

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: 12/14/2023

Below are the results of samples submitted to this laboratory on 12/6/2023

Laboratory ID	AF76260	Collection date and time	12/6/2023 9:15 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	0.50	U	mg/M3	0.5	2.0	12/11/2023	7:22 AM	SM10200H-2011
Pheophytin	2.19		mg/M3	0.5	2.0	12/11/2023	7:22 AM	SM10200H-2011
Dissolved Oxygen % Saturation by Client	97.8		%	0.1		12/6/2023	9:15 AM	FDEP FT1500
Biochemical Oxygen Demand 5 day	1.6		mg/L	0.3	1.2	12/7/2023	8:07 AM	SM5210B-2016
Color	77.3		CU	1.25	5.00	12/7/2023	1:31 PM	SM21 2120 C
Specific Conductance, By Client	15500		µmhos/cm			12/6/2023	9:15 AM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	8.28		mg/L			12/6/2023	9:15 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		12/6/2023	1:20 PM	Enterolert®
Ammonia as N	0.015	I	mg/L as N	0.014	0.056	12/8/2023	8:53 AM	EPA 350.1
Nitrite as N	0.014		mg/L as N	0.003	0.012	12/7/2023	1:41 PM	EPA 353.2
Nitrate as N	0.202		mg/L as N	0.01	0.04	12/7/2023	1:41 PM	EPA 353.2
Nitrate + Nitrite as N	0.216		mg/L as N	0.01	0.04	12/7/2023	1:41 PM	EPA 353.2
Nitrogen, Organic	0.86		mg/L as N	0.10	0.4	12/13/2023	9:06 AM	TKN - NH3
Phosphorus, Ortho as P	0.068		mg/L as P	0.005	0.020	12/7/2023	1:42 PM	EPA 365.1
pH, Field (electrometric) by Client	7.67		units			12/6/2023	9:15 AM	FDEP FT1100
Salinity by meter by Client	9.06		SU			12/6/2023	9:15 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.45		meters			12/6/2023	9:15 AM	FDEP FT 1700
Depth of Water Body	1.7		Meters			12/6/2023	9:15 AM	FS2100
Field Temperature by client	21.0		°C			12/6/2023	9:15 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	0.87		mg/L as N	0.10	0.4	12/13/2023	9:06 AM	EPA 351.2
Nitrogen, Total	1.1		mg/L as N	0.10	0.4	12/13/2023	9:06 AM	TKN + NOX
Total Organic Carbon (NPOC)	14		mg/L	1	4	12/7/2023	11:58 AM	SM5310B-2014
Phosphorus, Total as P	0.094		mg/L as P	0.006	0.024	12/13/2023	9:08 AM	EPA 365.1

Report Format: NELAC

DOH #E45049



Laboratory ID	AF76260	Collection date and time	12/6/2023 9:15 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	1.95	I	mg/L	0.6	2.4	12/7/2023	9:08 AM	SM2540D-2015
Turbidity (Nephelometric)	1.62		NTU	0.2	0.8	12/7/2023	7:35 AM	EPA 180.1

Laboratory ID	AF76261	Collection date and time	12/6/2023 9:40 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #396		

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	12/11/2023	7:22 AM	SM10200H-2011
Pheophytin	2.09		mg/M3	0.5	2.0	12/11/2023	7:22 AM	SM10200H-2011
Dissolved Oxygen % Saturation by Client	96.5		%	0.1		12/6/2023	9:40 AM	FDEP FT1500
Biochemical Oxygen Demand 5 day	0.5	I	mg/L	0.3	1.2	12/7/2023	8:07 AM	SM5210B-2016
Color	77.5		CU	1.25	5.00	12/7/2023	1:31 PM	SM21 2120 C
Specific Conductance, By Client	15600		µmhos/cm			12/6/2023	9:40 AM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	8.20		mg/L			12/6/2023	9:40 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		12/6/2023	1:20 PM	Enterolert®
Ammonia as N	0.014	U	mg/L as N	0.014	0.056	12/8/2023	8:53 AM	EPA 350.1
Nitrite as N	0.013		mg/L as N	0.003	0.012	12/7/2023	1:41 PM	EPA 353.2
Nitrate as N	0.200		mg/L as N	0.01	0.04	12/7/2023	1:41 PM	EPA 353.2
Nitrate + Nitrite as N	0.213		mg/L as N	0.01	0.04	12/7/2023	1:41 PM	EPA 353.2
Nitrogen, Organic	0.82		mg/L as N	0.10	0.4	12/13/2023	9:06 AM	TKN - NH3
Phosphorus, Ortho as P	0.070		mg/L as P	0.005	0.020	12/7/2023	1:42 PM	EPA 365.1
pH, Field (electrometric) by Client	7.90		units			12/6/2023	9:40 AM	FDEP FT1100
Salinity by meter by Client	9.11		SU			12/6/2023	9:40 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.1	S	meters			12/6/2023	9:40 AM	FDEP FT 1700
Depth of Water Body	1.1		Meters			12/6/2023	9:40 AM	FS2100
Field Temperature by client	20.7		°C			12/6/2023	9:40 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	0.82		mg/L as N	0.10	0.4	12/13/2023	9:06 AM	EPA 351.2
Nitrogen, Total	1.0		mg/L as N	0.10	0.4	12/13/2023	9:06 AM	TKN + NOX
Total Organic Carbon (NPOC)	14		mg/L	1	4	12/7/2023	11:58 AM	SM5310B-2014
Phosphorus, Total as P	0.11		mg/L as P	0.006	0.024	12/13/2023	9:08 AM	EPA 365.1
Total Suspended Solids	2.05	I	mg/L	0.6	2.4	12/7/2023	9:08 AM	SM2540D-2015
Turbidity (Nephelometric)	1.46		NTU	0.2	0.8	12/7/2023	7:35 AM	EPA 180.1



