

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: 2/2/2022

Below are the results of samples submitted to this laboratory on 1/19/2022

Laboratory ID	AF12174	Collection date and time	1/19/2022 10:55 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #412		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	0.52	I	mg/M3	0.5	2.0	1/30/2022	9:50 AM	SM21 10200 H
Pheophytin	3.26		mg/M3	0.5	2.0	1/30/2022	9:50 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.8	V1 I	mg/L	0.3	1.2	1/20/2022	10:04 AM	SM 5210 B
Color	67.4		CU	1.25	5.00	1/20/2022	2:27 PM	SM21 2120 C
Specific Conductance, By Client	8900		µmhos/cm			1/19/2022	10:55 AM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	8.99		mg/L			1/19/2022	10:55 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		1/19/2022	3:04 PM	Enterolert®
Ammonia	0.014	U	mg/L as N	0.014	0.056	1/21/2022	10:17 AM	EPA 350.1
Nitrite	0.004	I	mg/L as N	0.003	0.012	1/20/2022	11:05 AM	EPA 353.2
Nitrate	0.160		mg/L as N	0.01	0.04	1/20/2022	11:05 AM	EPA 353.2
Nitrate + Nitrite	0.164		mg/L as N	0.01	0.04	1/20/2022	11:05 AM	EPA 353.2
Nitrogen, Organic	0.87		mg/L as N	0.10	0.4	1/25/2022	8:50 AM	TKN - NH3
Phosphorus, Ortho	0.047		mg/L as P	0.005	0.020	1/20/2022	9:48 AM	EPA 365.1
pH, Field (electrometric) by Client	8.13		units			1/19/2022	10:55 AM	FDEP FT1100
Salinity by meter by Client	4.99		SU			1/19/2022	10:55 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.05		meters			1/19/2022	10:55 AM	FDEP FT 1700
Silica, dissolved as SiO2	6.1		mg/L as SiO2	0.1	0.4	1/20/2022	1:46 PM	SM4500-SiO2 C
Depth of Water Body	1.7		Meters			1/19/2022	10:55 AM	FS2100
Field Temperature by client	17.8		°C			1/19/2022	10:55 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	0.87		mg/L as N	0.10	0.4	1/25/2022	8:50 AM	EPA 351.2
Nitrogen, Total	1.0		mg/L as N	0.10	0.4	1/25/2022	8:50 AM	TKN + NOX
Total Organic Carbon (NPOC)	14		mg/L	1	4	1/24/2022	4:47 PM	SM 5310 B
Phosphorus, Total	0.084		mg/L as P	0.006	0.024	1/25/2022	8:52 AM	EPA 365.1

Report Format: NELAC

DOH #E45049



Laboratory ID	AF12174	Collection date and time	1/19/2022 10:55 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #412		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Total Suspended Solids	1.15	I	mg/L	0.6	2.4	1/20/2022	7:06 AM	SM 2540 D
Turbidity (Nephelometric)	0.800		NTU	0.2	0.8	1/20/2022	6:40 AM	EPA 180.1

Laboratory ID	AF12175	Collection date and time	1/19/2022 1:05 PM
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	2.07		mg/M3	0.5	2.0	1/30/2022	9:50 AM	SM21 10200 H
Pheophytin	6.47		mg/M3	0.5	2.0	1/30/2022	9:50 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	1.1	V1 I	mg/L	0.3	1.2	1/20/2022	10:04 AM	SM 5210 B
Color	78.9		CU	1.25	5.0	1/20/2022	2:27 PM	SM21 2120 C
Specific Conductance, By Client	4500		µmhos/cm			1/19/2022	1:05 PM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	8.88		mg/L			1/19/2022	1:05 PM	FDEP FT1500
Enterococci	20		MPN/100mL	10		1/19/2022	3:04 PM	Enterolert®
Ammonia	0.014	U	mg/L as N	0.014	0.056	1/21/2022	10:17 AM	EPA 350.1
Nitrite	0.005	I	mg/L as N	0.003	0.012	1/20/2022	11:05 AM	EPA 353.2
Nitrate	0.198		mg/L as N	0.01	0.04	1/20/2022	11:05 AM	EPA 353.2
Nitrate + Nitrite	0.203		mg/L as N	0.01	0.04	1/20/2022	11:05 AM	EPA 353.2
Nitrogen, Organic	0.88		mg/L as N	0.10	0.4	1/25/2022	8:50 AM	TKN - NH3
Phosphorus, Ortho	0.053		mg/L as P	0.005	0.020	1/20/2022	9:48 AM	EPA 365.1
pH, Field (electrometric) by Client	8.13		units			1/19/2022	1:05 PM	FDEP FT1100
Salinity by meter by Client	2.42		SU			1/19/2022	1:05 PM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.95		meters			1/19/2022	1:05 PM	FDEP FT 1700
Silica, dissolved as SiO2	7.4		mg/L as SiO2	0.1	0.4	1/20/2022	1:46 PM	SM4500-SiO2 C
Depth of Water Body	1.2		Meters			1/19/2022	1:05 PM	FS2100
Field Temperature by client	19.0		°C			1/19/2022	1:05 PM	FDEP FT1400
Nitrogen, Kjeldahl, Total	0.88		mg/L as N	0.10	0.4	1/25/2022	8:50 AM	EPA 351.2
Nitrogen, Total	1.1		mg/L as N	0.10	0.4	1/25/2022	8:50 AM	TKN + NOX
Total Organic Carbon (NPOC)	15		mg/L	1	4	1/24/2022	4:47 PM	SM 5310 B
Phosphorus, Total	0.095		mg/L as P	0.006	0.024	1/25/2022	8:52 AM	EPA 365.1
Total Suspended Solids	2.05	I	mg/L	0.6	2.4	1/20/2022	7:06 AM	SM 2540 D
Turbidity (Nephelometric)	2.14		NTU	0.2	0.8	1/20/2022	6:40 AM	EPA 180.1



