

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: 1/10/2022

Below are the results of samples submitted to this laboratory on 12/15/2021

Laboratory ID	AF08986	Collection date and time	12/15/2021 12:35 PM
Location Code	CRNEP_RS	Sample Collector	REISTADT/JAEGER
Sample Description	Grid #442		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	1.90	I	mg/M3	0.5	2.0	12/20/2021	7:32 AM	SM21 10200 H
Pheophytin	1.95	I	mg/M3	0.5	2.0	12/20/2021	7:32 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	1.1	I J3	mg/L	0.3	1.2	12/16/2021	11:36 AM	SM 5210 B
Color	79.6		CU	1.25	5.00	12/16/2021	2:19 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	7.82		mg/L			12/15/2021	12:35 PM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		12/15/2021	2:46 PM	Enterolert®
Ammonia	0.018	I	mg/L as N	0.014	0.056	12/17/2021	10:57 AM	EPA 350.1
Nitrite	0.007	I	mg/L as N	0.003	0.012	12/16/2021	9:53 AM	EPA 353.2
Nitrate	0.166	V1	mg/L as N	0.01	0.04	12/16/2021	9:53 AM	EPA 353.2
Nitrate + Nitrite	0.173	V1	mg/L as N	0.01	0.04	12/16/2021	9:53 AM	EPA 353.2
Nitrogen, Organic	0.88		mg/L as N	0.10	0.4	12/21/2021	8:12 AM	TKN - NH3
Phosphorus, Ortho	0.048		mg/L as P	0.005	0.020	12/16/2021	2:17 PM	EPA 365.1
Salinity by meter by Client	2.5		SU			12/15/2021	12:35 PM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.0		meters			12/15/2021	12:35 PM	FDEP FT 1700
Silica, dissolved as SiO2	7.5		mg/L as SiO2	0.1	0.4	12/16/2021	12:49 PM	SM4500-SiO2 C
Depth of Water Body	1.5		Meters			12/15/2021	12:35 PM	FS2100
Nitrogen, Kjeldahl, Total	0.90		mg/L as N	0.10	0.4	12/21/2021	8:12 AM	EPA 351.2
Nitrogen, Total	1.1	V1	mg/L as N	0.10	0.4	12/21/2021	8:12 AM	TKN + NOX
Total Organic Carbon (NPOC)	13.739695	FCL	mg/L	1	2	1/5/2022	12:00 AM	SM 5310 B
Phosphorus, Total	0.074		mg/L as P	0.006	0.024	12/21/2021	8:14 AM	EPA 365.1
Total Suspended Solids	3.30		mg/L	0.6	2.4	12/16/2021	6:50 AM	SM 2540 D
Turbidity (Nephelometric)	1.32		NTU	0.2	0.8	12/16/2021	6:42 AM	EPA 180.1



