

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: 11/21/2023

Below are the results of samples submitted to this laboratory on 11/1/2023

Laboratory ID	AF73597	Collection date and time	11/1/2023 10:55 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	1.34	I	mg/M3	0.5	2.0	11/13/2023	7:30 AM	SM10200H-2011
Pheophytin	1.11	I	mg/M3	0.5	2.0	11/13/2023	7:30 AM	SM10200H-2011
Dissolved Oxygen % Saturation by Client	92.3		%	0.1		11/1/2023	10:55 AM	FDEP FT1500
Biochemical Oxygen Demand 5 day	0.8	I	mg/L	0.3	1.2	11/2/2023	9:50 AM	SM5210B-2016
Color	115		CU	1.25	5.00	11/2/2023	2:42 PM	SM21 2120 C
Specific Conductance, By Client	10900		µmhos/cm			11/1/2023	10:55 AM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	7.37		mg/L			11/1/2023	10:55 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		11/1/2023	2:40 PM	Enterolert®
Ammonia as N	0.022	I	mg/L as N	0.014	0.056	11/3/2023	9:54 AM	EPA 350.1
Nitrite as N	0.015		mg/L as N	0.003	0.012	11/2/2023	1:52 PM	EPA 353.2
Nitrate as N	0.283		mg/L as N	0.01	0.04	11/2/2023	1:52 PM	EPA 353.2
Nitrate + Nitrite as N	0.298		mg/L as N	0.01	0.04	11/2/2023	1:52 PM	EPA 353.2
Nitrogen, Organic	0.93		mg/L as N	0.10	0.4	11/7/2023	9:08 AM	TKN - NH3
Phosphorus, Ortho as P	0.083		mg/L as P	0.005	0.020	11/2/2023	2:20 PM	EPA 365.1
pH, Field (electrometric) by Client	8.01		units			11/1/2023	10:55 AM	FDEP FT1100
Salinity by meter by Client	6.17		SU			11/1/2023	10:55 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.95		meters			11/1/2023	10:55 AM	FDEP FT 1700
Depth of Water Body	2.1		Meters			11/1/2023	10:55 AM	FS2100
Field Temperature by client	25.0		°C			11/1/2023	10:55 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	0.95		mg/L as N	0.10	0.4	11/7/2023	9:08 AM	EPA 351.2
Nitrogen, Total	1.2		mg/L as N	0.10	0.4	11/7/2023	9:08 AM	TKN + NOX
Total Organic Carbon (NPOC)	16		mg/L	1	4	11/15/2023	10:03 AM	SM5310B-2014
Phosphorus, Total as P	0.11		mg/L as P	0.006	0.024	11/7/2023	9:10 AM	EPA 365.1

Report Format: NELAC

DOH #E45049



Laboratory ID	AF73597	Collection date and time	11/1/2023 10:55 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
Total Suspended Solids	2.20	I	mg/L	0.6	2.4	11/2/2023	7:06 AM	SM2540D-2015
Turbidity (Nephelometric)	1.27		NTU	0.2	0.8	11/1/2023	2:37 PM	EPA 180.1

Laboratory ID	AF73598	Collection date and time	11/1/2023 10:05 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #386		

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	11/15/2023	7:25 AM	SM10200H-2011
Pheophytin	2.90		mg/M3	0.5	2.0	11/15/2023	7:25 AM	SM10200H-2011
Dissolved Oxygen % Saturation by Client	90.7		%	0.1		11/1/2023	10:05 AM	FDEP FT1500
Biochemical Oxygen Demand 5 day	0.6	I	mg/L	0.3	1.2	11/2/2023	9:50 AM	SM5210B-2016
Color	69.1		CU	1.25	5.00	11/2/2023	2:42 PM	SM21 2120 C
Specific Conductance, By Client	28500		µmhos/cm			11/1/2023	10:05 AM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	6.81		mg/L			11/1/2023	10:05 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		11/1/2023	2:40 PM	Enterolert®
Ammonia as N	0.016	I	mg/L as N	0.014	0.056	11/3/2023	9:54 AM	EPA 350.1
Nitrite as N	0.014		mg/L as N	0.003	0.012	11/2/2023	1:52 PM	EPA 353.2
Nitrate as N	0.181		mg/L as N	0.01	0.04	11/2/2023	1:52 PM	EPA 353.2
Nitrate + Nitrite as N	0.195		mg/L as N	0.01	0.04	11/2/2023	1:52 PM	EPA 353.2
Nitrogen, Organic	0.93		mg/L as N	0.10	0.4	11/7/2023	9:08 AM	TKN - NH3
Phosphorus, Ortho as P	0.055		mg/L as P	0.005	0.020	11/2/2023	2:20 PM	EPA 365.1
pH, Field (electrometric) by Client	7.91		units			11/1/2023	10:05 AM	FDEP FT1100
Salinity by meter by Client	17.56		SU			11/1/2023	10:05 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.05		meters			11/1/2023	10:05 AM	FDEP FT 1700
Depth of Water Body	1.6		Meters			11/1/2023	10:05 AM	FS2100
Field Temperature by client	24.8		°C			11/1/2023	10:05 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	0.95		mg/L as N	0.10	0.4	11/7/2023	9:08 AM	EPA 351.2
Nitrogen, Total	1.1		mg/L as N	0.10	0.4	11/7/2023	9:08 AM	TKN + NOX
Total Organic Carbon (NPOC)	11		mg/L	1	4	11/15/2023	10:03 AM	SM5310B-2014
Phosphorus, Total as P	0.087		mg/L as P	0.006	0.024	11/7/2023	9:10 AM	EPA 365.1
Total Suspended Solids	3.75		mg/L	0.6	2.4	11/2/2023	7:06 AM	SM2540D-2015
Turbidity (Nephelometric)	2.39		NTU	0.2	0.8	11/1/2023	2:37 PM	EPA 180.1



