

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: 12/2/2019

Below are the results of samples submitted to this laboratory on 11/14/2019

Laboratory ID	AE29970	Collection date and time	11/14/2019 11:35 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/CARROLL
Sample Description	Grid #428		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	6.95		mg/M3	0.5	2.0	11/25/2019	8:02 AM	SM21 10200 H
Pheophytin	13.08		mg/M3	0.5	2.0	11/25/2019	8:02 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.9	I	mg/L	0.3	1.2	11/15/2019	11:22 AM	SM 5210 B
Color	58.6		CU	1.6	6.4	11/14/2019	3:18 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	7.42		mg/L	0.1		11/14/2019	11:35 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		11/14/2019	2:50 PM	Enterolert®
E.coli Enumeration	42		MPN/100mL	10		11/14/2019	2:50 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	11/15/2019	1:54 PM	EPA 350.1
Nitrite	0.021		mg/L as N	0.003	0.012	11/15/2019	10:40 AM	EPA 353.2
Nitrate	0.106		mg/L as N	0.01	0.04	11/15/2019	10:40 AM	EPA 353.2
Nitrate + Nitrite	0.127		mg/L as N	0.01	0.04	11/15/2019	10:40 AM	EPA 353.2
Nitrogen, Organic	1.2		mg/L as N	0.05	0.2	11/26/2019	8:41 AM	TKN - NH3
Phosphorus, Ortho	0.093		mg/L as P	0.004	0.016	11/15/2019	10:28 AM	EPA 365.1
Salinity by meter by Client	14.63		SU	0.1		11/14/2019	11:35 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.7		meters	0.1		11/14/2019	11:35 AM	FDEP FT 1700
Silica, dissolved as SiO2	7.5		mg/L as SiO2	0.1	0.4	11/15/2019	11:46 AM	SM4500-SiO2 C
Depth of Water Body	0.7		Meters			11/14/2019	11:35 AM	FS2100
Nitrogen, Kjeldahl, Total	1.2		mg/L as N	0.05	0.2	11/26/2019	8:41 AM	EPA 351.2
Nitrogen, Total	1.3		mg/L as N	0.05	0.2	11/26/2019	8:41 AM	TKN + NOX
Total Organic Carbon	12		mg/L	1	4	11/25/2019	12:16 PM	SM 5310 B
Phosphorus, Total	0.16		mg/L as P	0.006	0.024	11/26/2019	8:43 AM	EPA 365.1

Report Format: NELAC

DOH #E45049



Laboratory ID	AE29970	Collection date and time	11/14/2019 11:35 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/CARROLL
Sample Description	Grid #428		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Total Suspended Solids	19.8		mg/L	0.6	2.4	11/15/2019	6:30 AM	SM 2540 D
Turbidity (Nephelometric)	1.50		NTU	0.2		11/15/2019	12:40 PM	EPA 180.1

Laboratory ID	AE29971	Collection date and time	11/14/2019 12:45 PM
Location Code	CRNEP_RS	Sample Collector	REISTADT/CARROLL
Sample Description	Grid #455		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	2.27		mg/M3	0.5	2.0	11/25/2019	8:02 AM	SM21 10200 H
Pheophytin	1.66	I	mg/M3	0.5	2.0	11/25/2019	8:02 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.6	I	mg/L	0.3	1.2	11/15/2019	11:22 AM	SM 5210 B
Color	126		CU	3.2	12.8	11/14/2019	3:18 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	6.52		mg/L	0.1		11/14/2019	12:45 PM	FDEP FT1500
Enterococci	31		MPN/100mL	10		11/14/2019	2:50 PM	Enterolert®
E.coli Enumeration	53		MPN/100mL	10		11/14/2019	2:50 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	11/15/2019	1:54 PM	EPA 350.1
Nitrite	0.078		mg/L as N	0.003	0.012	11/15/2019	10:40 AM	EPA 353.2
Nitrate	0.353		mg/L as N	0.01	0.04	11/15/2019	10:40 AM	EPA 353.2
Nitrate + Nitrite	0.431		mg/L as N	0.01	0.04	11/15/2019	10:40 AM	EPA 353.2
Nitrogen, Organic	1.1		mg/L as N	0.05	0.2	11/26/2019	8:41 AM	TKN - NH3
Phosphorus, Ortho	0.123		mg/L as P	0.004	0.016	11/15/2019	10:28 AM	EPA 365.1
Salinity by meter by Client	6.21		SU	0.1		11/14/2019	12:45 PM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.85		meters	0.1		11/14/2019	12:45 PM	FDEP FT 1700
Silica, dissolved as SiO2	11		mg/L as SiO2	0.1	0.4	11/15/2019	11:46 AM	SM4500-SiO2 C
Depth of Water Body	1.3		Meters			11/14/2019	12:45 PM	FS2100
Nitrogen, Kjeldahl, Total	1.1		mg/L as N	0.05	0.2	11/26/2019	8:41 AM	EPA 351.2
Nitrogen, Total	1.5		mg/L as N	0.05	0.2	11/26/2019	8:41 AM	TKN + NOX
Total Organic Carbon	19		mg/L	1	4	11/25/2019	12:16 PM	SM 5310 B
Phosphorus, Total	0.16		mg/L as P	0.006	0.024	11/26/2019	8:43 AM	EPA 365.1
Total Suspended Solids	4.40		mg/L	0.6	2.4	11/15/2019	6:30 AM	SM 2540 D
Turbidity (Nephelometric)	4.79		NTU	0.2		11/15/2019	12:40 PM	EPA 180.1



