPOC)	19		mg/L	1	4	8/10/2023	3:45 PM	SM 5310 B
Phosphorus, Total as P	0.14		mg/L as P	0.006	0.024	8/8/2023	9:03 AM	EPA 365.1

Report Format: NELAC

DOH #E45049



Laboratory ID	AF65400	Collection date and time	8/2/2023	11:55 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER	
Sample Description	Grid #449			

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Total Suspended Solids	1.95	I	mg/L	0.6	2.4	8/3/2023	9:09 AM	SM 2540 D
Turbidity (Nephelometric)	2.74		NTU	0.2	0.8	8/2/2023	2:52 PM	EPA 180.1

Laboratory ID	AF65401	Collection date and time	8/2/2023	11:10 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER	
Sample Description	Grid #428			

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Blue green algae present in the water column								
Chlorophyll a - corrected for Pheophytin	2.10		mg/M3	0.5	2.0	8/9/2023	7:34 AM	SM21 10200 H
Pheophytin	4.03		mg/M3	0.5	2.0	8/9/2023	7:34 AM	SM21 10200 H
Dissolved Oxygen % Saturation by Client	74.2		%	0.1		8/2/2023	11:10 AM	FDEP FT1500
Biochemical Oxygen Demand 5 day	1.0	I	mg/L	0.3	1.2	8/3/2023	9:55 AM	SM 5210 B
Color	144		CU	1.25	5.00	8/3/2023	7:58 AM	SM21 2120 C
Specific Conductance, By Client	1300		µmhos/cm			8/2/2023	11:10 AM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	5.50		mg/L			8/2/2023	11:10 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		8/2/2023	2:23 PM	Enterolert®
Ammonia as N	0.014	U	mg/L as N	0.014	0.056	8/4/2023	8:40 AM	EPA 350.1
Nitrite as N	0.012		mg/L as N	0.003	0.012	8/3/2023	12:54 PM	EPA 353.2
Nitrate as N	0.274		mg/L as N	0.01	0.04	8/3/2023	12:54 PM	EPA 353.2
Nitrate + Nitrite as N	0.286		mg/L as N	0.01	0.04	8/3/2023	12:54 PM	EPA 353.2
Nitrogen, Organic	1.1		mg/L as N	0.10	0.4	8/8/2023	9:01 AM	TKN - NH3
Phosphorus, Ortho as P	0.124		mg/L as P	0.005	0.020	8/3/2023	8:01 AM	EPA 365.1
pH, Field (electrometric) by Client	7.88		units			8/2/2023	11:10 AM	FDEP FT1100
Salinity by meter by Client	0.64		SU			8/2/2023	11:10 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.65		meters			8/2/2023	11:10 AM	FDEP FT 1700
Depth of Water Body	2.2		Meters			8/2/2023	11:10 AM	FS2100
Field Temperature by client	31.0		°C			8/2/2023	11:10 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	1.1		mg/L as N	0.10	0.4	8/8/2023	9:01 AM	EPA 351.2
Nitrogen, Total	1.4		mg/L as N	0.10	0.4	8/8/2023	9:01 AM	TKN + NOX
Total Organic Carbon (NPOC)	20		mg/L	1	4	8/10/2023	3:45 PM	SM 5310 B
Phosphorus, Total as P	0.17		mg/L as P	0.006	0.024	8/8/2023	9:03 AM	EPA 365.1
Total Suspended Solids	1.85	I	mg/L	0.6	2.4	8/3/2023	9:09 AM	SM 2540 D
Turbidity (Nephelometric)	3.13		NTU	0.2	0.8	8/2/2023	2:52 PM	EPA 180.1



