

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: 6/12/2020

Below are the results of samples submitted to this laboratory on 5/27/2020

Laboratory ID	AE45027	Collection date and time	5/27/2020 10:10 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/HORMUTH
Sample Description	Grid #424		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	3.97		mg/M3	0.5	2.0	5/28/2020	8:22 AM	SM21 10200 H
Pheophytin	4.09		mg/M3	0.5	2.0	5/28/2020	8:22 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	1.2		mg/L	0.3	1.2	5/28/2020	11:33 AM	SM 5210 B
Color	28.3		CU	1.6	6.4	5/28/2020	3:04 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	6.25		mg/L			5/27/2020	10:10 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		5/27/2020	2:21 PM	Enterolert®
E.coli Enumeration	10	U	MPN/100mL	10		5/27/2020	2:29 PM	Colilert-18®
Ammonia	0.045	I	mg/L as N	0.014	0.056	5/28/2020	11:26 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	5/28/2020	12:33 PM	EPA 353.2
Nitrate	0.013	I	mg/L as N	0.01	0.04	5/28/2020	12:33 PM	EPA 353.2
Nitrate + Nitrite	0.013	I	mg/L as N	0.01	0.04	5/28/2020	12:33 PM	EPA 353.2
Nitrogen, Organic	1.2		mg/L as N	0.05	0.2	6/10/2020	12:30 PM	TKN - NH3
Phosphorus, Ortho	0.066		mg/L as P	0.004	0.016	5/28/2020	1:07 PM	EPA 365.1
Salinity by meter by Client	17.37		SU			5/27/2020	10:10 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.0	S	meters			5/27/2020	10:10 AM	FDEP FT 1700
Silica, dissolved as SiO2	3.2		mg/L as SiO2	0.1	0.4	5/28/2020	1:06 PM	SM4500-SiO2 C
Depth of Water Body	1.0		Meters			5/27/2020	10:10 AM	FS2100
Nitrogen, Kjeldahl, Total	1.2		mg/L as N	0.05	0.2	6/10/2020	12:30 PM	EPA 351.2
Nitrogen, Total	1.2		mg/L as N	0.05	0.2	6/10/2020	12:30 PM	TKN + NOX
Total Organic Carbon	11		mg/L	1	4	6/2/2020	1:39 PM	SM 5310 B
Phosphorus, Total	0.10		mg/L as P	0.006	0.024	6/10/2020	8:47 AM	EPA 365.1

Report Format: NELAC

DOH #E45049



Laboratory ID	AE45027	Collection date and time	5/27/2020 10:10 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/HORMUTH
Sample Description	Grid #424		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Total Suspended Solids	5.10		mg/L	0.6	2.4	5/28/2020	9:19 AM	SM 2540 D
Turbidity (Nephelometric)	2.18		NTU	0.2	0.8	5/28/2020	8:35 AM	EPA 180.1

Laboratory ID	AE45028	Collection date and time	5/27/2020 10:55 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/HORMUTH
Sample Description	Grid #448		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	10.78		mg/M3	0.5	2.0	5/28/2020	8:22 AM	SM21 10200 H
Pheophytin	4.72		mg/M3	0.5	2.0	5/28/2020	8:22 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	1.8		mg/L	0.3	1.2	5/28/2020	11:33 AM	SM 5210 B
Color	39.6		CU	1.6	6.4	5/28/2020	3:04 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	7.38		mg/L			5/27/2020	10:55 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		5/27/2020	2:21 PM	Enterolert®
E.coli Enumeration	10		MPN/100mL	10		5/27/2020	2:29 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	5/28/2020	11:26 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	5/28/2020	12:33 PM	EPA 353.2
Nitrate	0.010	I	mg/L as N	0.01	0.04	5/28/2020	12:33 PM	EPA 353.2
Nitrate + Nitrite	0.010	I	mg/L as N	0.01	0.04	5/28/2020	12:33 PM	EPA 353.2
Nitrogen, Organic	1.0		mg/L as N	0.05	0.2	6/10/2020	12:30 PM	TKN - NH3
Phosphorus, Ortho	0.087		mg/L as P	0.004	0.016	5/28/2020	1:07 PM	EPA 365.1
Salinity by meter by Client	9.06		SU			5/27/2020	10:55 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.35		meters			5/27/2020	10:55 AM	FDEP FT 1700
Silica, dissolved as SiO2	4.3		mg/L as SiO2	0.1	0.4	5/28/2020	1:06 PM	SM4500-SiO2 C
Depth of Water Body	1.8		Meters			5/27/2020	10:55 AM	FS2100
Nitrogen, Kjeldahl, Total	1.0		mg/L as N	0.05	0.2	6/10/2020	12:30 PM	EPA 351.2
Nitrogen, Total	1.0		mg/L as N	0.05	0.2	6/10/2020	12:30 PM	TKN + NOX
Total Organic Carbon	13		mg/L	1	4	6/2/2020	1:39 PM	SM 5310 B
Phosphorus, Total	0.12		mg/L as P	0.006	0.024	6/10/2020	8:47 AM	EPA 365.1
Total Suspended Solids	2.90		mg/L	0.6	2.4	5/28/2020	9:19 AM	SM 2540 D
Turbidity (Nephelometric)	1.24		NTU	0.2	0.8	5/28/2020	8:35 AM	EPA 180.1