Laboratory ID AE29972
 Location Code CRNEP_RS
 Sample Description Grid #450

Collection date and time 11/14/2019 12:20 PM
 Sample Collector REISTADT/CARROLL

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	2.29		mg/M3	0.5	2.0	11/25/2019	8:02 AM	SM21 10200 H
Pheophytin	5.15		mg/M3	0.5	2.0	11/25/2019	8:02 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.7	I	mg/L	0.3	1.2	11/15/2019	11:22 AM	SM 5210 B
Color	114		CU	3.2	12.8	11/14/2019	3:18 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	6.74		mg/L	0.1		11/14/2019	12:20 PM	FDEP FT1500
Enterococci	10		MPN/100mL	10		11/14/2019	2:50 PM	Enterolert®
E.coli Enumeration	53		MPN/100mL	10		11/14/2019	2:50 PM	Colilert-18®
Ammonia	0.015	I	mg/L as N	0.014	0.056	11/15/2019	1:54 PM	EPA 350.1
Nitrite	0.071		mg/L as N	0.003	0.012	11/15/2019	10:40 AM	EPA 353.2
Nitrate	0.304		mg/L as N	0.01	0.04	11/15/2019	10:40 AM	EPA 353.2
Nitrate + Nitrite	0.375		mg/L as N	0.01	0.04	11/15/2019	10:40 AM	EPA 353.2
Nitrogen, Organic	0.98		mg/L as N	0.05	0.2	11/26/2019	8:41 AM	TKN - NH3
Phosphorus, Ortho	0.121		mg/L as P	0.004	0.016	11/15/2019	10:28 AM	EPA 365.1
Salinity by meter by Client	7.50		SU	0.1		11/14/2019	12:20 PM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	0.75		meters	0.1		11/14/2019	12:20 PM	FDEP FT 1700
Silica, dissolved as SiO2	11		mg/L as SiO2	0.1	0.4	11/15/2019	11:46 AM	SM4500-SiO2 C
Depth of Water Body	1.4		Meters			11/14/2019	12:20 PM	FS2100
Nitrogen, Kjeldahl, Total	0.99		mg/L as N	0.05	0.2	11/26/2019	8:41 AM	EPA 351.2
Nitrogen, Total	1.4		mg/L as N	0.05	0.2	11/26/2019	8:41 AM	TKN + NOX
Total Organic Carbon	18		mg/L	1	4	11/25/2019	12:16 PM	SM 5310 B
Phosphorus, Total	0.17		mg/L as P	0.006	0.024	11/26/2019	8:43 AM	EPA 365.1
Total Suspended Solids	7.25		mg/L	0.6	2.4	11/15/2019	6:30 AM	SM 2540 D
Turbidity (Nephelometric)	3.45		NTU	0.2		11/15/2019	12:40 PM	EPA 180.1

