

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: 8/27/2018

Below are the results of samples submitted to this laboratory on 8/15/2018

Laboratory ID	AD83924	Collection date and time	8/15/2018 10:40 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/DUGAN
Sample Description	Grid #393		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	4.83		mg/M3	0.5	2.0	8/18/2018	11:10 AM	SM21 10200 H
Pheophytin	1.21	I	mg/M3	0.5	2.0	8/18/2018	11:10 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.4	I	mg/L	0.3	1.2	8/16/2018	8:03 AM	SM20 5210 B
Color	123		CU	8.0	32.0	8/16/2018	2:43 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	5.86		mg/L	0.1		8/15/2018	10:40 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		8/15/2018	3:09 PM	Enterolert®
E.coli Enumeration	10	U	MPN/100mL	10		8/15/2018	3:09 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	8/16/2018	11:14 AM	EPA 350.1
Nitrite	0.009	I	mg/L as N	0.003	0.012	8/16/2018	9:07 AM	EPA 353.2
Nitrate	0.112		mg/L as N	0.01	0.04	8/16/2018	9:07 AM	EPA 353.2
Nitrate + Nitrite	0.121		mg/L as N	0.01	0.04	8/16/2018	9:07 AM	EPA 353.2
Nitrogen, Organic	0.86		mg/L as N	0.05	0.2	8/22/2018	8:28 AM	TKN - NH3
Phosphorus, Ortho	0.092		mg/L as P	0.004	0.016	8/16/2018	11:54 AM	EPA 365.1
Salinity by meter by Client	5.90		SU	0.1		8/15/2018	10:40 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.05		meters	0.1		8/15/2018	10:40 AM	FDEP FT 1700
Silica, dissolved as SiO2	8.9		mg/L as SiO2	0.1	0.4	8/16/2018	11:55 AM	SM4500 C
Depth of Water Body	2.1		Meters			8/15/2018	10:40 AM	FS2100
Nitrogen, Kjeldahl, Total	0.86		mg/L as N	0.05	0.2	8/22/2018	8:28 AM	EPA 351.2
Nitrogen, Total	0.98		mg/L as N	0.05	0.2	8/22/2018	8:28 AM	TKN + NOX
Total Organic Carbon	16		mg/L	1	4	8/21/2018	2:16 PM	SM21 5310 B

Laboratory ID	AD83924	Collection date and time	8/15/2018 10:40 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/DUGAN
Sample Description	Grid #393		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Phosphorus, Total	0.12		mg/L as P	0.006	0.024	8/22/2018	8:31 AM	EPA 365.1
Total Suspended Solids	1.68	I	mg/L	0.6	2.4	8/16/2018	8:03 AM	SM21 2540 D
Turbidity (Nephelometric)	1.39		NTU	0.2	0.8	8/16/2018	8:08 AM	EPA 180.1

Laboratory ID	AD83925	Collection date and time	8/15/2018 11:15 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/DUGAN
Sample Description	Grid #395		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	3.61		mg/M3	0.5	2.0	8/18/2018	11:10 AM	SM21 10200 H
Pheophytin	1.87	I	mg/M3	0.5	2.0	8/18/2018	11:10 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.3	I	mg/L	0.3	1.2	8/16/2018	8:03 AM	SM20 5210 B
Color	129		CU	8.0	32.0	8/16/2018	2:43 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	5.87		mg/L	0.1		8/15/2018	11:15 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		8/15/2018	3:09 PM	Enterolert®
E.coli Enumeration	10		MPN/100mL	10		8/15/2018	3:09 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	8/16/2018	11:14 AM	EPA 350.1
Nitrite	0.008	I	mg/L as N	0.003	0.012	8/16/2018	9:07 AM	EPA 353.2
Nitrate	0.131		mg/L as N	0.01	0.04	8/16/2018	9:07 AM	EPA 353.2
Nitrate + Nitrite	0.139		mg/L as N	0.01	0.04	8/16/2018	9:07 AM	EPA 353.2
Nitrogen, Organic	0.98		mg/L as N	0.05	0.2	8/22/2018	8:28 AM	TKN - NH3
Phosphorus, Ortho	0.095		mg/L as P	0.004	0.016	8/16/2018	11:54 AM	EPA 365.1
Salinity by meter by Client	3.57		SU	0.1		8/15/2018	11:15 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.9		meters	0.1		8/15/2018	11:15 AM	FDEP FT 1700
Silica, dissolved as SiO2	9.6		mg/L as SiO2	0.1	0.4	8/16/2018	11:55 AM	SM4500 C
Depth of Water Body	1.5		Meters			8/15/2018	11:15 AM	FS2100
Nitrogen, Kjeldahl, Total	0.98		mg/L as N	0.05	0.2	8/22/2018	8:28 AM	EPA 351.2
Nitrogen, Total	1.1		mg/L as N	0.05	0.2	8/22/2018	8:28 AM	TKN + NOX
Total Organic Carbon	17		mg/L	1	4	8/21/2018	2:16 PM	SM21 5310 B
Phosphorus, Total	0.13		mg/L as P	0.006	0.024	8/22/2018	8:31 AM	EPA 365.1
Total Suspended Solids	2.47		mg/L	0.6	2.4	8/16/2018	8:03 AM	SM21 2540 D
Turbidity (Nephelometric)	1.24		NTU	0.2	0.8	8/16/2018	8:08 AM	EPA 180.1