Laboratory ID	AF08987	Collection date and time	12/15/2021 10:15 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/JAEGER
Sample Description	Grid #386		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	1.11	I	mg/M3	0.5	2.0	12/20/2021	7:32 AM	SM21 10200 H
Pheophytin	1.18	I	mg/M3	0.5	2.0	12/20/2021	7:32 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	1.1	I J3	mg/L	0.3	1.2	12/16/2021	11:36 AM	SM 5210 B
Color	54.4		CU	1.25	5.00	12/16/2021	2:19 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	7.47		mg/L			12/15/2021	10:15 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		12/15/2021	2:46 PM	Enterolert®
Ammonia	0.023	I	mg/L as N	0.014	0.056	12/17/2021	10:57 AM	EPA 350.1
Nitrite	0.006	I	mg/L as N	0.003	0.012	12/16/2021	9:53 AM	EPA 353.2
Nitrate	0.093	V1	mg/L as N	0.01	0.04	12/16/2021	9:53 AM	EPA 353.2
Nitrate + Nitrite	0.099	V1	mg/L as N	0.01	0.04	12/16/2021	9:53 AM	EPA 353.2
Nitrogen, Organic	0.80		mg/L as N	0.10	0.4	12/21/2021	8:12 AM	TKN - NH3
Phosphorus, Ortho	0.040		mg/L as P	0.005	0.020	12/16/2021	2:17 PM	EPA 365.1
Salinity by meter by Client	11.31		SU			12/15/2021	10:15 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.35		meters			12/15/2021	10:15 AM	FDEP FT 1700
Silica, dissolved as SiO2	4.9		mg/L as SiO2	0.1	0.4	12/16/2021	12:49 PM	SM4500-SiO2 C
Depth of Water Body	1.5		Meters			12/15/2021	10:15 AM	FS2100
Nitrogen, Kjeldahl, Total	0.82		mg/L as N	0.10	0.4	12/21/2021	8:12 AM	EPA 351.2
Nitrogen, Total	0.92	V1	mg/L as N	0.10	0.4	12/21/2021	8:12 AM	TKN + NOX
Total Organic Carbon (NPOC)	6.8156766	V1 FCL	mg/L	1	2	1/5/2022	12:00 AM	SM 5310 B
Phosphorus, Total	0.061		mg/L as P	0.006	0.024	12/21/2021	8:14 AM	EPA 365.1
Total Suspended Solids	2.95		mg/L	0.6	2.4	12/16/2021	6:50 AM	SM 2540 D
Turbidity (Nephelometric)	0.740	I	NTU	0.2	0.8	12/16/2021	6:42 AM	EPA 180.1

Laboratory ID	AF08988	Collection date and time	12/15/2021 10:55 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/JAEGER
Sample Description	Grid #464		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	0.79	I	mg/M3	0.5	2.0	12/20/2021	7:32 AM	SM21 10200 H
Pheophytin	4.34		mg/M3	0.5	2.0	12/20/2021	7:32 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.7	I J3	mg/L	0.3	1.2	12/16/2021	11:36 AM	SM 5210 B
Color	51.2		CU	1.25	5.00	12/16/2021	2:19 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	7.77		mg/L			12/15/2021	10:55 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		12/15/2021	2:46 PM	Enterolert®
Ammonia	0.016	I	mg/L as N	0.014	0.056	12/17/2021	10:57 AM	EPA 350.1
Nitrite	0.005	I	mg/L as N	0.003	0.012	12/16/2021	9:53 AM	EPA 353.2

Report Format: NELAC

DOH #E45049



Laboratory ID	AF08988	Collection date and time	12/15/2021 10:55 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/JAEGER
Sample Description	Grid #464		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Nitrate	0.036	V1 I	mg/L as N	0.01	0.04	12/16/2021	9:53 AM	EPA 353.2
Nitrate + Nitrite	0.041	V1	mg/L as N	0.01	0.04	12/16/2021	9:53 AM	EPA 353.2
Nitrogen, Organic	0.71		mg/L as N	0.10	0.4	12/21/2021	8:12 AM	TKN - NH3
Phosphorus, Ortho	0.036		mg/L as P	0.005	0.020	12/16/2021	2:17 PM	EPA 365.1
Salinity by meter by Client	13.5		SU			12/15/2021	10:55 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.1		meters			12/15/2021	10:55 AM	FDEP FT 1700
Silica, dissolved as SiO2	4.5		mg/L as SiO2	0.1	0.4	12/16/2021	12:49 PM	SM4500-SiO2 C
Depth of Water Body	1.2		Meters			12/15/2021	10:55 AM	FS2100
Nitrogen, Kjeldahl, Total	0.73		mg/L as N	0.10	0.4	12/21/2021	8:12 AM	EPA 351.2
Nitrogen, Total	0.77	V1	mg/L as N	0.10	0.4	12/21/2021	8:12 AM	TKN + NOX
Total Organic Carbon (NPOC)	5.86674	V1 FCL	mg/L	1	2	1/5/2022	12:00 AM	SM 5310 B
Phosphorus, Total	0.066		mg/L as P	0.006	0.024	12/21/2021	8:14 AM	EPA 365.1
Total Suspended Solids	7.95		mg/L	0.6	2.4	12/16/2021	6:50 AM	SM 2540 D
Turbidity (Nephelometric)	1.50		NTU	0.2	0.8	12/16/2021	6:42 AM	EPA 180.1