Laboratory ID AE29973
 Location Code CRNEP_RS
 Sample Description Grid #395

Collection date and time 11/14/2019 10:45 AM
 Sample Collector REISTADT/CARROLL

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	1.43	I	mg/M3	0.5	2.0	11/25/2019	8:02 AM	SM21 10200 H
Pheophytin	2.56		mg/M3	0.5	2.0	11/25/2019	8:02 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.6	I	mg/L	0.3	1.2	11/15/2019	11:22 AM	SM 5210 B
Color	41.7		CU	1.6	6.4	11/14/2019	3:18 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	7.05		mg/L	0.1		11/14/2019	10:45 AM	FDEP FT1500

Report Format: NELAC

DOH #E45049



Laboratory ID AE29973
 Location Code CRNEP_RS
 Sample Description Grid #395

Collection date and time 11/14/2019 10:45 AM
 Sample Collector REISTADT/CARROLL

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Enterococci	10	U	MPN/100mL	10		11/14/2019	2:50 PM	Enterolert®
E.coli Enumeration	10	U	MPN/100mL	10		11/14/2019	2:50 PM	Colilert-18®
Ammonia	0.032	I	mg/L as N	0.014	0.056	11/15/2019	1:54 PM	EPA 350.1
Nitrite	0.017		mg/L as N	0.003	0.012	11/15/2019	10:40 AM	EPA 353.2
Nitrate	0.115		mg/L as N	0.01	0.04	11/15/2019	10:40 AM	EPA 353.2
Nitrate + Nitrite	0.132		mg/L as N	0.01	0.04	11/15/2019	10:40 AM	EPA 353.2
Nitrogen, Organic	0.82		mg/L as N	0.05	0.2	11/26/2019	8:41 AM	TKN - NH3
Phosphorus, Ortho	0.084		mg/L as P	0.004	0.016	11/15/2019	10:28 AM	EPA 365.1
Salinity by meter by Client	19.63		SU	0.1		11/14/2019	10:45 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.25		meters	0.1		11/14/2019	10:45 AM	FDEP FT 1700
Silica, dissolved as SiO2	5.6		mg/L as SiO2	0.1	0.4	11/15/2019	11:46 AM	SM4500-SiO2 C
Depth of Water Body	2.7		Meters			11/14/2019	10:45 AM	FS2100
Nitrogen, Kjeldahl, Total	0.85		mg/L as N	0.05	0.2	11/26/2019	8:41 AM	EPA 351.2
Nitrogen, Total	0.98		mg/L as N	0.05	0.2	11/26/2019	8:41 AM	TKN + NOX
Total Organic Carbon	10		mg/L	1	4	11/25/2019	12:16 PM	SM 5310 B
Phosphorus, Total	0.12		mg/L as P	0.006	0.024	11/26/2019	8:43 AM	EPA 365.1
Total Suspended Solids	7.55		mg/L	0.6	2.4	11/15/2019	6:30 AM	SM 2540 D
Turbidity (Nephelometric)	2.89		NTU	0.2		11/15/2019	12:40 PM	EPA 180.1

Laboratory ID AE29974
 Location Code CRNEP_RS
 Sample Description Grid #326X

Collection date and time 11/14/2019 10:05 AM
 Sample Collector REISTADT/CARROLL

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	1.08	I	mg/M3	0.5	2.0	11/25/2019	8:02 AM	SM21 10200 H
Pheophytin	1.65	I	mg/M3	0.5	2.0	11/25/2019	8:02 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.6	I	mg/L	0.3	1.2	11/15/2019	11:22 AM	SM 5210 B
Color	27.0		CU	1.6	6.4	11/14/2019	3:18 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	6.58		mg/L	0.1		11/14/2019	10:05 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		11/14/2019	2:50 PM	Enterolert®
E.coli Enumeration	10	U	MPN/100mL	10		11/14/2019	2:50 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	11/15/2019	1:54 PM	EPA 350.1
Nitrite	0.009	I	mg/L as N	0.003	0.012	11/15/2019	10:40 AM	EPA 353.2
Nitrate	0.064		mg/L as N	0.01	0.04	11/15/2019	10:40 AM	EPA 353.2