Laboratory ID	AF65402	Collection date and time	8/2/2023 9:25 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #387		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Blue green algae present in the water column and on surface								
Chlorophyll a - corrected for Pheophytin	1.82	I	mg/M3	0.5	2.0	8/9/2023	7:34 AM	SM21 10200 H
Pheophytin	3.44		mg/M3	0.5	2.0	8/9/2023	7:34 AM	SM21 10200 H
Dissolved Oxygen % Saturation by Client	68.3		%	0.1		8/2/2023	9:25 AM	FDEP FT1500
Biochemical Oxygen Demand 5 day	0.9	I	mg/L	0.3	1.2	8/3/2023	9:55 AM	SM 5210 B
Color	88.4		CU	1.25	5.00	8/3/2023	7:58 AM	SM21 2120 C
Specific Conductance, By Client	17000		µmhos/cm			8/2/2023	9:25 AM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	4.79		mg/L			8/2/2023	9:25 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		8/2/2023	2:23 PM	Enterolert®
Ammonia as N	0.041	I	mg/L as N	0.014	0.056	8/4/2023	8:40 AM	EPA 350.1
Nitrite as N	0.012		mg/L as N	0.003	0.012	8/3/2023	12:54 PM	EPA 353.2
Nitrate as N	0.129		mg/L as N	0.01	0.04	8/3/2023	12:54 PM	EPA 353.2
Nitrate + Nitrite as N	0.141		mg/L as N	0.01	0.04	8/3/2023	12:54 PM	EPA 353.2
Nitrogen, Organic	1.0		mg/L as N	0.10	0.4	8/8/2023	9:01 AM	TKN - NH3
Phosphorus, Ortho as P	0.105		mg/L as P	0.005	0.020	8/3/2023	8:01 AM	EPA 365.1
pH, Field (electrometric) by Client	7.69		units			8/2/2023	9:25 AM	FDEP FT1100
Salinity by meter by Client	9.92		SU			8/2/2023	9:25 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.15		meters			8/2/2023	9:25 AM	FDEP FT 1700
Depth of Water Body	2.4		Meters			8/2/2023	9:25 AM	FS2100
Field Temperature by client	31.3		°C			8/2/2023	9:25 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	1.0		mg/L as N	0.10	0.4	8/8/2023	9:01 AM	EPA 351.2
Nitrogen, Total	1.1		mg/L as N	0.10	0.4	8/8/2023	9:01 AM	TKN + NOX
Total Organic Carbon (NPOC)	14		mg/L	1	4	8/10/2023	3:45 PM	SM 5310 B
Phosphorus, Total as P	0.15		mg/L as P	0.006	0.024	8/8/2023	9:03 AM	EPA 365.1
Total Suspended Solids	3.10		mg/L	0.6	2.4	8/3/2023	9:09 AM	SM 2540 D
Turbidity (Nephelometric)	2.87		NTU	0.2	0.8	8/2/2023	2:52 PM	EPA 180.1

Laboratory ID	AF65403	Collection date and time	8/2/2023 10:10 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
Blue green algae present in the water column								
Chlorophyll a - corrected for Pheophytin	1.82	I	mg/M3	0.5	2.0	8/9/2023	7:34 AM	SM21 10200 H
Pheophytin	2.46		mg/M3	0.5	2.0	8/9/2023	7:34 AM	SM21 10200 H
Dissolved Oxygen % Saturation by Client	65.6		%	0.1		8/2/2023	10:10 AM	FDEP FT1500

Report Format: NELAC

DOH #E45049



Laboratory ID	AF65403	Collection date and time	8/2/2023	10:10 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
Blue green algae present in the water column								
Biochemical Oxygen Demand 5 day	0.8	I	mg/L	0.3	1.2	8/3/2023	9:55 AM	SM 5210 B
Color	116		CU	1.25	5.00	8/3/2023	7:58 AM	SM21 2120 C
Specific Conductance, By Client	6800		µmhos/cm			8/2/2023	10:10 AM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	4.74		mg/L			8/2/2023	10:10 AM	FDEP FT1500
Enterococci	10		MPN/100mL	10		8/2/2023	2:23 PM	Enterolert®
Ammonia as N	0.055	I	mg/L as N	0.014	0.056	8/4/2023	8:40 AM	EPA 350.1
Nitrite as N	0.012		mg/L as N	0.003	0.012	8/3/2023	12:54 PM	EPA 353.2
Nitrate as N	0.170		mg/L as N	0.01	0.04	8/3/2023	12:54 PM	EPA 353.2
Nitrate + Nitrite as N	0.182		mg/L as N	0.01	0.04	8/3/2023	12:54 PM	EPA 353.2
Nitrogen, Organic	0.94		mg/L as N	0.10	0.4	8/8/2023	9:01 AM	TKN - NH3
Phosphorus, Ortho as P	0.130		mg/L as P	0.005	0.020	8/3/2023	8:01 AM	EPA 365.1
pH, Field (electrometric) by Client	7.75		units			8/2/2023	10:10 AM	FDEP FT1100
Salinity by meter by Client	3.68		SU			8/2/2023	10:10 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.85		meters			8/2/2023	10:10 AM	FDEP FT 1700
Depth of Water Body	2.8		Meters			8/2/2023	10:10 AM	FS2100
Field Temperature by client	30.9		°C			8/2/2023	10:10 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	0.99		mg/L as N	0.10	0.4	8/8/2023	9:01 AM	EPA 351.2
Nitrogen, Total	1.2		mg/L as N	0.10	0.4	8/8/2023	9:01 AM	TKN + NOX
Total Organic Carbon (NPOC)	17		mg/L	1	4	8/10/2023	3:45 PM	SM 5310 B
Phosphorus, Total as P	0.18		mg/L as P	0.006	0.024	8/8/2023	9:03 AM	EPA 365.1
Total Suspended Solids	3.95		mg/L	0.6	2.4	8/3/2023	9:09 AM	SM 2540 D
Turbidity (Nephelometric)	5.36		NTU	0.2	0.8	8/2/2023	2:52 PM	EPA 180.1

