

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: 3/6/2019

Below are the results of samples submitted to this laboratory on 2/20/2019

Laboratory ID	AE01206	Collection date and time	2/20/2019 11:50 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT
Sample Description	Grid #462		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	17.95		mg/M3	0.5	2.0	3/4/2019	1:07 PM	SM21 10200 H
Pheophytin	6.32		mg/M3	0.5	2.0	3/4/2019	1:07 PM	SM21 10200 H
Biochemical Oxygen Demand 5 day	1.1	I	mg/L	0.3	1.2	2/21/2019	11:09 AM	SM 5210 B
Color	59.9		CU	1.6	6.4	2/21/2019	8:38 AM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	7.22		mg/L	0.1		2/20/2019	11:50 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		2/20/2019	3:04 PM	Enterolert®
E.coli Enumeration	10	U	MPN/100mL	10		2/20/2019	3:05 PM	Colilert-18®
Ammonia	0.016	I	mg/L as N	0.014	0.056	2/28/2019	9:57 AM	EPA 350.1
Nitrite	0.020		mg/L as N	0.003	0.012	2/22/2019	9:29 AM	EPA 353.2
Nitrate	0.402		mg/L as N	0.01	0.04	2/22/2019	9:20 AM	EPA 353.2
Nitrate + Nitrite	0.422		mg/L as N	0.01	0.04	2/22/2019	9:20 AM	EPA 353.2
Nitrogen, Organic	0.91		mg/L as N	0.05	0.2	3/1/2019	7:46 AM	TKN - NH3
Phosphorus, Ortho	0.052		mg/L as P	0.004	0.016	2/21/2019	8:10 AM	EPA 365.1
Salinity by meter by Client	0.30		SU	0.1		2/20/2019	11:50 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.95		meters	0.1		2/20/2019	11:50 AM	FDEP FT 1700
Silica, dissolved as SiO2	7.7		mg/L as SiO2	0.1	0.4	2/21/2019	8:10 AM	SM4500-SiO2 C
Depth of Water Body	2.0		Meters			2/20/2019	11:50 AM	FS2100
Nitrogen, Kjeldahl, Total	0.93		mg/L as N	0.05	0.2	3/1/2019	7:46 AM	EPA 351.2
Nitrogen, Total	1.4		mg/L as N	0.05	0.2	3/1/2019	7:46 AM	TKN + NOX
Total Organic Carbon	16		mg/L	1	4	2/27/2019	3:24 PM	SM 5310 B

Laboratory ID	AE01206	Collection date and time	2/20/2019 11:50 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT
Sample Description	Grid #462		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Phosphorus, Total	0.099		mg/L as P	0.006	0.024	3/1/2019	7:49 AM	EPA 365.1
Total Suspended Solids	3.47		mg/L	0.6	2.4	2/21/2019	8:21 AM	SM 2540 D
Turbidity (Nephelometric)	3.43		NTU	0.2	0.8	2/21/2019	8:12 AM	EPA 180.1