Laboratory ID	AF12176	Collection date and time	1/19/2022 9:35 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #393		

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	1/30/2022	9:50 AM	SM21 10200 H
Pheophytin	1.09	I	mg/M3	0.5	2.0	1/30/2022	9:50 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.8	V1 I	mg/L	0.3	1.2	1/20/2022	10:04 AM	SM 5210 B
Color	44.4		CU	1.25	5.0	1/20/2022	2:27 PM	SM21 2120 C
Specific Conductance, By Client	23700		µmhos/cm			1/19/2022	9:35 AM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	8.45		mg/L			1/19/2022	9:35 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		1/19/2022	3:04 PM	Enterolert®
Ammonia	0.014	U	mg/L as N	0.014	0.056	1/21/2022	10:17 AM	EPA 350.1
Nitrite	0.007	I	mg/L as N	0.003	0.012	1/20/2022	11:05 AM	EPA 353.2
Nitrate	0.084		mg/L as N	0.01	0.04	1/20/2022	11:05 AM	EPA 353.2
Nitrate + Nitrite	0.091		mg/L as N	0.01	0.04	1/20/2022	11:05 AM	EPA 353.2
Nitrogen, Organic	0.76		mg/L as N	0.10	0.4	1/25/2022	8:50 AM	TKN - NH3
Phosphorus, Ortho	0.033		mg/L as P	0.005	0.020	1/20/2022	9:48 AM	EPA 365.1
pH, Field (electrometric) by Client	8.02		units			1/19/2022	9:35 AM	FDEP FT1100
Salinity by meter by Client	14.38		SU			1/19/2022	9:35 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.5	S	meters			1/19/2022	9:35 AM	FDEP FT 1700
Silica, dissolved as SiO2	3.9		mg/L as SiO2	0.1	0.4	1/20/2022	1:46 PM	SM4500-SiO2 C
Depth of Water Body	1.5		Meters			1/19/2022	9:35 AM	FS2100
Field Temperature by client	17.6		°C			1/19/2022	9:35 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	0.76		mg/L as N	0.10	0.4	1/25/2022	8:50 AM	EPA 351.2
Nitrogen, Total	0.85		mg/L as N	0.10	0.4	1/25/2022	8:50 AM	TKN + NOX
Total Organic Carbon (NPOC)	11		mg/L	1	4	1/24/2022	4:47 PM	SM 5310 B
Phosphorus, Total	0.061		mg/L as P	0.006	0.024	1/25/2022	8:52 AM	EPA 365.1
Total Suspended Solids	3.15		mg/L	0.6	2.4	1/20/2022	7:06 AM	SM 2540 D
Turbidity (Nephelometric)	0.890		NTU	0.2	0.8	1/20/2022	6:40 AM	EPA 180.1

Laboratory ID	AF12178	Collection date and time	1/19/2022 11:30 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #417		

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	1/30/2022	9:50 AM	SM21 10200 H
Pheophytin	3.83		mg/M3	0.5	2.0	1/30/2022	9:50 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.7	V1 I	mg/L	0.3	1.2	1/20/2022	10:04 AM	SM 5210 B
Color	68.0		CU	1.25	5.0	1/20/2022	2:27 PM	SM21 2120 C
Specific Conductance, By Client	8400		µmhos/cm			1/19/2022	9:35 AM	FDEP FT1200