Laboratory ID	AF76262	Collection date and time	12/6/2023 10:10 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	0.50	U	mg/M3	0.5	2.0	12/11/2023	7:22 AM	SM10200H-2011
Pheophytin	3.36		mg/M3	0.5	2.0	12/11/2023	7:22 AM	SM10200H-2011
Dissolved Oxygen % Saturation by Client	96.0		%	0.1		12/6/2023	10:10 AM	FDEP FT1500
Biochemical Oxygen Demand 5 day	0.6	I	mg/L	0.3	1.2	12/7/2023	8:07 AM	SM5210B-2016
Color	96.0		CU	1.25	5.00	12/7/2023	1:31 PM	SM21 2120 C
Specific Conductance, By Client	8600		µmhos/cm			12/6/2023	10:10 AM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	8.35		mg/L			12/6/2023	10:10 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		12/6/2023	1:20 PM	Enterolert®
Ammonia as N	0.014	U	mg/L as N	0.014	0.056	12/8/2023	8:53 AM	EPA 350.1
Nitrite as N	0.011	I	mg/L as N	0.003	0.012	12/7/2023	1:41 PM	EPA 353.2
Nitrate as N	0.268		mg/L as N	0.01	0.04	12/7/2023	1:41 PM	EPA 353.2
Nitrate + Nitrite as N	0.279		mg/L as N	0.01	0.04	12/7/2023	1:41 PM	EPA 353.2
Nitrogen, Organic	0.86		mg/L as N	0.10	0.4	12/13/2023	9:06 AM	TKN - NH3
Phosphorus, Ortho as P	0.075		mg/L as P	0.005	0.020	12/7/2023	1:42 PM	EPA 365.1
pH, Field (electrometric) by Client	7.90		units			12/6/2023	10:10 AM	FDEP FT1100
Salinity by meter by Client	4.81		SU			12/6/2023	10:10 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.9		meters			12/6/2023	10:10 AM	FDEP FT 1700
Depth of Water Body	1.1		Meters			12/6/2023	10:10 AM	FS2100
Field Temperature by client	20.8		°C			12/6/2023	10:10 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	0.86		mg/L as N	0.10	0.4	12/13/2023	9:06 AM	EPA 351.2
Nitrogen, Total	1.1		mg/L as N	0.10	0.4	12/13/2023	9:06 AM	TKN + NOX
Total Organic Carbon (NPOC)	16		mg/L	1	4	12/7/2023	11:58 AM	SM5310B-2014
Phosphorus, Total as P	0.10		mg/L as P	0.006	0.024	12/13/2023	9:08 AM	EPA 365.1
Total Suspended Solids	2.35	I	mg/L	0.6	2.4	12/7/2023	9:08 AM	SM2540D-2015
Turbidity (Nephelometric)	1.89		NTU	0.2	0.8	12/7/2023	7:35 AM	EPA 180.1

Laboratory ID	AF76263	Collection date and time	12/6/2023 11:00 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	0.50	U	mg/M3	0.5	2.0	12/11/2023	7:22 AM	SM10200H-2011
Pheophytin	3.80		mg/M3	0.5	2.0	12/11/2023	7:22 AM	SM10200H-2011
Dissolved Oxygen % Saturation by Client	87.7		%	0.1		12/6/2023	11:00 AM	FDEP FT1500
Biochemical Oxygen Demand 5 day	0.6	I	mg/L	0.3	1.2	12/7/2023	8:07 AM	SM5210B-2016
Color	109		CU	1.25	5.00	12/7/2023	1:31 PM	SM21 2120 C

