

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: 9/18/2023

Below are the results of samples submitted to this laboratory on 9/6/2023

Laboratory ID	AF68837	Collection date and time	9/6/2023 9:25 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #389		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	1.68	I	mg/M3	0.5	2.0	9/14/2023	7:23 AM	SM21 10200 H
Pheophytin	16.34		mg/M3	0.5	2.0	9/14/2023	7:23 AM	SM21 10200 H
Dissolved Oxygen % Saturation by Client	87.6		%	0.1		9/6/2023	9:25 AM	FDEP FT1500
Biochemical Oxygen Demand 5 day	1.9	V1	mg/L	0.3	1.2	9/7/2023	8:18 AM	SM 5210 B
Color	64.9		CU	1.25	5.00	9/6/2023	2:44 PM	SM21 2120 C
Specific Conductance, By Client	26700		µmhos/cm			9/6/2023	9:25 AM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	6.10		mg/L			9/6/2023	9:25 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		9/6/2023	2:28 PM	Enterolert®
Ammonia as N	0.014	U	mg/L as N	0.014	0.056	9/8/2023	9:49 AM	EPA 350.1
Nitrite as N	0.005	I	mg/L as N	0.003	0.012	9/7/2023	1:00 PM	EPA 353.2
Nitrate as N	0.010	U	mg/L as N	0.01	0.04	9/7/2023	1:00 PM	EPA 353.2
Nitrate + Nitrite as N	0.010	U	mg/L as N	0.01	0.04	9/7/2023	1:00 PM	EPA 353.2
Nitrogen, Organic	0.90		mg/L as N	0.10	0.4	9/14/2023	9:00 AM	TKN - NH3
Phosphorus, Ortho as P	0.056		mg/L as P	0.005	0.020	9/6/2023	2:48 PM	EPA 365.1
pH, Field (electrometric) by Client	7.56		units			9/6/2023	9:25 AM	FDEP FT1100
Salinity by meter by Client	16.26		SU			9/6/2023	9:25 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.8	S	meters			9/6/2023	9:25 AM	FDEP FT 1700
Depth of Water Body	0.8		Meters			9/6/2023	9:25 AM	FS2100
Field Temperature by client	29.6		°C			9/6/2023	9:25 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	0.90		mg/L as N	0.10	0.4	9/14/2023	9:00 AM	EPA 351.2
Nitrogen, Total	0.90		mg/L as N	0.10	0.4	9/14/2023	9:00 AM	TKN + NOX
Total Organic Carbon (NPOC)	11		mg/L	1	4	9/7/2023	12:11 PM	SM 5310 B
Phosphorus, Total as P	0.092		mg/L as P	0.006	0.024	9/14/2023	9:02 AM	EPA 365.1

Report Format: NELAC

DOH #E45049



Laboratory ID	AF68837	Collection date and time	9/6/2023	9:25 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER	
Sample Description	Grid #389			

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Total Suspended Solids	3.45		mg/L	0.6	2.4	9/7/2023	7:06 AM	SM 2540 D
Turbidity (Nephelometric)	0.917		NTU	0.2	0.8	9/7/2023	2:46 PM	EPA 180.1

Laboratory ID	AF68838	Collection date and time	9/6/2023	11:25 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER	
Sample Description	Grid #443			