Laboratory ID	AE45029	Collection date and time	5/27/2020 9:45 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/HORMUTH
Sample Description	Grid #404		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	1.80	I	mg/M3	0.5	2.0	5/28/2020	8:22 AM	SM21 10200 H
Pheophytin	1.59	I	mg/M3	0.5	2.0	5/28/2020	8:22 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.9	I	mg/L	0.3	1.2	5/28/2020	11:33 AM	SM 5210 B
Color	22.6		CU	1.6	6.4	5/28/2020	3:04 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	5.82		mg/L			5/27/2020	9:45 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		5/27/2020	2:21 PM	Enterolert®
E.coli Enumeration	10	U	MPN/100mL	10		5/27/2020	2:29 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	5/28/2020	11:26 AM	EPA 350.1
Nitrite	0.003	I	mg/L as N	0.003	0.012	5/28/2020	12:33 PM	EPA 353.2
Nitrate	0.017	I	mg/L as N	0.01	0.04	5/28/2020	12:33 PM	EPA 353.2
Nitrate + Nitrite	0.020	I	mg/L as N	0.01	0.04	5/28/2020	12:33 PM	EPA 353.2
Nitrogen, Organic	1.3		mg/L as N	0.05	0.2	6/10/2020	12:30 PM	TKN - NH3
Phosphorus, Ortho	0.058		mg/L as P	0.004	0.016	5/28/2020	1:07 PM	EPA 365.1
Salinity by meter by Client	21.02		SU			5/27/2020	9:45 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.4	S	meters			5/27/2020	9:45 AM	FDEP FT 1700
Silica, dissolved as SiO2	3.2		mg/L as SiO2	0.1	0.4	5/28/2020	1:06 PM	SM4500-SiO2 C
Depth of Water Body	1.4		Meters			5/27/2020	9:45 AM	FS2100
Nitrogen, Kjeldahl, Total	1.3		mg/L as N	0.05	0.2	6/10/2020	12:30 PM	EPA 351.2
Nitrogen, Total	1.3		mg/L as N	0.05	0.2	6/10/2020	12:30 PM	TKN + NOX
Total Organic Carbon	9.2		mg/L	1	4	6/2/2020	1:39 PM	SM 5310 B
Phosphorus, Total	0.083		mg/L as P	0.006	0.024	6/10/2020	8:47 AM	EPA 365.1
Total Suspended Solids	3.80		mg/L	0.6	2.4	5/28/2020	9:19 AM	SM 2540 D
Turbidity (Nephelometric)	0.880		NTU	0.2	0.8	5/28/2020	8:35 AM	EPA 180.1

Laboratory ID	AE45030	Collection date and time	5/27/2020 11:25 AM
Location Code	CRNEP_RS	Sample Collector	REISTADT/HORMUTH
Sample Description	Grid #456		

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	1.83	I	mg/M3	0.5	2.0	5/28/2020	8:22 AM	SM21 10200 H
Pheophytin	3.09		mg/M3	0.5	2.0	5/28/2020	8:22 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.7	I	mg/L	0.3	1.2	5/28/2020	11:33 AM	SM 5210 B
Color	38.7		CU	1.6	6.4	5/28/2020	3:04 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	5.77		mg/L			5/27/2020	11:25 AM	FDEP FT1500