Report Format: NELAC

DOH #E45049



Laboratory ID	AF12178	Collection date and time	1/19/2022 11:30 AM
Location Code	CRNEP_RS	Sample Collector	REISTAD/JAEGER
Sample Description	Grid #417		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Oxygen, Dissolved, Electrode, by Client	8.89		mg/L			1/19/2022	9:35 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		1/19/2022	3:04 PM	Enterolert®
Ammonia	0.014	U	mg/L as N	0.014	0.056	1/21/2022	10:17 AM	EPA 350.1
Nitrite	0.009	I	mg/L as N	0.003	0.012	1/20/2022	11:05 AM	EPA 353.2
Nitrate	0.156		mg/L as N	0.01	0.04	1/20/2022	11:05 AM	EPA 353.2
Nitrate + Nitrite	0.165		mg/L as N	0.01	0.04	1/20/2022	11:05 AM	EPA 353.2
Nitrogen, Organic	0.81		mg/L as N	0.10	0.4	1/25/2022	8:50 AM	TKN - NH3
Phosphorus, Ortho	0.045		mg/L as P	0.005	0.020	1/20/2022	9:48 AM	EPA 365.1
pH, Field (electrometric) by Client	8.11		units			1/19/2022	9:35 AM	FDEP FT1100
Salinity by meter by Client	4.72		SU			1/19/2022	9:35 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.0	S	meters			1/19/2022	9:35 AM	FDEP FT 1700
Silica, dissolved as SiO2	5.8		mg/L as SiO2	0.1	0.4	1/20/2022	1:46 PM	SM4500-SiO2 C
Depth of Water Body	1.00		Meters			1/19/2022	9:35 AM	FS2100
Field Temperature by client	18.1		°C			1/19/2022	9:35 AM	FDEP FT1400
Nitrogen, Kjeldahl, Total	0.81		mg/L as N	0.10	0.4	1/25/2022	8:50 AM	EPA 351.2
Nitrogen, Total	0.98		mg/L as N	0.10	0.4	1/25/2022	8:50 AM	TKN + NOX
Total Organic Carbon (NPOC)	15		mg/L	1	4	1/24/2022	4:47 PM	SM 5310 B
Phosphorus, Total	0.077		mg/L as P	0.006	0.024	1/25/2022	8:52 AM	EPA 365.1
Total Suspended Solids	0.6	U	mg/L	0.6	2.4	1/20/2022	7:06 AM	SM 2540 D
Turbidity (Nephelometric)	0.790	I	NTU	0.2	0.8	1/20/2022	6:40 AM	EPA 180.1

Laboratory ID	AF12179	Collection date and time	1/19/2022 12:20 PM
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	3.12		mg/M3	0.5	2.0	1/30/2022	9:50 AM	SM21 10200 H
Pheophytin	1.53	I	mg/M3	0.5	2.0	1/30/2022	9:50 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.9	I	mg/L	0.3	1.2	1/20/2022	10:04 AM	SM 5210 B
Color	80.8		CU	1.25	5.0	1/20/2022	2:27 PM	SM21 2120 C
Specific Conductance, By Client	2800		µmhos/cm			1/19/2022	12:20 PM	FDEP FT1200
Oxygen, Dissolved, Electrode, by Client	8.84		mg/L			1/19/2022	12:20 PM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		1/19/2022	3:04 PM	Enterolert®
Ammonia	0.014	U	mg/L as N	0.014	0.056	1/21/2022	10:17 AM	EPA 350.1
Nitrite	0.011	I	mg/L as N	0.003	0.012	1/20/2022	11:05 AM	EPA 353.2
Nitrate	0.194		mg/L as N	0.01	0.04	1/20/2022	11:05 AM	EPA 353.2

Report Format: NELAC

DOH #E45049



Laboratory ID	AF12179	Collection date and time	1/19/2022 12:20 PM
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
Nitrate + Nitrite	0.205		mg/L as N	0.01	0.04	1/20/2022	11:05 AM	EPA 353.2
Nitrogen, Organic	0.96		mg/L as N	0.10	0.4	1/25/2022	8:50 AM	TKN - NH3
Phosphorus, Ortho	0.048		mg/L as P	0.005	0.020	1/20/2022	9:48 AM	EPA 365.1
pH, Field (electrometric) by Client	8.10		units			1/19/2022	12:20 PM	FDEP FT1100
Salinity by meter by Client	1.45		SU			1/19/2022	12:20 PM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.85		meters			1/19/2022	12:20 PM	FDEP FT 1700
Silica, dissolved as SiO2	8.1		mg/L as SiO2	0.1	0.4	1/20/2022	1:46 PM	SM4500-SiO2 C
Depth of Water Body	2.3		Meters			1/19/2022	12:20 PM	FS2100
Field Temperature by client	19.0		°C			1/19/2022	12:20 PM	FDEP FT1400
Nitrogen, Kjeldahl, Total	0.96		mg/L as N	0.10	0.4	1/25/2022	8:50 AM	EPA 351.2
Nitrogen, Total	1.2		mg/L as N	0.10	0.4	1/25/2022	8:50 AM	TKN + NOX
Total Organic Carbon (NPOC)	16		mg/L	1	4	1/24/2022	4:47 PM	SM 5310 B
Phosphorus, Total	0.094		mg/L as P	0.006	0.024	1/25/2022	8:52 AM	EPA 365.1
Total Suspended Solids	1.40	I	mg/L	0.6	2.4	1/20/2022	7:06 AM	SM 2540 D
Turbidity (Nephelometric)	2.20		NTU	0.2	0.8	1/20/2022	6:40 AM	EPA 180.1