Laboratory ID	AD83926	Collection date and time	8/15/2018 11:45 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/DUGAN
Sample Description	Grid #428		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	6.05		mg/M3	0.5	2.0	8/18/2018	11:10 AM	SM21 10200 H
Pheophytin	3.59		mg/M3	0.5	2.0	8/18/2018	11:10 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.9	I	mg/L	0.3	1.2	8/16/2018	8:03 AM	SM20 5210 B
Color	174		CU	8.0	32.0	8/16/2018	2:43 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	6.84		mg/L	0.1		8/15/2018	11:45 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		8/15/2018	3:09 PM	Enterolert®
E.coli Enumeration	10	U	MPN/100mL	10		8/15/2018	3:09 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	8/16/2018	11:14 AM	EPA 350.1
Nitrite	0.008	I	mg/L as N	0.003	0.012	8/16/2018	9:07 AM	EPA 353.2
Nitrate	0.101		mg/L as N	0.01	0.04	8/16/2018	9:07 AM	EPA 353.2
Nitrate + Nitrite	0.109		mg/L as N	0.01	0.04	8/16/2018	9:07 AM	EPA 353.2
Nitrogen, Organic	0.97		mg/L as N	0.05	0.2	8/22/2018	8:28 AM	TKN - NH3
Phosphorus, Ortho	0.090		mg/L as P	0.004	0.016	8/16/2018	11:54 AM	EPA 365.1
Salinity by meter by Client	0.20		SU	0.1		8/15/2018	11:45 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.65		meters	0.1		8/15/2018	11:45 AM	FDEP FT 1700
Silica, dissolved as SiO2	11		mg/L as SiO2	0.1	0.4	8/16/2018	11:55 AM	SM4500 C
Depth of Water Body	2.1		Meters			8/15/2018	11:45 AM	FS2100
Nitrogen, Kjeldahl, Total	0.97		mg/L as N	0.05	0.2	8/22/2018	8:28 AM	EPA 351.2
Nitrogen, Total	1.1		mg/L as N	0.05	0.2	8/22/2018	8:28 AM	TKN + NOX
Total Organic Carbon	20		mg/L	1	4	8/21/2018	2:16 PM	SM21 5310 B
Phosphorus, Total	0.13		mg/L as P	0.006	0.024	8/22/2018	8:31 AM	EPA 365.1
Total Suspended Solids	1.77	I	mg/L	0.6	2.4	8/16/2018	8:03 AM	SM21 2540 D
Turbidity (Nephelometric)	1.66		NTU	0.2	0.8	8/16/2018	8:08 AM	EPA 180.1

Laboratory ID	AD83927	Collection date and time	8/15/2018 12:40 PM
Location Code	CRNEP_RS	Sample Collector	REISTADT/DUGAN
Sample Description	Grid #463		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	8.23		mg/M3	0.5	2.0	8/18/2018	11:10 AM	SM21 10200 H
Pheophytin	2.84		mg/M3	0.5	2.0	8/18/2018	11:10 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	1.8		mg/L	0.3	1.2	8/16/2018	8:03 AM	SM20 5210 B