Laboratory ID	AF73599	Collection date and time	11/1/2023 11:55 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	0.57	I	mg/M3	0.5	2.0	11/15/2023	7:25 AM	SM10200H-2011
Pheophytin	5.82		mg/M3	0.5	2.0	11/15/2023	7:25 AM	SM10200H-2011
Dissolved Oxygen % Saturation by Client	85.0		%	0.1		11/1/2023	11:55 AM	FDEP FT1500
Biochemical Oxygen Demand 5 day	0.8	I	mg/L	0.3	1.2	11/2/2023	9:50 AM	SM5210B-2016
Color	111		CU	1.25	5.00	11/2/2023	2:42 PM	SM21 2120 C
Specific Conductance, By Client	11600		µmhos/cm			11/1/2023	11:55 AM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	6.69		mg/L			11/1/2023	11:55 AM	FDEP FT1500
Enterococci	20		MPN/100mL	10		11/1/2023	2:40 PM	Enterolert®
Ammonia as N	0.020	I	mg/L as N	0.014	0.056	11/3/2023	9:54 AM	EPA 350.1
Nitrite as N	0.016		mg/L as N	0.003	0.012	11/2/2023	1:52 PM	EPA 353.2
Nitrate as N	0.267		mg/L as N	0.01	0.04	11/2/2023	1:52 PM	EPA 353.2
Nitrate + Nitrite as N	0.283		mg/L as N	0.01	0.04	11/2/2023	1:52 PM	EPA 353.2
Nitrogen, Organic	0.88		mg/L as N	0.10	0.4	11/7/2023	9:08 AM	TKN - NH3
Phosphorus, Ortho as P	0.085		mg/L as P	0.005	0.020	11/2/2023	2:20 PM	EPA 365.1
pH, Field (electrometric) by Client	7.88		units			11/1/2023	11:55 AM	FDEP FT1100
Salinity by meter by Client	6.59		SU			11/1/2023	11:55 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.8	S	meters			11/1/2023	11:55 AM	FDEP FT 1700
Depth of Water Body	0.8		Meters			11/1/2023	11:55 AM	FS2100
Field Temperature by client	25.6		°C			11/1/2023	11:55 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	0.90		mg/L as N	0.10	0.4	11/7/2023	9:08 AM	EPA 351.2
Nitrogen, Total	1.2		mg/L as N	0.10	0.4	11/7/2023	9:08 AM	TKN + NOX
Total Organic Carbon (NPOC)	15		mg/L	1	4	11/16/2023	9:59 AM	SM5310B-2014
Phosphorus, Total as P	0.12		mg/L as P	0.006	0.024	11/7/2023	9:10 AM	EPA 365.1
Total Suspended Solids	2.80		mg/L	0.6	2.4	11/2/2023	7:06 AM	SM2540D-2015
Turbidity (Nephelometric)	1.50		NTU	0.2	0.8	11/1/2023	2:37 PM	EPA 180.1

Laboratory ID	AF73600	Collection date and time	11/1/2023 11:30 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #429		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	1.41	I	mg/M3	0.5	2.0	11/15/2023	7:25 AM	SM10200H-2011
Pheophytin	2.22		mg/M3	0.5	2.0	11/15/2023	7:25 AM	SM10200H-2011
Dissolved Oxygen % Saturation by Client	93.7		%	0.1		11/1/2023	11:30 AM	FDEP FT1500
Biochemical Oxygen Demand 5 day	0.6	I	mg/L	0.3	1.2	11/2/2023	9:50 AM	SM5210B-2016
Color	117		CU	1.25	5.00	11/2/2023	2:42 PM	SM21 2120 C