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	33.47		mg/M3	0.5	2.0	9/14/2023	7:23 AM	SM21 10200 H
Pheophytin	0.50	U	mg/M3	0.5	2.0	9/14/2023	7:23 AM	SM21 10200 H
Dissolved Oxygen % Saturation by Client	86.7		%	0.1		9/6/2023	11:25 AM	FDEP FT1500
Biochemical Oxygen Demand 5 day	0.8	I V1	mg/L	0.3	1.2	9/7/2023	8:18 AM	SM 5210 B
Color	169		CU	1.25	5.00	9/6/2023	2:44 PM	SM21 2120 C
Specific Conductance, By Client	3100		µmhos/cm			9/6/2023	11:25 AM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	6.51		mg/L			9/6/2023	11:25 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		9/6/2023	2:28 PM	Enterolert®
Ammonia as N	0.018	I	mg/L as N	0.014	0.056	9/8/2023	9:49 AM	EPA 350.1
Nitrite as N	0.011	I	mg/L as N	0.003	0.012	9/7/2023	1:00 PM	EPA 353.2
Nitrate as N	0.322		mg/L as N	0.01	0.04	9/7/2023	1:00 PM	EPA 353.2
Nitrate + Nitrite as N	0.333		mg/L as N	0.01	0.04	9/7/2023	1:00 PM	EPA 353.2
Nitrogen, Organic	0.98		mg/L as N	0.10	0.4	9/14/2023	9:00 AM	TKN - NH3
Phosphorus, Ortho as P	0.118		mg/L as P	0.005	0.020	9/6/2023	2:48 PM	EPA 365.1
pH, Field (electrometric) by Client	7.99		units			9/6/2023	11:25 AM	FDEP FT1100
Salinity by meter by Client	1.62		SU			9/6/2023	11:25 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.75		meters			9/6/2023	11:25 AM	FDEP FT 1700
Depth of Water Body	2.3		Meters			9/6/2023	11:25 AM	FS2100
Field Temperature by client	29.9		°C			9/6/2023	11:25 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	1.00		mg/L as N	0.10	0.4	9/14/2023	9:00 AM	EPA 351.2
Nitrogen, Total	1.3		mg/L as N	0.10	0.4	9/14/2023	9:00 AM	TKN + NOX
Total Organic Carbon (NPOC)	19		mg/L	1	4	9/7/2023	12:11 PM	SM 5310 B
Phosphorus, Total as P	0.15		mg/L as P	0.006	0.024	9/14/2023	9:02 AM	EPA 365.1
Total Suspended Solids	0.650	I	mg/L	0.6	2.4	9/7/2023	7:06 AM	SM 2540 D
Turbidity (Nephelometric)	0.846		NTU	0.2	0.8	9/7/2023	2:46 PM	EPA 180.1



Laboratory ID	AF68839	Collection date and time	9/6/2023 11:50 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #448		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	0.57	I	mg/M3	0.5	2.0	9/14/2023	7:23 AM	SM21 10200 H
Pheophytin	2.72		mg/M3	0.5	2.0	9/14/2023	7:23 AM	SM21 10200 H
Dissolved Oxygen % Saturation by Client	80.3		%	0.1		9/6/2023	11:50 AM	FDEP FT1500
Biochemical Oxygen Demand 5 day	0.7	I V1	mg/L	0.3	1.2	9/7/2023	8:18 AM	SM 5210 B
Color	173		CU	1.25	5.00	9/6/2023	2:44 PM	SM21 2120 C
Specific Conductance, By Client	2400		µmhos/cm			9/6/2023	11:50 AM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	6.02		mg/L			9/6/2023	11:50 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		9/6/2023	2:28 PM	Enterolert®
Ammonia as N	0.029	I	mg/L as N	0.014	0.056	9/8/2023	9:49 AM	EPA 350.1
Nitrite as N	0.009	I	mg/L as N	0.003	0.012	9/7/2023	1:00 PM	EPA 353.2
Nitrate as N	0.327		mg/L as N	0.01	0.04	9/7/2023	1:00 PM	EPA 353.2
Nitrate + Nitrite as N	0.336		mg/L as N	0.01	0.04	9/7/2023	1:00 PM	EPA 353.2
Nitrogen, Organic	0.92		mg/L as N	0.10	0.4	9/14/2023	9:00 AM	TKN - NH3
Phosphorus, Ortho as P	0.121		mg/L as P	0.005	0.020	9/6/2023	2:48 PM	EPA 365.1
pH, Field (electrometric) by Client	7.94		units			9/6/2023	11:50 AM	FDEP FT1100
Salinity by meter by Client	1.22		SU			9/6/2023	11:50 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.65		meters			9/6/2023	11:50 AM	FDEP FT 1700
Depth of Water Body	1.3		Meters			9/6/2023	11:50 AM	FS2100
Field Temperature by client	30.1		°C			9/6/2023	11:50 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	0.95		mg/L as N	0.10	0.4	9/14/2023	9:00 AM	EPA 351.2
Nitrogen, Total	1.3		mg/L as N	0.10	0.4	9/14/2023	9:00 AM	TKN + NOX
Total Organic Carbon (NPOC)	19		mg/L	1	4	9/7/2023	12:11 PM	SM 5310 B
Phosphorus, Total as P	0.14		mg/L as P	0.006	0.024	9/14/2023	9:02 AM	EPA 365.1
Total Suspended Solids	0.6	U	mg/L	0.6	2.4	9/7/2023	7:06 AM	SM 2540 D
Turbidity (Nephelometric)	0.704	I	NTU	0.2	0.8	9/7/2023	2:46 PM	EPA 180.1