Laboratory ID	AD83927	Collection date and time	8/15/2018 12:40 PM
Location Code	CRNEP_RS	Sample Collector	REISTADT/DUGAN
Sample Description	Grid #463		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Color	222		CU	8.0	32.0	8/16/2018	2:43 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	3.83		mg/L	0.1		8/15/2018	12:40 PM	FDEP FT1500
Enterococci	10		MPN/100mL	10		8/15/2018	3:09 PM	Enterolert®
E.coli Enumeration	63		MPN/100mL	10		8/15/2018	3:09 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	8/16/2018	11:14 AM	EPA 350.1
Nitrite	0.020		mg/L as N	0.003	0.012	8/16/2018	9:07 AM	EPA 353.2
Nitrate	0.320		mg/L as N	0.01	0.04	8/16/2018	9:07 AM	EPA 353.2
Nitrate + Nitrite	0.340		mg/L as N	0.01	0.04	8/16/2018	9:07 AM	EPA 353.2
Nitrogen, Organic	1.2		mg/L as N	0.05	0.2	8/22/2018	8:28 AM	TKN - NH3
Phosphorus, Ortho	0.116		mg/L as P	0.004	0.016	8/16/2018	11:54 AM	EPA 365.1
Salinity by meter by Client	0.18		SU	0.1		8/15/2018	12:40 PM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.5		meters	0.1		8/15/2018	12:40 PM	FDEP FT 1700
Silica, dissolved as SiO2	11		mg/L as SiO2	0.1	0.4	8/16/2018	3:41 PM	SM4500 C
Depth of Water Body	2.8		Meters			8/15/2018	12:40 PM	FS2100
Nitrogen, Kjeldahl, Total	1.2		mg/L as N	0.05	0.2	8/22/2018	8:28 AM	EPA 351.2
Nitrogen, Total	1.5		mg/L as N	0.05	0.2	8/22/2018	8:28 AM	TKN + NOX
Total Organic Carbon	24		mg/L	1	4	8/21/2018	2:16 PM	SM21 5310 B
Phosphorus, Total	0.16		mg/L as P	0.006	0.024	8/22/2018	8:31 AM	EPA 365.1
Total Suspended Solids	3.20		mg/L	0.6	2.4	8/16/2018	8:03 AM	SM21 2540 D
Turbidity (Nephelometric)	3.55		NTU	0.2	0.8	8/16/2018	8:08 AM	EPA 180.1

Laboratory ID	AD83928	Collection date and time	8/15/2018 10:05 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/DUGAN
Sample Description	Grid #386		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	3.69		mg/M3	0.5	2.0	8/18/2018	11:10 AM	SM21 10200 H
Pheophytin	1.19	I	mg/M3	0.5	2.0	8/18/2018	11:10 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.5	I	mg/L	0.3	1.2	8/16/2018	8:03 AM	SM20 5210 B
Color	102		CU	8.0	32.0	8/16/2018	2:43 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	5.73		mg/L	0.1		8/15/2018	10:05 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		8/15/2018	3:09 PM	Enterolert®

Laboratory ID	AD83928	Collection date and time	8/15/2018 10:05 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/DUGAN
Sample Description	Grid #386		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
E.coli Enumeration	10	U	MPN/100mL	10		8/15/2018	3:09 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	8/16/2018	11:14 AM	EPA 350.1
Nitrite	0.010	I	mg/L as N	0.003	0.012	8/16/2018	9:07 AM	EPA 353.2
Nitrate	0.110		mg/L as N	0.01	0.04	8/16/2018	9:07 AM	EPA 353.2
Nitrate + Nitrite	0.120		mg/L as N	0.01	0.04	8/16/2018	9:07 AM	EPA 353.2
Nitrogen, Organic	0.87		mg/L as N	0.05	0.2	8/22/2018	8:28 AM	TKN - NH3
Phosphorus, Ortho	0.086		mg/L as P	0.004	0.016	8/16/2018	2:09 PM	EPA 365.1
Salinity by meter by Client	8.53		SU	0.1		8/15/2018	10:05 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.05		meters	0.1		8/15/2018	10:05 AM	FDEP FT 1700
Silica, dissolved as SiO2	7.7		mg/L as SiO2	0.1	0.4	8/16/2018	3:41 PM	SM4500 C
Depth of Water Body	1.3		Meters			8/15/2018	10:05 AM	FS2100
Nitrogen, Kjeldahl, Total	0.87		mg/L as N	0.05	0.2	8/22/2018	8:28 AM	EPA 351.2
Nitrogen, Total	0.99		mg/L as N	0.05	0.2	8/22/2018	8:28 AM	TKN + NOX
Total Organic Carbon	15		mg/L	1	4	8/21/2018	2:16 PM	SM21 5310 B
Phosphorus, Total	0.11		mg/L as P	0.006	0.024	8/22/2018	8:31 AM	EPA 365.1
Total Suspended Solids	2.30	I	mg/L	0.6	2.4	8/16/2018	8:03 AM	SM21 2540 D
Turbidity (Nephelometric)	0.20	U	NTU	0.2	0.8	8/16/2018	8:08 AM	EPA 180.1