Report Format: NELAC

DOH #E45049



Laboratory ID	AF73600	Collection date and time	11/1/2023 11:30 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #429		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Specific Conductance, By Client	10300		µmhos/cm			11/1/2023	11:30 AM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	7.44		mg/L			11/1/2023	11:30 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		11/1/2023	2:40 PM	Enterolert®
Ammonia as N	0.022	I	mg/L as N	0.014	0.056	11/3/2023	9:54 AM	EPA 350.1
Nitrite as N	0.014		mg/L as N	0.003	0.012	11/2/2023	1:52 PM	EPA 353.2
Nitrate as N	0.295		mg/L as N	0.01	0.04	11/2/2023	1:52 PM	EPA 353.2
Nitrate + Nitrite as N	0.309		mg/L as N	0.01	0.04	11/2/2023	1:52 PM	EPA 353.2
Nitrogen, Organic	0.92		mg/L as N	0.10	0.4	11/7/2023	9:08 AM	TKN - NH3
Phosphorus, Ortho as P	0.083		mg/L as P	0.005	0.020	11/2/2023	2:20 PM	EPA 365.1
pH, Field (electrometric) by Client	8.01		units			11/1/2023	11:30 AM	FDEP FT1100
Salinity by meter by Client	5.80		SU			11/1/2023	11:30 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.9	S	meters			11/1/2023	11:30 AM	FDEP FT 1700
Depth of Water Body	0.9		Meters			11/1/2023	11:30 AM	FS2100
Field Temperature by client	25.4		°C			11/1/2023	11:30 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	0.94		mg/L as N	0.10	0.4	11/7/2023	9:08 AM	EPA 351.2
Nitrogen, Total	1.2		mg/L as N	0.10	0.4	11/7/2023	9:08 AM	TKN + NOX
Total Organic Carbon (NPOC)	16		mg/L	1	4	11/16/2023	9:59 AM	SM5310B-2014
Phosphorus, Total as P	0.12		mg/L as P	0.006	0.024	11/7/2023	9:10 AM	EPA 365.1
Total Suspended Solids	2.80		mg/L	0.6	2.4	11/2/2023	7:06 AM	SM2540D-2015
Turbidity (Nephelometric)	1.27		NTU	0.2	0.8	11/1/2023	2:37 PM	EPA 180.1

Laboratory ID	AF73601	Collection date and time	11/1/2023 9:25 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #391		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	0.91	I	mg/M3	0.5	2.0	11/15/2023	7:25 AM	SM10200H-2011
Pheophytin	1.38	I	mg/M3	0.5	2.0	11/15/2023	7:25 AM	SM10200H-2011
Dissolved Oxygen % Saturation by Client	83.1		%	0.1		11/1/2023	9:25 AM	FDEP FT1500
Biochemical Oxygen Demand 5 day	0.7	I	mg/L	0.3	1.2	11/2/2023	9:50 AM	SM5210B-2016
Color	49.4		CU	1.25	5.00	11/2/2023	2:42 PM	SM21 2120 C
Specific Conductance, By Client	36400		µmhos/cm			11/1/2023	9:25 AM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	6.01		mg/L			11/1/2023	9:25 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		11/1/2023	2:40 PM	Enterolert®
Ammonia as N	0.016	I	mg/L as N	0.014	0.056	11/3/2023	9:54 AM	EPA 350.1
Nitrite as N	0.011	I	mg/L as N	0.003	0.012	11/2/2023	1:52 PM	EPA 353.2