Laboratory ID	AF65405	Collection date and time	8/2/2023	10:45 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER	
Sample Description	Grid #418			

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	8/16/2023	7:33 AM	SM21 10200 H
Pheophytin	2.75		mg/M3	0.5	2	8/16/2023	7:33 AM	SM21 10200 H
Dissolved Oxygen % Saturation by Client	65.8		%	0.1		8/2/2023	10:45 AM	FDEP FT1500
Biochemical Oxygen Demand 5 day	0.9	I	mg/L	0.3	1.2	8/3/2023	9:55 AM	SM 5210 B
Color	118		CU	1.25	5.00	8/3/2023	7:58 AM	SM21 2120 C
Specific Conductance, By Client	4600		µmhos/cm			8/2/2023	10:45 AM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	4.85		mg/L			8/2/2023	10:45 AM	FDEP FT1500

Report Format: NELAC

DOH #E45049



Laboratory ID	AF65405	Collection date and time	8/2/2023 10:45 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #418		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Enterococci	10	U	MPN/100mL	10		8/2/2023	2:23 PM	Enterolert®
Ammonia as N	0.058		mg/L as N	0.014	0.056	8/4/2023	8:40 AM	EPA 350.1
Nitrite as N	0.011	I	mg/L as N	0.003	0.012	8/3/2023	12:54 PM	EPA 353.2
Nitrate as N	0.190		mg/L as N	0.01	0.04	8/3/2023	12:54 PM	EPA 353.2
Nitrate + Nitrite as N	0.201		mg/L as N	0.01	0.04	8/3/2023	12:54 PM	EPA 353.2
Nitrogen, Organic	0.94		mg/L as N	0.10	0.4	8/8/2023	9:01 AM	TKN - NH3
Phosphorus, Ortho as P	0.137		mg/L as P	0.005	0.020	8/3/2023	8:01 AM	EPA 365.1
pH, Field (electrometric) by Client	7.74		units			8/2/2023	10:45 AM	FDEP FT1100
Salinity by meter by Client	2.44		SU			8/2/2023	10:45 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.85		meters			8/2/2023	10:45 AM	FDEP FT 1700
Depth of Water Body	1.5		Meters			8/2/2023	10:45 AM	FS2100
Field Temperature by client	30.6		°C			8/2/2023	10:45 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	1.00		mg/L as N	0.10	0.4	8/8/2023	9:01 AM	EPA 351.2
Nitrogen, Total	1.2		mg/L as N	0.10	0.4	8/8/2023	9:01 AM	TKN + NOX
Total Organic Carbon (NPOC)	18		mg/L	1	4	8/10/2023	3:45 PM	SM 5310 B
Phosphorus, Total as P	0.18		mg/L as P	0.006	0.024	8/8/2023	9:03 AM	EPA 365.1
Total Suspended Solids	1.95	I	mg/L	0.6	2.4	8/3/2023	9:09 AM	SM 2540 D
Turbidity (Nephelometric)	2.70		NTU	0.2	0.8	8/2/2023	2:52 PM	EPA 180.1