Report Format: NELAC

DOH #E45049



Laboratory ID AE29974
 Location Code CRNEP_RS
 Sample Description Grid #326X

Collection date and time 11/14/2019 10:05 AM
 Sample Collector REISTADT/CARROLL

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Nitrate + Nitrite	0.073		mg/L as N	0.01	0.04	11/15/2019	10:40 AM	EPA 353.2
Nitrogen, Organic	0.82		mg/L as N	0.05	0.2	11/26/2019	8:41 AM	TKN - NH3
Phosphorus, Ortho	0.052		mg/L as P	0.004	0.016	11/15/2019	10:28 AM	EPA 365.1
Salinity by meter by Client	24.95		SU	0.1		11/14/2019	10:05 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.1		meters	0.1		11/14/2019	10:05 AM	FDEP FT 1700
Silica, dissolved as SiO2	4.1		mg/L as SiO2	0.1	0.4	11/15/2019	11:46 AM	SM4500-SiO2 C
Depth of Water Body	1.1		Meters			11/14/2019	10:05 AM	FS2100
Nitrogen, Kjeldahl, Total	0.82		mg/L as N	0.05	0.2	11/26/2019	8:41 AM	EPA 351.2
Nitrogen, Total	0.89		mg/L as N	0.05	0.2	11/26/2019	8:41 AM	TKN + NOX
Total Organic Carbon	7.5		mg/L	1	4	11/25/2019	12:16 PM	SM 5310 B
Phosphorus, Total	0.084		mg/L as P	0.006	0.024	11/26/2019	8:43 AM	EPA 365.1
Total Suspended Solids	6.70		mg/L	0.6	2.4	11/15/2019	6:30 AM	SM 2540 D
Turbidity (Nephelometric)	2.31		NTU	0.2		11/15/2019	12:40 PM	EPA 180.1

Laboratory ID AE29975
 Location Code CRNEP_EQ
 Sample Description EB Site #455

Collection date and time 11/14/2019 1:00 PM
 Sample Collector REISTADT/CARROLL

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	11/25/2019	8:02 AM	SM21 10200 H
Pheophytin	0.50	U	mg/M3	0.5	2.0	11/25/2019	8:02 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.3	U	mg/L	0.3	1.2	11/15/2019	11:22 AM	SM 5210 B
Color	1.6	U	CU	1.6	6.4	11/14/2019	3:18 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	7.33		mg/L	0.1		11/14/2019	1:00 PM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		11/14/2019	2:50 PM	Enterolert®
E.coli Enumeration	10	U	MPN/100mL	10		11/14/2019	2:50 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	11/15/2019	1:54 PM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	11/15/2019	10:40 AM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	11/15/2019	10:40 AM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	11/15/2019	10:40 AM	EPA 353.2
Nitrogen, Organic	0.0500	U	mg/L as N	0.05	0.2	11/26/2019	8:41 AM	TKN - NH3
Phosphorus, Ortho	0.004	U	mg/L as P	0.004	0.016	11/15/2019	10:28 AM	EPA 365.1
Salinity by meter by Client	0.1	U	SU	0.1		11/14/2019	1:00 PM	FDEP FT 1300
Silica, dissolved as SiO2	0.1	U	mg/L as SiO2	0.1	0.4	11/15/2019	11:46 AM	SM4500-SiO2 C

Report Format: NELAC

DOH #E45049



Laboratory ID AE29975
Location Code CRNEP_EQ
Sample Description EB Site #455

Collection date and time 11/14/2019 1:00 PM
Sample Collector REISTADT/CARROLL

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Nitrogen, Kjeldahl, Total	0.05	U	mg/L as N	0.05	0.2	11/26/2019	8:41 AM	EPA 351.2
Nitrogen, Total	0.0500	U	mg/L as N	0.05	0.2	11/26/2019	8:41 AM	TKN + NOX
Total Organic Carbon	1.000	U	mg/L	1	4	11/25/2019	12:16 PM	SM 5310 B
Phosphorus, Total	0.006	U	mg/L as P	0.006	0.024	11/26/2019	8:43 AM	EPA 365.1
Total Suspended Solids	0.6	U	mg/L	0.6	2.4	11/15/2019	6:30 AM	SM 2540 D
Turbidity (Nephelometric)	0.2	U	NTU	0.2		11/15/2019	12:40 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).

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



*Qualified = the data may not be accurate and regulatory agencies may not accept qualified data.