Report Format: NELAC

DOH #E45049



Laboratory ID AE45030
 Location Code CRNEP_RS
 Sample Description Grid #456

Collection date and time 5/27/2020 11:25 AM
 Sample Collector REISTADT/HORMUTH

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Enterococci	10	U	MPN/100mL	10		5/27/2020	2:21 PM	Enterolert®
E.coli Enumeration	64		MPN/100mL	10		5/27/2020	2:29 PM	Colilert-18®
Ammonia	0.125		mg/L as N	0.014	0.056	5/28/2020	11:26 AM	EPA 350.1
Nitrite	0.011	I	mg/L as N	0.003	0.012	5/28/2020	12:33 PM	EPA 353.2
Nitrate	0.126		mg/L as N	0.01	0.04	5/28/2020	12:33 PM	EPA 353.2
Nitrate + Nitrite	0.137		mg/L as N	0.01	0.04	5/28/2020	12:33 PM	EPA 353.2
Nitrogen, Organic	0.85		mg/L as N	0.05	0.2	6/10/2020	12:30 PM	TKN - NH3
Phosphorus, Ortho	0.104		mg/L as P	0.004	0.016	5/28/2020	1:07 PM	EPA 365.1
Salinity by meter by Client	4.23		SU			5/27/2020	11:25 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	2.25		meters			5/27/2020	11:25 AM	FDEP FT 1700
Silica, dissolved as SiO2	5.3		mg/L as SiO2	0.1	0.4	5/28/2020	1:06 PM	SM4500-SiO2 C
Depth of Water Body	2.8		Meters			5/27/2020	11:25 AM	FS2100
Nitrogen, Kjeldahl, Total	0.97		mg/L as N	0.05	0.2	6/10/2020	12:30 PM	EPA 351.2
Nitrogen, Total	1.1		mg/L as N	0.05	0.2	6/10/2020	12:30 PM	TKN + NOX
Total Organic Carbon	15		mg/L	1	4	6/2/2020	1:39 PM	SM 5310 B
Phosphorus, Total	0.12		mg/L as P	0.006	0.024	6/10/2020	8:47 AM	EPA 365.1
Total Suspended Solids	1.20	I	mg/L	0.6	2.4	5/28/2020	9:19 AM	SM 2540 D
Turbidity (Nephelometric)	0.700	I	NTU	0.2	0.8	5/28/2020	8:35 AM	EPA 180.1

Laboratory ID AE45032
 Location Code CRNEP_RS
 Sample Description Grid #443

Collection date and time 5/27/2020 10:35 AM
 Sample Collector REISTADT/HORMUTH

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Chlorophyll a - corrected for Pheophytin	7.72		mg/M3	0.5	2.0	5/28/2020	8:22 AM	SM21 10200 H
Pheophytin	2.69		mg/M3	0.5	2.0	5/28/2020	8:22 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	2.0		mg/L	0.3	1.2	5/28/2020	11:33 AM	SM 5210 B
Color	36.3		CU	1.6	6.4	5/28/2020	3:04 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	7.27		mg/L			5/27/2020	10:35 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		5/27/2020	2:21 PM	Enterolert®
E.coli Enumeration	10		MPN/100mL	10		5/27/2020	2:29 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	5/28/2020	11:26 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	5/28/2020	12:33 PM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	5/28/2020	12:33 PM	EPA 353.2