Laboratory ID	AF65406	Collection date and time	8/2/2023 12:55 PM
Location Code	CRNEP_EQ	Sample Collector	REISTAD/JAEGER
Sample Description	EB Site #449		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Collected at grid# 449								
Chlorophyll a - corrected for Pheophytin	0.50	U	mg/M3	0.5	2.0	8/9/2023	7:34 AM	SM21 10200 H
Pheophytin	0.50	U	mg/M3	0.5	2.0	8/9/2023	7:34 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.3	U	mg/L	0.3	1.2	8/3/2023	9:55 AM	SM 5210 B
Color	1.25	U	CU	1.25	5.00	8/3/2023	7:58 AM	SM21 2120 C
Enterococci	10	U	MPN/100mL	10		8/2/2023	2:23 PM	Enterolert®
Ammonia as N	0.014	U	mg/L as N	0.014	0.056	8/4/2023	8:40 AM	EPA 350.1
Nitrite as N	0.003	U	mg/L as N	0.003	0.012	8/3/2023	12:54 PM	EPA 353.2
Nitrate as N	0.010	U	mg/L as N	0.01	0.04	8/3/2023	12:54 PM	EPA 353.2
Nitrate + Nitrite as N	0.010	U	mg/L as N	0.01	0.04	8/3/2023	12:54 PM	EPA 353.2
Nitrogen, Organic	0.100	U	mg/L as N	0.10	0.4	8/8/2023	9:01 AM	TKN - NH3
Phosphorus, Ortho as P	0.005	U	mg/L as P	0.005	0.020	8/3/2023	8:01 AM	EPA 365.1

Report Format: NELAC

DOH #E45049



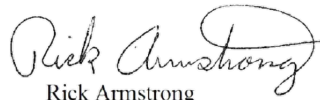
Laboratory ID	AF65406	Collection date and time	8/2/2023 12:55 PM
Location Code	CRNEP_EQ	Sample Collector	REISTAD/JAEGER
Sample Description	EB Site #449		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Collected at grid# 449								
Nitrogen, Kjeldahl, Total	0.10	U	mg/L as N	0.10	0.4	8/8/2023	9:01 AM	EPA 351.2
Nitrogen, Total	0.100	U	mg/L as N	0.10	0.4	8/8/2023	9:01 AM	TKN + NOX
Total Organic Carbon (NPOC)	1.000	U	mg/L	1	4	8/10/2023	3:45 PM	SM 5310 B
Phosphorus, Total as P	0.006	U	mg/L as P	0.006	0.024	8/8/2023	9:03 AM	EPA 365.1
Total Suspended Solids	0.6	U	mg/L	0.6	2.4	8/4/2023	8:31 AM	SM 2540 D
Turbidity (Nephelometric)	0.20	U	NTU	0.2	0.8	8/2/2023	2:52 PM	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).
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



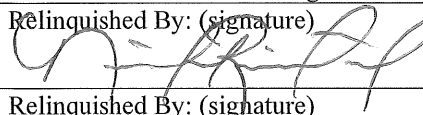
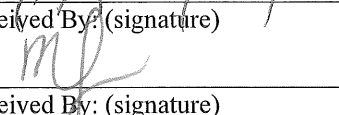
LCEL

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: Tidal Caloosa Distrib List: FDEP - South Address: 2295 Victoria Ave, Suite 364 PO Box 2549 Ft Myers FL 33901 Phone: (239) 344-5719 Sample Collector(s) (please print): Nicole Reistad/Monica Jaeger				Name: DNRM 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: 08/02/23 Time: 1419				Received By: (signature) 				\$Chloroa, _prep	O-PO4, Color, NOX	TOC	NH3, TKN, TN, T-PO4, NO3, ONIT	Turb, NO2, TSS, Bod, Bodi	Entero	Analyses Required					
Relinquished By: (signature)				Received By: (signature)										Preservatives (see codes)					
Relinquished By: (signature)				Received By: (signature)															
Sample(s) on ice ☒ Yes or ☐ No? Temperature °C: 0.6°C								NP	NPF	S	S	NP	ST						
Collection Date Time		Sample Description & Location		Matrix (see codes)		# of Sample Containers Submitted								Lab ID #					
08/02/23 1010		CRNEP_RS #449		SWE		1	1	1	1	2	1	AF65400							
08/02/23 1110		CRNEP_RS #428		SWE		1	1	1	1	2	1	AF65401							
08/02/23 0925		CRNEP_RS #387		SWE		1	1	1	1	2	1	AF65402							
08/02/23 1010		CRNEP_RS #404		SWE		1	1	1	1	2	1	AF65403							
		CRNEP_RSBOT #404 Bottom DID NOT SAMPLE		SWE		1	1	1	1	2	1	AF65404							
08/02/23 1045		CRNEP_RS #418		SWE		1	1	1	1	2	1	AF65405							
08/02/23 1255		RNEP_EQ # C449		SWE		1	1	1	1	2	1	AF65406							

**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.