Laboratory ID	AE01208	Collection date and time	2/20/2019 10:45 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT
Sample Description	Grid #453		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	3.50		mg/M3	0.5	2.0	3/4/2019	1:07 PM	SM21 10200 H
Pheophytin	5.17		mg/M3	0.5	2.0	3/4/2019	1:07 PM	SM21 10200 H
Biochemical Oxygen Demand 5 day	1.2	I	mg/L	0.3	1.2	2/21/2019	11:09 AM	SM 5210 B
Color	59.0		CU	1.6	6.4	2/21/2019	8:38 AM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	6.83		mg/L	0.1		2/20/2019	10:45 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		2/20/2019	3:04 PM	Enterolert®
E.coli Enumeration	20		MPN/100mL	10		2/20/2019	3:05 PM	Colilert-18®
Ammonia	0.053	I	mg/L as N	0.014	0.056	2/28/2019	9:57 AM	EPA 350.1
Nitrite	0.017		mg/L as N	0.003	0.012	2/21/2019	11:46 AM	EPA 353.2
Nitrate	0.435		mg/L as N	0.01	0.04	2/21/2019	11:46 AM	EPA 353.2
Nitrate + Nitrite	0.452		mg/L as N	0.01	0.04	2/21/2019	11:46 AM	EPA 353.2
Nitrogen, Organic	0.91		mg/L as N	0.05	0.2	3/1/2019	7:46 AM	TKN - NH3
Phosphorus, Ortho	0.073		mg/L as P	0.004	0.016	2/21/2019	8:10 AM	EPA 365.1
Salinity by meter by Client	0.35		SU	0.1		2/20/2019	10:45 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.75		meters	0.1		2/20/2019	10:45 AM	FDEP FT 1700
Silica, dissolved as SiO2	7.8		mg/L as SiO2	0.1	0.4	2/21/2019	8:10 AM	SM4500-SiO2 C
Depth of Water Body	1.1		Meters			2/20/2019	10:45 AM	FS2100
Nitrogen, Kjeldahl, Total	0.96		mg/L as N	0.05	0.2	3/1/2019	7:46 AM	EPA 351.2
Nitrogen, Total	1.4		mg/L as N	0.05	0.2	3/1/2019	7:46 AM	TKN + NOX
Total Organic Carbon	16		mg/L	1	4	2/27/2019	3:24 PM	SM 5310 B
Phosphorus, Total	0.13		mg/L as P	0.006	0.024	3/1/2019	7:49 AM	EPA 365.1
Total Suspended Solids	9.00		mg/L	0.6	2.4	2/21/2019	8:21 AM	SM 2540 D
Turbidity (Nephelometric)	9.29		NTU	0.2	0.8	2/21/2019	8:12 AM	EPA 180.1

Laboratory ID	AE01209	Collection date and time	2/20/2019 11:05 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT
Sample Description	Grid #454		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	2.81		mg/M3	0.5	2.0	3/4/2019	1:07 PM	SM21 10200 H
Pheophytin	1.95	I	mg/M3	0.5	2.0	3/4/2019	1:07 PM	SM21 10200 H
Biochemical Oxygen Demand 5 day	1.9		mg/L	0.3	1.2	2/21/2019	11:09 AM	SM 5210 B
Color	63.5		CU	1.6	6.4	2/21/2019	8:38 AM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	6.48		mg/L	0.1		2/20/2019	11:05 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		2/20/2019	3:04 PM	Enterolert®
E.coli Enumeration	10		MPN/100mL	10		2/20/2019	3:05 PM	Colilert-18®
Ammonia	0.057		mg/L as N	0.014	0.056	2/28/2019	9:57 AM	EPA 350.1
Nitrite	0.021		mg/L as N	0.003	0.012	2/22/2019	9:29 AM	EPA 353.2
Nitrate	0.426		mg/L as N	0.01	0.04	2/22/2019	9:20 AM	EPA 353.2
Nitrate + Nitrite	0.447		mg/L as N	0.01	0.04	2/22/2019	9:20 AM	EPA 353.2
Nitrogen, Organic	0.84		mg/L as N	0.05	0.2	3/1/2019	7:46 AM	TKN - NH3
Phosphorus, Ortho	0.065		mg/L as P	0.004	0.016	2/21/2019	8:10 AM	EPA 365.1
Salinity by meter by Client	0.31		SU	0.1		2/20/2019	11:05 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.05		meters	0.1		2/20/2019	11:05 AM	FDEP FT 1700
Silica, dissolved as SiO2	7.6		mg/L as SiO2	0.1	0.4	2/21/2019	8:10 AM	SM4500-SiO2 C
Depth of Water Body	1.7		Meters			2/20/2019	11:05 AM	FS2100
Nitrogen, Kjeldahl, Total	0.90		mg/L as N	0.05	0.2	3/1/2019	7:46 AM	EPA 351.2
Nitrogen, Total	1.3		mg/L as N	0.05	0.2	3/1/2019	7:46 AM	TKN + NOX
Total Organic Carbon	16		mg/L	1	4	2/27/2019	3:24 PM	SM 5310 B
Phosphorus, Total	0.099		mg/L as P	0.006	0.024	3/1/2019	7:49 AM	EPA 365.1
Total Suspended Solids	2.08	I	mg/L	0.6	2.4	2/21/2019	8:21 AM	SM 2540 D
Turbidity (Nephelometric)	3.05		NTU	0.2	0.8	2/21/2019	8:12 AM	EPA 180.1