Laboratory ID	AD83929	Collection date and time	8/15/2018 12:50 PM
Location Code	CRNEP_EQ	Sample Collector	REISTADT/DUGAN
Sample Description	EB Site #463		

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	8/18/2018	11:10 AM	SM21 10200 H
Pheophytin	0.50	U	mg/M3	0.5	2.0	8/18/2018	11:10 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.3	U	mg/L	0.3	1.2	8/16/2018	8:03 AM	SM20 5210 B
Color	1.6	U	CU	1.6	6.4	8/16/2018	2:43 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	6.89		mg/L	0.1		8/15/2018	12:50 PM	FDEP FT1500
Enterococci	2	U	MPN/100mL	2		8/15/2018	3:09 PM	Enterolert®
E.coli Enumeration	2	U	MPN/100mL	2		8/15/2018	3:09 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	8/16/2018	11:14 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	8/16/2018	9:07 AM	EPA 353.2

Laboratory ID AD83929
 Location Code CRNEP_EQ
 Sample Description EB Site #463

Collection date and time 8/15/2018 12:50 PM
 Sample Collector REISTADT/DUGAN

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	8/16/2018	9:07 AM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	8/16/2018	9:07 AM	EPA 353.2
Nitrogen, Organic	0.050	U	mg/L as N	0.05	0.2	8/22/2018	8:28 AM	TKN - NH3
Phosphorus, Ortho	0.004	U	mg/L as P	0.004	0.016	8/16/2018	11:54 AM	EPA 365.1
Salinity by meter by Client	0.1	U	SU	0.1		8/15/2018	12:50 PM	FDEP FT 1300
Silica, dissolved as SiO2	0.1	U	mg/L as SiO2	0.1	0.4	8/16/2018	11:55 AM	SM4500 C
Nitrogen, Kjeldahl, Total	0.05	U	mg/L as N	0.05	0.2	8/22/2018	8:28 AM	EPA 351.2
Nitrogen, Total	0.050	U	mg/L as N	0.05	0.2	8/22/2018	8:28 AM	TKN + NOX
Total Organic Carbon	1.000	U	mg/L	1	4	8/21/2018	2:16 PM	SM21 5310 B
Phosphorus, Total	0.006	U	mg/L as P	0.006	0.024	8/22/2018	8:31 AM	EPA 365.1
Total Suspended Solids	0.6	U	mg/L	0.6	2.4	8/16/2018	8:03 AM	SM21 2540 D
Turbidity (Nephelometric)	0.20	U	NTU	0.2	0.8	8/16/2018	8:08 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		Name: DNR		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			
ATTN: Kirby Wolfe		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): MaryAnn Dugan / Nicole Reistad		Sample Collector Signature:		Analyses Required \$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)						
Relinquished By: (signature)	Date	Time	Received By: (signature)						
Sample(s) on ice ☒ Yes or ☐ No? Temperature °C: 0.1°C				Preservatives (see codes) NP NPF S S NP ST					
Collection Date Time		Sample Description & Location		Matrix (see codes)		# of Sample Containers Submitted		Lab ID #	
08/15/2018 1040		CRNEP_RS #393		SWE		1 1 1 1 2 1		AD83924	
08/15/2018 1115		CRNEP_RS #395		SWE		1 1 1 1 2 1		AD83925	
08/15/2018 1145		CRNEP_RS #428		SWE		1 1 1 1 2 1		AD83926	
08/15/2018 1240		CRNEP_RS #463		SWE		1 1 1 1 2 1		AD83927	
08/15/2018 1005		CRNEP_RS #386		SWE		1 1 1 1 2 1		AD83928	
08/15/2018 1250		CRNEP_EQ #		SWE		1 1 1 1 2 1		AD83929	

**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.