Laboratory ID	AF08989	Collection date and time	12/15/2021 11:40 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/JAEGER
Sample Description	Grid #404		

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	12/20/2021	7:32 AM	SM21 10200 H
Pheophytin	2.77		mg/M3	0.5	2.0	12/20/2021	7:32 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	1.0	I J3	mg/L	0.3	1.2	12/16/2021	11:36 AM	SM 5210 B
Color	61.0		CU	1.25	5.00	12/16/2021	2:19 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	7.55		mg/L			12/15/2021	11:40 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		12/15/2021	2:46 PM	Enterolert®
Ammonia	0.019	I	mg/L as N	0.014	0.056	12/17/2021	10:57 AM	EPA 350.1
Nitrite	0.006	I	mg/L as N	0.003	0.012	12/16/2021	9:53 AM	EPA 353.2
Nitrate	0.109	V1	mg/L as N	0.01	0.04	12/16/2021	9:53 AM	EPA 353.2
Nitrate + Nitrite	0.115	V1	mg/L as N	0.01	0.04	12/16/2021	9:53 AM	EPA 353.2
Nitrogen, Organic	0.81		mg/L as N	0.10	0.4	12/21/2021	8:12 AM	TKN - NH3
Phosphorus, Ortho	0.044		mg/L as P	0.005	0.020	12/16/2021	2:17 PM	EPA 365.1
Salinity by meter by Client	8.40		SU			12/15/2021	11:40 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.6		meters			12/15/2021	11:40 AM	FDEP FT 1700
Silica, dissolved as SiO2	5.6		mg/L as SiO2	0.1	0.4	12/16/2021	12:49 PM	SM4500-SiO2 C
Depth of Water Body	2.0		Meters			12/15/2021	11:40 AM	FS2100

Report Format: NELAC

DOH #E45049



Laboratory ID	AF08989	Collection date and time	12/15/2021 11:40 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/JAEGER
Sample Description	Grid #404		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Nitrogen, Kjeldahl, Total	0.83		mg/L as N	0.10	0.4	12/21/2021	8:12 AM	EPA 351.2
Nitrogen, Total	0.95	V1	mg/L as N	0.10	0.4	12/21/2021	8:12 AM	TKN + NOX
Total Organic Carbon (NPOC)	8.6951375	V1 FCL	mg/L	1	2	1/5/2022	12:00 AM	SM 5310 B
Phosphorus, Total	0.068		mg/L as P	0.006	0.024	12/21/2021	8:14 AM	EPA 365.1
Total Suspended Solids	1.85	I	mg/L	0.6	2.4	12/16/2021	6:50 AM	SM 2540 D
Turbidity (Nephelometric)	0.640	I	NTU	0.2	0.8	12/16/2021	6:42 AM	EPA 180.1

Laboratory ID	AF08990	Collection date and time	12/15/2021 1:35 PM
Location Code	CRNEP_EQ	Sample Collector	REISTADT/JAEGER
Sample Description	EB Site #		