Laboratory ID	AF12181	Collection date and time	1/19/2022 2:15 PM
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
Chlorophyll a - corrected for Pheophytin	0.50	U	mg/M3	0.5	2.0	1/30/2022	9:50 AM	SM21 10200 H
Pheophytin	0.50	U	mg/M3	0.5	2.0	1/30/2022	9:50 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.4	I	mg/L	0.3	1.2	1/20/2022	10:04 AM	SM 5210 B
Color	1.25	U	CU	1.25	5.0	1/20/2022	2:27 PM	SM21 2120 C
Enterococci	1	U	MPN/100mL	1		1/19/2022	3:04 PM	Enterolert®
Ammonia	0.014	U	mg/L as N	0.014	0.056	1/21/2022	10:17 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	1/20/2022	11:05 AM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	1/20/2022	11:05 AM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	1/20/2022	11:05 AM	EPA 353.2
Nitrogen, Organic	0.100	U	mg/L as N	0.10	0.4	1/25/2022	8:50 AM	TKN - NH3
Phosphorus, Ortho	0.005	U	mg/L as P	0.005	0.020	1/20/2022	9:48 AM	EPA 365.1
Silica, dissolved as SiO2	0.1	U	mg/L as SiO2	0.1	0.4	1/20/2022	1:46 PM	SM4500-SiO2 C
Nitrogen, Kjeldahl, Total	0.10	U	mg/L as N	0.10	0.4	1/25/2022	8:50 AM	EPA 351.2
Nitrogen, Total	0.100	U	mg/L as N	0.10	0.4	1/25/2022	8:50 AM	TKN + NOX
Total Organic Carbon (NPOC)	1.000	U	mg/L	1	4	2/1/2022	1:51 PM	SM 5310 B

Report Format: NELAC

DOH #E45049



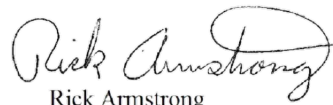
Laboratory ID	AF12181	Collection date and time	1/19/2022 2:15 PM
Location Code	CRNEP_EQ	Sample Collector	REISTAD/JAEGER
Sample Description	EB Site #		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Phosphorus, Total	0.006	U	mg/L as P	0.006	0.024	1/25/2022	8:52 AM	EPA 365.1
Total Suspended Solids	0.6	U	mg/L	0.6	2.4	1/20/2022	9:32 AM	SM 2540 D
Turbidity (Nephelometric)	0.20	U	NTU	0.2	0.8	1/20/2022	6:40 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.
- V1 I Analyte found in both sample & field blank @ <5X the blank value. The value is > the MDL and < or = 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					
Sample Collector(s) (please print): Nicole Reistad/Monica Jaeger		Sample Collector Signature: 		Analyses Required							
Relinquished By: (signature) 	Date 01/19/22	Time 1500	Received By: (signature) 	\$Chloro, _prep	O-PO4, Color, NOX	TOC	NH3, TKN, TN, T-PO4, NO3, ONIT	Turb, NO2, TSS, Silica, Bod, Bodi	Mug2QT, 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: 4.9°C				NP	NPF	S	S	NP	ST		
Collection Date Time		Sample Description & Location		Matrix (see codes)		# of Sample Containers Submitted				Lab ID #	
01/19/22	1055	CRNEP_RS #412		SWE	1	1	1	1	2	1	AF12174
01/19/22	1305	CRNEP_RS #443		SWE	1	1	1	1	2	1	AF12175
01/19/22	0935	CRNEP_RS #393		SWE	1	1	1	1	2	1	AF12176
		CRNEP_RSBOT #393 Bottom DID NOT SAMPLE		SWE	1	1	1	1	2	1	AF12177
01/19/22	1130	CRNEP_RS #417		SWE	1	1	1	1	2	1	AF12178
01/19/22	1220	CRNEP_RS #442		SWE	1	1	1	1	2	1	AF12179
		CRNEP_RSBOT #442 Bottom DID NOT SAMPLE		SWE	1	1	1	1	2	1	AF12180
01/19/22	1415	CRNEP_EQ #		SWE	1	1	1	1	2	1	AF12181

**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.