Report Format: NELAC

DOH #E45049



Laboratory ID	AF73601	Collection date and time	11/1/2023 9:25 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #391		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Nitrate as N	0.126		mg/L as N	0.01	0.04	11/2/2023	1:52 PM	EPA 353.2
Nitrate + Nitrite as N	0.137		mg/L as N	0.01	0.04	11/2/2023	1:52 PM	EPA 353.2
Nitrogen, Organic	0.84		mg/L as N	0.10	0.4	11/7/2023	9:08 AM	TKN - NH3
Phosphorus, Ortho as P	0.044		mg/L as P	0.005	0.020	11/2/2023	2:20 PM	EPA 365.1
pH, Field (electrometric) by Client	7.59		units			11/1/2023	9:25 AM	FDEP FT1100
Salinity by meter by Client	22.96		SU			11/1/2023	9:25 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.3		meters			11/1/2023	9:25 AM	FDEP FT 1700
Depth of Water Body	1.5		Meters			11/1/2023	9:25 AM	FS2100
Field Temperature by client	25.2		°C			11/1/2023	9:25 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	0.86		mg/L as N	0.10	0.4	11/7/2023	9:08 AM	EPA 351.2
Nitrogen, Total	1.00		mg/L as N	0.10	0.4	11/7/2023	9:08 AM	TKN + NOX
Total Organic Carbon (NPOC)	8.4		mg/L	1	4	11/16/2023	9:59 AM	SM5310B-2014
Phosphorus, Total as P	0.063		mg/L as P	0.006	0.024	11/7/2023	9:10 AM	EPA 365.1
Total Suspended Solids	5.25		mg/L	0.6	2.4	11/2/2023	7:06 AM	SM2540D-2015
Turbidity (Nephelometric)	2.22		NTU	0.2	0.8	11/1/2023	2:37 PM	EPA 180.1

Laboratory ID	AF73602	Collection date and time	11/1/2023 1:00 PM
Location Code	CRNEP_EQ	Sample Collector	REISTAD/JAEGER
Sample Description	EB Site #435		

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	11/13/2023	7:30 AM	SM10200H-2011
Pheophytin	0.50	U	mg/M3	0.5	2.0	11/13/2023	7:30 AM	SM10200H-2011
Biochemical Oxygen Demand 5 day	0.3	U	mg/L	0.3	1.2	11/2/2023	9:50 AM	SM5210B-2016
Color	1.25	U	CU	1.25	5.00	11/2/2023	2:42 PM	SM21 2120 C
Enterococci	1	U	MPN/100mL	1		11/1/2023	2:40 PM	Enterolert®
Ammonia as N	0.014	U	mg/L as N	0.014	0.056	11/3/2023	9:54 AM	EPA 350.1
Nitrite as N	0.003	U	mg/L as N	0.003	0.012	11/2/2023	1:52 PM	EPA 353.2
Nitrate as N	0.010	U	mg/L as N	0.01	0.04	11/2/2023	1:52 PM	EPA 353.2
Nitrate + Nitrite as N	0.010	U	mg/L as N	0.01	0.04	11/2/2023	1:52 PM	EPA 353.2
Nitrogen, Organic	0.100	U	mg/L as N	0.10	0.4	11/7/2023	9:08 AM	TKN - NH3
Phosphorus, Ortho as P	0.005	U	mg/L as P	0.005	0.020	11/2/2023	2:20 PM	EPA 365.1
Nitrogen, Kjeldahl, Total	0.10	U	mg/L as N	0.10	0.4	11/7/2023	9:08 AM	EPA 351.2
Nitrogen, Total	0.100	U	mg/L as N	0.10	0.4	11/7/2023	9:08 AM	TKN + NOX
Total Organic Carbon (NPOC)	1.000	U	mg/L	1	4	11/15/2023	10:03 AM	SM5310B-2014
Phosphorus, Total as P	0.006	U	mg/L as P	0.006	0.024	11/7/2023	9:10 AM	EPA 365.1

Report Format: NELAC

DOH #E45049



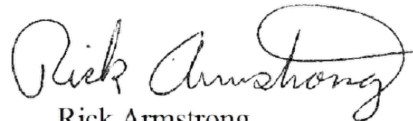
Laboratory ID	AF73602	Collection date and time	11/1/2023 1:00 PM
Location Code	CRNEP_EQ	Sample Collector	REISTAD/JAEGER
Sample Description	EB Site #435		

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	11/2/2023	7:06 AM	SM2540D-2015
Turbidity (Nephelometric)	0.20	U	NTU	0.2	0.8	11/1/2023	2:37 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.

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

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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	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	Time	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)						

Preservatives (see codes)

Sample(s) on ice ☒ Yes or ☐ No? Temperature °C: 3.8°C

Collection		Sample Description & Location	Matrix (see codes)	# of Sample Containers Submitted						Lab ID #
Date	Time			NP	NPF	S	S	NP	ST	
11/01/23	1055	CRNEP_RS #423	SWE	1	1	1	1	2	1	AF73597
11/01/23	1005	CRNEP_RS #386	SWE	1	1	1	1	2	1	AF73598
11/01/23	1155	CRNEP_RS #435	SWE	1	1	1	1	2	1	AF73599
11/01/23	1130	CRNEP_RS #429	SWE	1	1	1	1	2	1	AF73600
11/01/23	0925	CRNEP_RS #391	SWE	1	1	1	1	2	1	AF73601
11/01/23	1300	CRNEP_EQ # @435	SWE	1	1	1	1	2	1	AF73602

**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.