Laboratory ID	AE01210	Collection date and time	2/20/2019 9:35 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT
Sample Description	Grid #429		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	5.98		mg/M3	0.5	2.0	3/4/2019	1:07 PM	SM21 10200 H
Pheophytin	7.60		mg/M3	0.5	2.0	3/4/2019	1:07 PM	SM21 10200 H
Biochemical Oxygen Demand 5 day	2.0		mg/L	0.3	1.2	2/21/2019	11:09 AM	SM 5210 B

Laboratory ID	AE01210	Collection date and time	2/20/2019 9:35 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT
Sample Description	Grid #429		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Color	39.9		CU	1.6	6.4	2/21/2019	8:38 AM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	6.53		mg/L	0.1		2/20/2019	9:35 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		2/20/2019	3:04 PM	Enterolert®
E.coli Enumeration	10	U	MPN/100mL	10		2/20/2019	3:05 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	2/28/2019	9:57 AM	EPA 350.1
Nitrite	0.004	I	mg/L as N	0.003	0.012	2/22/2019	9:29 AM	EPA 353.2
Nitrate	0.012	I	mg/L as N	0.01	0.04	2/22/2019	9:20 AM	EPA 353.2
Nitrate + Nitrite	0.016	I	mg/L as N	0.01	0.04	2/22/2019	9:20 AM	EPA 353.2
Nitrogen, Organic	0.82		mg/L as N	0.05	0.2	3/1/2019	7:46 AM	TKN - NH3
Phosphorus, Ortho	0.042		mg/L as P	0.004	0.016	2/21/2019	8:10 AM	EPA 365.1
Salinity by meter by Client	6.43		SU	0.1		2/20/2019	9:35 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.7		meters	0.1		2/20/2019	9:35 AM	FDEP FT 1700
Silica, dissolved as SiO2	4.8		mg/L as SiO2	0.1	0.4	2/21/2019	8:10 AM	SM4500-SiO2 C
Depth of Water Body	0.7		Meters			2/20/2019	9:35 AM	FS2100
Nitrogen, Kjeldahl, Total	0.82		mg/L as N	0.05	0.2	3/1/2019	7:46 AM	EPA 351.2
Nitrogen, Total	0.84		mg/L as N	0.05	0.2	3/1/2019	7:46 AM	TKN + NOX
Total Organic Carbon	13		mg/L	1	4	2/27/2019	3:24 PM	SM 5310 B
Phosphorus, Total	0.10		mg/L as P	0.006	0.024	3/1/2019	7:49 AM	EPA 365.1
Total Suspended Solids	8.25		mg/L	0.6	2.4	2/21/2019	8:21 AM	SM 2540 D
Turbidity (Nephelometric)	6.35		NTU	0.2	0.8	2/21/2019	8:12 AM	EPA 180.1