Report Format: NELAC

DOH #E45049



Laboratory ID	AF76263	Collection date and time	12/6/2023 11:00 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
Specific Conductance, By Client	2700		µmhos/cm			12/6/2023	11:00 AM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	7.65		mg/L			12/6/2023	11:00 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		12/6/2023	1:20 PM	Enterolert®
Ammonia as N	0.014	U	mg/L as N	0.014	0.056	12/8/2023	8:53 AM	EPA 350.1
Nitrite as N	0.007	I	mg/L as N	0.003	0.012	12/7/2023	1:41 PM	EPA 353.2
Nitrate as N	0.340		mg/L as N	0.01	0.04	12/7/2023	1:41 PM	EPA 353.2
Nitrate + Nitrite as N	0.347		mg/L as N	0.01	0.04	12/7/2023	1:41 PM	EPA 353.2
Nitrogen, Organic	0.94		mg/L as N	0.10	0.4	12/13/2023	9:06 AM	TKN - NH3
Phosphorus, Ortho as P	0.075		mg/L as P	0.005	0.020	12/7/2023	1:42 PM	EPA 365.1
pH, Field (electrometric) by Client	7.88		units			12/6/2023	11:00 AM	FDEP FT1100
Salinity by meter by Client	1.38		SU			12/6/2023	11:00 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.85		meters			12/6/2023	11:00 AM	FDEP FT 1700
Depth of Water Body	1.6		Meters			12/6/2023	11:00 AM	FS2100
Field Temperature by client	21.7		°C			12/6/2023	11:00 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	0.94		mg/L as N	0.10	0.4	12/13/2023	9:06 AM	EPA 351.2
Nitrogen, Total	1.3		mg/L as N	0.10	0.4	12/13/2023	9:06 AM	TKN + NOX
Total Organic Carbon (NPOC)	18		mg/L	1	4	12/7/2023	11:58 AM	SM5310B-2014
Phosphorus, Total as P	0.11		mg/L as P	0.006	0.024	12/13/2023	9:08 AM	EPA 365.1
Total Suspended Solids	0.750	I	mg/L	0.6	2.4	12/7/2023	9:08 AM	SM2540D-2015
Turbidity (Nephelometric)	1.63		NTU	0.2	0.8	12/7/2023	7:35 AM	EPA 180.1

Laboratory ID	AF76264	Collection date and time	12/6/2023 10:35 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #441		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	1.39	I	mg/M3	0.5	2.0	12/11/2023	7:22 AM	SM10200H-2011
Pheophytin	1.55	I	mg/M3	0.5	2.0	12/11/2023	7:22 AM	SM10200H-2011
Dissolved Oxygen % Saturation by Client	90.8		%	0.1		12/6/2023	10:35 AM	FDEP FT1500
Biochemical Oxygen Demand 5 day	0.6	I	mg/L	0.3	1.2	12/7/2023	8:07 AM	SM5210B-2016
Color	98.3		CU	1.25	5.00	12/7/2023	1:31 PM	SM21 2120 C
Specific Conductance, By Client	19100		µmhos/cm			12/6/2023	10:35 AM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	7.87		mg/L			12/6/2023	10:35 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		12/6/2023	1:20 PM	Enterolert®
Ammonia as N	0.014	U	mg/L as N	0.014	0.056	12/8/2023	8:53 AM	EPA 350.1
Nitrite as N	0.010	I	mg/L as N	0.003	0.012	12/7/2023	1:41 PM	EPA 353.2

Report Format: NELAC

DOH #E45049



Laboratory ID	AF76264	Collection date and time	12/6/2023 10:35 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #441		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Nitrate as N	0.277		mg/L as N	0.01	0.04	12/7/2023	1:41 PM	EPA 353.2
Nitrate + Nitrite as N	0.287		mg/L as N	0.01	0.04	12/7/2023	1:41 PM	EPA 353.2
Nitrogen, Organic	0.90		mg/L as N	0.10	0.4	12/13/2023	9:06 AM	TKN - NH3
Phosphorus, Ortho as P	0.076		mg/L as P	0.005	0.020	12/7/2023	1:42 PM	EPA 365.1
pH, Field (electrometric) by Client	7.91		units			12/6/2023	10:35 AM	FDEP FT1100
Salinity by meter by Client	4.25		SU			12/6/2023	10:35 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.95		meters			12/6/2023	10:35 AM	FDEP FT 1700
Depth of Water Body	1.8		Meters			12/6/2023	10:35 AM	FS2100
Field Temperature by client	21.1		°C			12/6/2023	10:35 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	0.90		mg/L as N	0.10	0.4	12/13/2023	9:06 AM	EPA 351.2
Nitrogen, Total	1.2		mg/L as N	0.10	0.4	12/13/2023	9:06 AM	TKN + NOX
Total Organic Carbon (NPOC)	16		mg/L	1	4	12/7/2023	11:58 AM	SM5310B-2014
Phosphorus, Total as P	0.11		mg/L as P	0.006	0.024	12/13/2023	9:08 AM	EPA 365.1
Total Suspended Solids	1.10	I	mg/L	0.6	2.4	12/7/2023	9:08 AM	SM2540D-2015
Turbidity (Nephelometric)	1.56		NTU	0.2	0.8	12/7/2023	7:35 AM	EPA 180.1