Laboratory ID	AF68840	Collection date and time	9/6/2023 11:00 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #442		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	1.29	I	mg/M3	0.5	2.0	9/14/2023	7:23 AM	SM21 10200 H
Pheophytin	4.43		mg/M3	0.5	2.0	9/14/2023	7:23 AM	SM21 10200 H
Dissolved Oxygen % Saturation by Client	89.5		%	0.1		9/6/2023	11:00 AM	FDEP FT1500
Biochemical Oxygen Demand 5 day	0.7	I V1	mg/L	0.3	1.2	9/7/2023	8:18 AM	SM 5210 B
Color	157		CU	1.25	5.00	9/6/2023	2:44 PM	SM21 2120 C

Report Format: NELAC

DOH #E45049



Laboratory ID	AF68840	Collection date and time	9/6/2023	11:00 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER	
Sample Description	Grid #442			

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Specific Conductance, By Client	4200		µmhos/cm			9/6/2023	11:00 AM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	6.74		mg/L			9/6/2023	11:00 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		9/6/2023	2:28 PM	Enterolert®
Ammonia as N	0.014	U	mg/L as N	0.014	0.056	9/8/2023	9:49 AM	EPA 350.1
Nitrite as N	0.013		mg/L as N	0.003	0.012	9/7/2023	1:00 PM	EPA 353.2
Nitrate as N	0.302		mg/L as N	0.01	0.04	9/7/2023	1:00 PM	EPA 353.2
Nitrate + Nitrite as N	0.315		mg/L as N	0.01	0.04	9/7/2023	1:00 PM	EPA 353.2
Nitrogen, Organic	0.96		mg/L as N	0.10	0.4	9/14/2023	9:00 AM	TKN - NH3
Phosphorus, Ortho as P	0.117		mg/L as P	0.005	0.020	9/6/2023	2:48 PM	EPA 365.1
pH, Field (electrometric) by Client	8.01		units			9/6/2023	11:00 AM	FDEP FT1100
Salinity by meter by Client	2.19		SU			9/6/2023	11:00 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.85		meters			9/6/2023	11:00 AM	FDEP FT 1700
Depth of Water Body	2.5		Meters			9/6/2023	11:00 AM	FS2100
Field Temperature by client	29.5		°C			9/6/2023	11:00 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	0.96		mg/L as N	0.10	0.4	9/14/2023	9:00 AM	EPA 351.2
Nitrogen, Total	1.3		mg/L as N	0.10	0.4	9/14/2023	9:00 AM	TKN + NOX
Total Organic Carbon (NPOC)	19		mg/L	1	4	9/7/2023	12:11 PM	SM 5310 B
Phosphorus, Total as P	0.14		mg/L as P	0.006	0.024	9/14/2023	9:02 AM	EPA 365.1
Total Suspended Solids	1.40	I	mg/L	0.6	2.4	9/7/2023	7:06 AM	SM 2540 D
Turbidity (Nephelometric)	0.941		NTU	0.2	0.8	9/7/2023	2:46 PM	EPA 180.1