Laboratory ID	AE01211	Collection date and time	2/20/2019 10:05 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT
Sample Description	Grid #435		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	6.18		mg/M3	0.5	2.0	3/4/2019	1:07 PM	SM21 10200 H
Pheophytin	8.36		mg/M3	0.5	2.0	3/4/2019	1:07 PM	SM21 10200 H
Biochemical Oxygen Demand 5 day	1.2		mg/L	0.3	1.2	2/21/2019	11:09 AM	SM 5210 B
Color	51.5		CU	1.6	6.4	2/21/2019	8:38 AM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	7.60		mg/L	0.1		2/20/2019	10:05 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		2/20/2019	3:04 PM	Enterolert®

Laboratory ID	AE01211	Collection date and time	2/20/2019 10:05 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT
Sample Description	Grid #435		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
E.coli Enumeration	10	U	MPN/100mL	10		2/20/2019	3:05 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	2/28/2019	9:57 AM	EPA 350.1
Nitrite	0.010	I	mg/L as N	0.003	0.012	2/22/2019	9:29 AM	EPA 353.2
Nitrate	0.287		mg/L as N	0.01	0.04	2/22/2019	9:20 AM	EPA 353.2
Nitrate + Nitrite	0.297		mg/L as N	0.01	0.04	2/22/2019	9:20 AM	EPA 353.2
Nitrogen, Organic	0.83		mg/L as N	0.05	0.2	3/1/2019	7:46 AM	TKN - NH3
Phosphorus, Ortho	0.062		mg/L as P	0.004	0.016	2/21/2019	8:10 AM	EPA 365.1
Salinity by meter by Client	1.86		SU	0.1		2/20/2019	10:05 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.9		meters	0.1		2/20/2019	10:05 AM	FDEP FT 1700
Silica, dissolved as SiO2	6.7		mg/L as SiO2	0.1	0.4	2/21/2019	8:10 AM	SM4500-SiO2 C
Depth of Water Body	2.2		Meters			2/20/2019	10:05 AM	FS2100
Nitrogen, Kjeldahl, Total	0.83		mg/L as N	0.05	0.2	3/1/2019	7:46 AM	EPA 351.2
Nitrogen, Total	1.1		mg/L as N	0.05	0.2	3/1/2019	7:46 AM	TKN + NOX
Total Organic Carbon	15		mg/L	1	4	2/27/2019	3:24 PM	SM 5310 B
Phosphorus, Total	0.12		mg/L as P	0.006	0.024	3/1/2019	7:49 AM	EPA 365.1
Total Suspended Solids	4.00		mg/L	0.6	2.4	2/21/2019	8:21 AM	SM 2540 D
Turbidity (Nephelometric)	4.99		NTU	0.2	0.8	2/21/2019	8:12 AM	EPA 180.1

Laboratory ID	AE01213	Collection date and time	2/20/2019 12:00 PM
Location Code	CRNEP_EQ	Sample Collector	REISTADT
Sample Description	EB Site #462		

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	3/4/2019	1:07 PM	SM21 10200 H
Pheophytin	0.50	U	mg/M3	0.5	2.0	3/4/2019	1:07 PM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.3	U	mg/L	0.3	1.2	2/21/2019	11:09 AM	SM 5210 B
Color	1.6	U	CU	1.6	6.4	2/21/2019	8:38 AM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	7.66		mg/L	0.1		2/20/2019	12:00 PM	FDEP FT1500
Enterococci	2	U	MPN/100mL	2		2/20/2019	3:04 PM	Enterolert®
E.coli Enumeration	2	U	MPN/100mL	2		2/20/2019	3:05 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	2/28/2019	9:57 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	2/21/2019	11:46 AM	EPA 353.2