Report Format: NELAC

DOH #E45049



Laboratory ID AE45032
 Location Code CRNEP_RS
 Sample Description Grid #443

Collection date and time 5/27/2020 10:35 AM
 Sample Collector REISTADT/HORMUTH

Analyte Name	Result	Qualifier	Units	MDL	PQL	Analysis Date	Analysis Time	Analysis Method
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	5/28/2020	12:33 PM	EPA 353.2
Nitrogen, Organic	1.1		mg/L as N	0.05	0.2	6/10/2020	12:30 PM	TKN - NH3
Phosphorus, Ortho	0.074		mg/L as P	0.004	0.016	5/28/2020	1:07 PM	EPA 365.1
Salinity by meter by Client	12.13		SU			5/27/2020	10:35 AM	FDEP FT 1300
Water Clarity Secchi Disk, by Client	1.45		meters			5/27/2020	10:35 AM	FDEP FT 1700
Silica, dissolved as SiO2	3.2		mg/L as SiO2	0.1	0.4	5/28/2020	1:06 PM	SM4500-SiO2 C
Depth of Water Body	2.0		Meters			5/27/2020	10:35 AM	FS2100
Nitrogen, Kjeldahl, Total	1.1		mg/L as N	0.05	0.2	6/10/2020	12:30 PM	EPA 351.2
Nitrogen, Total	1.1		mg/L as N	0.05	0.2	6/10/2020	12:30 PM	TKN + NOX
Total Organic Carbon	12		mg/L	1	4	6/2/2020	1:39 PM	SM 5310 B
Phosphorus, Total	0.11		mg/L as P	0.006	0.024	6/10/2020	8:47 AM	EPA 365.1
Total Suspended Solids	3.95		mg/L	0.6	2.4	5/28/2020	9:19 AM	SM 2540 D
Turbidity (Nephelometric)	1.35		NTU	0.2	0.8	5/28/2020	8:35 AM	EPA 180.1

Laboratory ID AE45033
 Location Code CRNEP_EQ
 Sample Description EB Site #456

Collection date and time 5/27/2020 11:35 AM
 Sample Collector REISTADT/HORMUTH

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	5/28/2020	8:22 AM	SM21 10200 H
Pheophytin	0.50	U	mg/M3	0.5	2.0	5/28/2020	8:22 AM	SM21 10200 H
Biochemical Oxygen Demand 5 day	0.3	U	mg/L	0.3	1.2	5/28/2020	11:33 AM	SM 5210 B
Color	1.6	U	CU	1.6	6.4	5/28/2020	3:04 PM	SM21 2120 C
Oxygen, Dissolved, Electrode, by Client	7.50		mg/L			5/27/2020	11:35 AM	FDEP FT1500
Enterococci	10	U	MPN/100mL	10		5/27/2020	2:21 PM	Enterolert®
E.coli Enumeration	10	U	MPN/100mL	10		5/27/2020	2:29 PM	Colilert-18®
Ammonia	0.014	U	mg/L as N	0.014	0.056	5/28/2020	11:26 AM	EPA 350.1
Nitrite	0.003	U	mg/L as N	0.003	0.012	5/28/2020	12:33 PM	EPA 353.2
Nitrate	0.010	U	mg/L as N	0.01	0.04	5/28/2020	12:33 PM	EPA 353.2
Nitrate + Nitrite	0.010	U	mg/L as N	0.01	0.04	5/28/2020	12:33 PM	EPA 353.2
Nitrogen, Organic	0.050	U	mg/L as N	0.05	0.2	6/10/2020	12:30 PM	TKN - NH3
Phosphorus, Ortho	0.004	U	mg/L as P	0.004	0.016	5/28/2020	1:07 PM	EPA 365.1
Salinity by meter by Client	0.00		SU			5/27/2020	11:35 AM	FDEP FT 1300
Silica, dissolved as SiO2	0.1	U	mg/L as SiO2	0.1	0.4	5/28/2020	1:06 PM	SM4500-SiO2 C

Report Format: NELAC

DOH #E45049



Laboratory ID AE45033
Location Code CRNEP_EQ
Sample Description EB Site #456

Collection date and time 5/27/2020 11:35 AM
Sample Collector REISTADT/HORMUTH

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	6/10/2020	12:30 PM	EPA 351.2
Nitrogen, Total	0.050	U	mg/L as N	0.05	0.2	6/10/2020	12:30 PM	TKN + NOX
Total Organic Carbon	1.000	U	mg/L	1	4	6/2/2020	1:39 PM	SM 5310 B
Phosphorus, Total	0.006	U	mg/L as P	0.006	0.024	6/10/2020	8:47 AM	EPA 365.1
Total Suspended Solids	0.6	U	mg/L	0.6	2.4	5/28/2020	9:19 AM	SM 2540 D
Turbidity (Nephelometric)	0.20	U	NTU	0.2	0.8	5/28/2020	8:35 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.

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