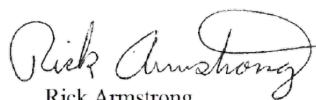
Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	0.50	U	mg/M3	0.5	2.0	12/20/2021	7:32 AM	SM21 10200 H
Pheophytin	0.50	U	mg/M3	0.5	2.0	12/20/2021	7:32 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.3	U J3	mg/L	0.3	1.2	12/16/2021	11:36 AM	SM 5210 B
Color	1.25	U	CU	1.25	5.00	12/16/2021	2:19 PM	SM21 2120 C
Enterococci	1	U	MPN/100mL	1		12/15/2021	2:46 PM	Enterolert®
Ammonia	0.014	U	mg/L as N	0.014	0.056	12/17/2021	10:57 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	12/16/2021	9:53 AM	EPA 353.2
Nitrate	0.108		mg/L as N	0.01	0.04	12/16/2021	11:25 AM	EPA 353.2
Nitrate + Nitrite	0.108		mg/L as N	0.01	0.04	12/16/2021	11:25 AM	EPA 353.2
Nitrogen, Organic	0.100	U	mg/L as N	0.10	0.4	12/21/2021	8:12 AM	TKN - NH3
Phosphorus, Ortho	0.006	I	mg/L as P	0.005	0.020	12/16/2021	2:17 PM	EPA 365.1
Silica, dissolved as SiO2	0.88		mg/L as SiO2	0.1	0.4	12/21/2021	12:54 PM	SM4500-SiO2 C
Nitrogen, Kjeldahl, Total	0.10	U	mg/L as N	0.10	0.4	12/21/2021	8:12 AM	EPA 351.2
Nitrogen, Total	0.21	I	mg/L as N	0.10	0.4	12/21/2021	8:12 AM	TKN + NOX
Total Organic Carbon (NPOC)	1.8179869	I FCL	mg/L	1	2	1/5/2022	12:00 AM	SM 5310 B
Phosphorus, Total	0.006	I	mg/L as P	0.006	0.024	1/3/2022	8:38 AM	EPA 365.1
Total Suspended Solids	0.6	U	mg/L	0.6	2.4	12/16/2021	6:50 AM	SM 2540 D
Turbidity (Nephelometric)	0.20	U	NTU	0.2	0.8	12/16/2021	6:42 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).
- I FCL Value less than, or equal to laboratory's PQL and greater than MDL. Analysed by Flowers Chemical Lab, Altamonte Springs FL, FDOH # E83018.
- I J3 The value is $\leq$ to the PQL and $>$ the MDL. The reported value failed to meet the established quality control criteria for either precision or accuracy.
- U Indicates that the compound was analyzed for but not detected.
- U J3 Indicates that the compound was analyzed for but not detected. Value failed to meet QC criteria for precision or accuracy.
- V1 Indicates that the analyte was detected in both the sample and associated field blank at a level of $<5X$ the blank value.
- V1 FCL Analyte found in both sample & field blank @ $<5X$ the blank value. Analysis performed by Flowers Chemical Laboratory, Altamonte Springs FL, FDOH # E83018
- V1 I Analyte found in both sample & field blank @ $<5X$ the blank value. The value is $>$ the MDL and $\leq$ to the PQL.

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: DNR 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
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Sample Collector(s) (please print): Nicole Reistad/Monica Jaeger				Sample Collector Signature: 				Analyses Required			
Relinquished By: (signature) 	Date 12/15/21	Time 1440	Received By: (signature) 	\$Chloroa, _prep	O-PO4, Color, NOX	TOC	NH3, TKN, TN, T-PO4, NO3, ONIT	Turb, NO2, TSS, Silica, Bod, Bodi	MugQT, 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: 5.42				NP	NPF	S	S	NP	ST		

Collection Date	Time	Sample Description & Location	Matrix (see codes)	# of Sample Containers Submitted						Lab ID #
		CRNEP_RS #469 NOT COLLECTED	SWE	1	1	1	1	2	1	AF08985
12/15/21	1235	CRNEP_RS #442	SWE	1	1	1	1	2	1	AF08986
12/15/21	1015	CRNEP_RS #386	SWE	1	1	1	1	2	1	AF08987
12/15/21	1055	CRNEP_RS #464	SWE	1	1	1	1	2	1	AF08988
12/15/21	1140	CRNEP_RS #404	SWE	1	1	1	1	2	1	AF08989
12/15/21	1335	CRNEP_EQ #	SWE	1	1	1	1	2	1	AF08990

**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.