Laboratory ID	AF76265	Collection date and time	12/6/2023 11:55 AM
Location Code	CRNEP_EQ	Sample Collector	REISTAD/JAEGER
Sample Description	EB Site #		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Blank collected at site# 449								
Chlorophyll a - corrected for Pheophytin	0.50	U	mg/M3	0.5	2.0	12/11/2023	7:22 AM	SM10200H-2011
Pheophytin	0.50	U	mg/M3	0.5	2.0	12/11/2023	7:22 AM	SM10200H-2011
Biochemical Oxygen Demand 5 day	0.3	U	mg/L	0.3	1.2	12/7/2023	8:07 AM	SM5210B-2016
Color	1.25	U	CU	1.25	5.00	12/7/2023	1:31 PM	SM21 2120 C
Enterococci	1	U	MPN/100mL	1		12/6/2023	1:20 PM	Enterolert®
Ammonia as N	0.014	U	mg/L as N	0.014	0.056	12/8/2023	8:53 AM	EPA 350.1
Nitrite as N	0.003	U	mg/L as N	0.003	0.012	12/7/2023	1:41 PM	EPA 353.2
Nitrate as N	0.010	U	mg/L as N	0.01	0.04	12/7/2023	1:41 PM	EPA 353.2
Nitrate + Nitrite as N	0.010	U	mg/L as N	0.01	0.04	12/7/2023	1:41 PM	EPA 353.2
Nitrogen, Organic	0.100	U	mg/L as N	0.10	0.4	12/13/2023	9:06 AM	TKN - NH3
Phosphorus, Ortho as P	0.006	I	mg/L as P	0.005	0.020	12/7/2023	1:42 PM	EPA 365.1
Nitrogen, Kjeldahl, Total	0.10	U	mg/L as N	0.10	0.4	12/13/2023	9:06 AM	EPA 351.2
Nitrogen, Total	0.100	U	mg/L as N	0.10	0.4	12/13/2023	9:06 AM	TKN + NOX
Total Organic Carbon (NPOC)	1.000	U	mg/L	1	4	12/7/2023	11:58 AM	SM5310B-2014

Report Format: NELAC

DOH #E45049



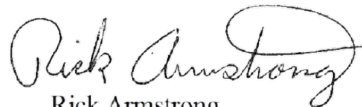
Laboratory ID	AF76265	Collection date and time	12/6/2023 11:55 AM
Location Code	CRNEP_EQ	Sample Collector	REISTAD/JAEGER
Sample Description	EB Site #		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Blank collected at site# 449								
Phosphorus, Total as P	0.006	U	mg/L as P	0.006	0.024	12/13/2023	9:08 AM	EPA 365.1
Total Suspended Solids	0.6	U	mg/L	0.6	2.4	12/7/2023	9:08 AM	SM2540D-2015
Turbidity (Nephelometric)	0.20	U	NTU	0.2	0.8	12/7/2023	7:35 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

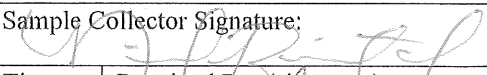
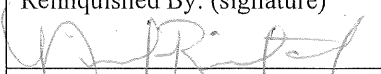
Lab Certification: E45049

LCEL F COC 20150828R1

Report/Result Information

Billing/Invoice Information

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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		Preservative Codes: NP-No Preservative N-Nitric Acid S-Sulfuric Acid H-Hydrochloric Acid SH-Sodium Hydroxide ST-Sodium Thiosulfate 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							
Relinquished By: (signature) 	Date 12/06/23	Time 1305	Received By: (signature) 	\$Chloroa, _prep	O-PO4, Color, NOX	TOC	NH3, TKN, TN, T-PO4, NO3, ONIT	Turb, NO2, TSS, , Bod, Bodi	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 #	
12/06/23	0915	CRNEP_RS #395		SWE	1	1	1	1	2	1	AF76260
12/06/23	0940	CRNEP_RS #396		SWE	1	1	1	1	2	1	AF76261
12/06/23	1010	CRNEP_RS #423		SWE	1	1	1	1	2	1	AF76262
12/06/23	1100	CRNEP_RS #449		SWE	1	1	1	1	2	1	AF76263
12/06/23	1035	CRNEP_RS #441		SWE	1	1	1	1	2	1	AF76264
12/06/23	1155	CRNEP_EQ #		SWE	1	1	1	1	2	1	AF76265

**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.