Laboratory ID	AF68841	Collection date and time	9/6/2023	10:15 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER	
Sample Description	Grid #423			

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	1.09	I	mg/M3	0.5	2.0	9/14/2023	7:23 AM	SM21 10200 H
Pheophytin	11.50		mg/M3	0.5	2.0	9/14/2023	7:23 AM	SM21 10200 H
Dissolved Oxygen % Saturation by Client	81.6		%	0.1		9/6/2023	10:15 AM	FDEP FT1500
Biochemical Oxygen Demand 5 day	0.9	I V1	mg/L	0.3	1.2	9/7/2023	8:18 AM	SM 5210 B
Color	121		CU	1.25	5.00	9/6/2023	2:44 PM	SM21 2120 C
Specific Conductance, By Client	7000		µmhos/cm			9/6/2023	10:15 AM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	6.15		mg/L			9/6/2023	10:15 AM	FDEP FT1500
Enterococci	10		MPN/100mL	10		9/6/2023	2:28 PM	Enterolert®
Ammonia as N	0.028	I	mg/L as N	0.014	0.056	9/8/2023	9:49 AM	EPA 350.1
Nitrite as N	0.015		mg/L as N	0.003	0.012	9/7/2023	1:00 PM	EPA 353.2

Report Format: NELAC

DOH #E45049



Laboratory ID	AF68841	Collection date and time	9/6/2023 10:15 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #423		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Nitrate as N	0.169		mg/L as N	0.01	0.04	9/7/2023	1:00 PM	EPA 353.2
Nitrate + Nitrite as N	0.184		mg/L as N	0.01	0.04	9/7/2023	1:00 PM	EPA 353.2
Nitrogen, Organic	0.89		mg/L as N	0.10	0.4	9/14/2023	9:00 AM	TKN - NH3
Phosphorus, Ortho as P	0.105		mg/L as P	0.005	0.020	9/6/2023	2:48 PM	EPA 365.1
pH, Field (electrometric) by Client	7.91		units			9/6/2023	10:15 AM	FDEP FT1100
Salinity by meter by Client	3.78		SU			9/6/2023	10:15 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.95		meters			9/6/2023	10:15 AM	FDEP FT 1700
Depth of Water Body	1.5		Meters			9/6/2023	10:15 AM	FS2100
Field Temperature by client	29.0		°C			9/6/2023	10:15 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	0.92		mg/L as N	0.10	0.4	9/14/2023	9:00 AM	EPA 351.2
Nitrogen, Total	1.1		mg/L as N	0.10	0.4	9/14/2023	9:00 AM	TKN + NOX
Total Organic Carbon (NPOC)	16		mg/L	1	4	9/7/2023	12:11 PM	SM 5310 B
Phosphorus, Total as P	0.14		mg/L as P	0.006	0.024	9/14/2023	9:02 AM	EPA 365.1
Total Suspended Solids	4.10		mg/L	0.6	2.4	9/7/2023	7:06 AM	SM 2540 D
Turbidity (Nephelometric)	2.74		NTU	0.2	0.8	9/7/2023	2:46 PM	EPA 180.1