Laboratory ID AE01213
Location Code CRNEP_EQ
Sample Description EB Site #462

Collection date and time 2/20/2019 12:00 PM
Sample Collector REISTADT

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Nitrate	0.010	U	mg/L as N	0.01	0.04	2/21/2019	11:46 AM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	2/21/2019	11:46 AM	EPA 353.2
Nitrogen, Organic	0.050	U	mg/L as N	0.05	0.2	3/1/2019	7:46 AM	TKN - NH3
Phosphorus, Ortho	0.004	U	mg/L as P	0.004	0.016	2/21/2019	8:10 AM	EPA 365.1
Salinity by meter by Client	0.1	U	SU	0.1		2/20/2019	12:00 PM	FDEP FT 1300
Silica, dissolved as SiO2	0.1	U	mg/L as SiO2	0.1	0.4	2/21/2019	8:10 AM	SM4500-SiO2 C
Nitrogen, Kjeldahl, Total	0.05	U	mg/L as N	0.05	0.2	3/1/2019	7:46 AM	EPA 351.2
Nitrogen, Total	0.050	U	mg/L as N	0.05	0.2	3/1/2019	7:46 AM	TKN + NOX
Total Organic Carbon	1.000	U	mg/L	1	4	2/27/2019	3:24 PM	SM 5310 B
Phosphorus, Total	0.006	U	mg/L as P	0.006	0.024	3/1/2019	7:49 AM	EPA 365.1
Total Suspended Solids	0.6	U	mg/L	0.6	2.4	2/21/2019	8:21 AM	SM 2540 D
Turbidity (Nephelometric)	0.20	U	NTU	0.2	0.8	2/21/2019	8:12 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).

U Indicates that the compound was analyzed for but not detected.

Unless noted otherwise, these test results meet all the requirements of the 2003 NELAC 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

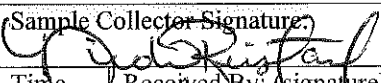
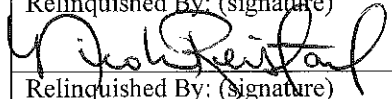
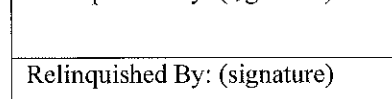
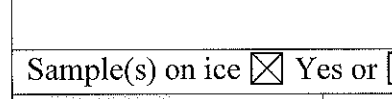
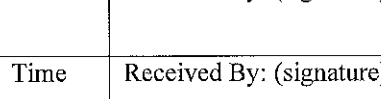
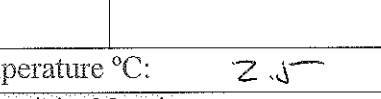
LCEL

Lee County Environmental Laboratory
60-2 Danley Dr Ft 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 Sample Collector(s) (please print): Nicole Reistad			Name: DNRM RE: CCHMN-Tidal Caloosa Address: 1500 Monroe St Ft Myers, FL 33901 Phone: (239) 533-8109 Sample Collector Signature: 			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								
Relinquished By: (signature)  Relinquished By: (signature)  Relinquished By: (signature) 			Date 02/20/19	Time 1440	Received By: (signature)  Received By: (signature)  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	Analyses Required							
Preservatives (see codes)																			
Sample(s) on ice ☒ Yes or ☐ No? Temperature °C: 2.5						NP	NPF	S	S	NP	ST								
Collection Date Time		Sample Description & Location		Matrix (see codes)	# of Sample Containers Submitted						Lab ID #								
02/20/2019 1150		CRNEP_RS #462		SWE	1	1	1	1	2	1	AE01206								
		CRNEP_RSBOT #462 Bottom		SWE	1	1	1	1	2	1	AE01207								
02/20/2019 1045		CRNEP_RS #453		SWE	1	1	1	1	2	1	AE01208								
02/20/2019 1105		CRNEP_RS #454		SWE	1	1	1	1	2	1	AE01209								
02/20/2019 0935		CRNEP_RS #429		SWE	1	1	1	1	2	1	AE01210								
02/20/2019 1005		CRNEP_RS #435		SWE	1	1	1	1	2	1	AE01211								
		CRNEP_RSBOT #435 Bottom		SWE	1	1	1	1	2	1	AE01212								
02/20/2019 1200		CRNEP_EQ # 462		SWE	1	1	1	1	2	1	AE01213								

**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.