Laboratory ID	AF68842	Collection date and time	9/6/2023 12:40 PM
Location Code	CRNEP_EQ	Sample Collector	REISTAD/JAEGER
Sample Description	EB Site at #448		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Collected at #448								
Chlorophyll a - corrected for Pheophytin	0.50	U	mg/M3	0.5	2.0	9/14/2023	7:23 AM	SM21 10200 H
Pheophytin	0.50	U	mg/M3	0.5	2.0	9/14/2023	7:23 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.5	I	mg/L	0.3	1.2	9/7/2023	8:18 AM	SM 5210 B
Color	1.25	U	CU	1.25	5.00	9/6/2023	2:44 PM	SM21 2120 C
Enterococci	1	U	MPN/100mL	1		9/6/2023	2:28 PM	Enterolert®
Ammonia as N	0.014	U	mg/L as N	0.014	0.056	9/8/2023	9:49 AM	EPA 350.1
Nitrite as N	0.003	U	mg/L as N	0.003	0.012	9/7/2023	1:00 PM	EPA 353.2
Nitrate as N	0.010	U	mg/L as N	0.01	0.04	9/7/2023	1:00 PM	EPA 353.2
Nitrate + Nitrite as N	0.010	U	mg/L as N	0.01	0.04	9/7/2023	1:00 PM	EPA 353.2
Nitrogen, Organic	0.100	U	mg/L as N	0.10	0.4	9/14/2023	9:00 AM	TKN - NH3
Phosphorus, Ortho as P	0.005	U	mg/L as P	0.005	0.020	9/6/2023	2:48 PM	EPA 365.1
Nitrogen, Kjeldahl, Total	0.10	U	mg/L as N	0.10	0.4	9/14/2023	9:00 AM	EPA 351.2
Nitrogen, Total	0.100	U	mg/L as N	0.10	0.4	9/14/2023	9:00 AM	TKN + NOX
Total Organic Carbon (NPOC)	1.000	U	mg/L	1	4	9/7/2023	12:11 PM	SM 5310 B

Report Format: NELAC

DOH #E45049



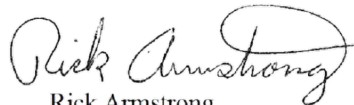
Laboratory ID	AF68842	Collection date and time	9/6/2023 12:40 PM
Location Code	CRNEP_EQ	Sample Collector	REISTAD/JAEGER
Sample Description	EB Site at #448		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Collected at #448								
Phosphorus, Total as P	0.006	U	mg/L as P	0.006	0.024	9/14/2023	9:02 AM	EPA 365.1
Total Suspended Solids	0.6	U	mg/L	0.6	2.4	9/7/2023	7:06 AM	SM 2540 D
Turbidity (Nephelometric)	0.20	U	NTU	0.2	0.8	9/7/2023	2:46 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).
- 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.
- V1 Indicates that the analyte was detected in both the sample and associated field blank at a level of <5X the blank value.

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

Page 1 of 1

Report/Result Information				Billing/Invoice Information															
Name: Tidal Caloosa				Name: DNRM				Matrix Codes: DW-Drinking water GW- Ground water WW-Waste water SW-Surface water WWS-Wastewater Sludge S-Sediment O-Other											
Distrib List: FDEP - South				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/Monica Jaeger				Sample Collector Signature:				Analyses Required \$Chloroa, _prep O-PO4, Color, NOX TOC NH3, TKN, TN, T-PO4, NO3, ONIT Turb, NO2, TSS, Bod, Bodi Enter											
Relinquished By: (signature)		Date: 09/06/23		Time: 1350		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: 1.3°C								NP		NPF		S		S		NP		ST	
Collection Date Time		Sample Description & Location			Matrix (see codes)	# of Sample Containers Submitted					Lab ID #								
09/06/23 0925		CRNEP_RS #389			SWE	1	1	1	1	2	1	AF68837							
09/06/23 1125		CRNEP_RS #443			SWE	1	1	1	1	2	1	AF68838							
09/06/23 1150		CRNEP_RS #448			SWE	1	1	1	1	2	1	AF68839							
09/06/23 1100		CRNEP_RS #442			SWE	1	1	1	1	2	1	AF68840							
09/06/23 1015		CRNEP_RS #423			SWE	1	1	1	1	2	1	AF68841							
09/06/23 1240		CRNEP_EQ #			SWE	1	1	1	1	2	1	AF68842							

**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.