



Collier County™

POLLUTION CONTROL

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Report To: Tonia Selmeski
City of Marco Island
50 Bald Eagle Drive
Marco Island, FL 34145

Collected by: CCPCD
Collection Date: 04/14/2020
Submittal Date: 04/14/2020 @ 15:45

Report Date : 4/30/2020
Report Time : 1:36:39PM

Project: MARCO
Report#: 0420_MRCO_II

Data Qualifier Code Key:

- I: The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
- U: The compound was analyzed for but not detected
- Q: Sample held beyond acceptable holding time
- J: Estimate value; the reported value failed to meet established criteria for either precision or accuracy
- V: Analyte detected in both the sample and the associated method blank
- B: Colony count is generated from plates in which the total number of colonies is outside the method indicated ideal range
- Y: The laboratory analysis was from an improperly preserved sample. The data may not be accurate.
- G: Indicates that the analyte was detected at or above the method detection limit in both the sample and the associated field blank, equipment blank, or trip blank, and the blank value was greater than 10% of the associated sample value.

Analyses performed using EPA or Standard Methods and certified to meet NELAC Standards. Data qualifiers assigned according to F.A.C. 62-160. Results contained in this report relate only to the samples collected.



Respectfully Submitted,

Nosbel Perez

Nosbel Perez
Laboratory Supervisor

ANALYTICAL RESULTS

Report # 0420_MRCO_II

<i>Location:</i> JH_PARK		<i>Field ID:</i> AF59887		<i>Lab ID:</i> AF59887		<i>Collect Date/Time:</i> 4/14/20 09:54				
Analyte Name	Method	Result	Acceptable Limits	Qualifier	Units	MDL	PQL	DF	Analysis Date/Time	
CC-Nitrate-N	CC-Nitrate-N	0.011		U	mg/L	0.011	0.020	1	04/21/2020	08:18
Enterococci	Enterolert/QT	20	<130		MPN/100 mL	10	10	10	04/14/2020	15:24
Nitrogen- Total Kjeldahl	EPA 351.2	0.674			mg/L	0.200	0.500	1	04/16/2020	15:12
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	04/20/2020	14:38
pH	FDEP FT1100	7.8	6.5 - 8.5		SU			1	04/14/2020	09:54
Specific Conductance	FDEP FT1200	55786			umho/cm			1	04/14/2020	09:54
Dissolved Oxygen Saturation	FDEP FT1500	82.4	>42		%			1	04/14/2020	09:54
Nitrogen- Total	Nitrogen- Total	0.674	<0.3		mg/L	0.200	0.500	1	04/16/2020	15:12
Chlorophyll a	SM 10200 H	3.4	<4.9		mg/m3	1.00	1.00	1	04/28/2020	08:28
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	04/15/2020	10:45
Pheophytin	SM 10200 H	1.00		U	mg/m3	1.00	1.00	1	04/28/2020	08:28
Turbidity	SM 2130 B	6.3			NTU	0.10	0.50	1	04/15/2020	09:47
Digestion for TKN	SM 4500 NorgD	Completed						1	04/15/2020	11:37
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	04/15/2020	13:28
Persulfate Digestion for Total P	SM 4500-P B	Completed						1	04/17/2020	11:04
Phosphorus- Total	SM 4500-P E (P	0.056	<0.046		mg/L	0.014	0.040	2	04/20/2020	16:48

ANALYTICAL RESULTS

Report # 0420_MRCO_II

<i>Location:</i> HC_CENTER		<i>Field ID:</i> AF59888		<i>Lab ID:</i> AF59888		<i>Collect Date/Time:</i> 4/14/20 10:16				
Analyte Name	Method	Result	Acceptable Limits	Qualifier	Units	MDL	PQL	DF	Analysis Date/Time	
CC-Nitrate-N	CC-Nitrate-N	0.067			mg/L	0.011	0.020	1	04/15/2020	13:31
Enterococci	Enterolert/QT	10	<130	U	MPN/100 mL	10	10	10	04/14/2020	15:24
Nitrogen- Total Kjeldahl	EPA 351.2	0.561			mg/L	0.200	0.500	1	04/16/2020	15:13
Nitrate-Nitrite (N)	EPA 353.2	0.067			mg/L	0.011	0.020	1	04/20/2020	14:40
pH	FDEP FT1100	7.7	6.5 - 8.5		SU			1	04/14/2020	10:16
Specific Conductance	FDEP FT1200	55494			umho/cm			1	04/14/2020	10:16
Dissolved Oxygen Saturation	FDEP FT1500	76	>42		%			1	04/14/2020	10:16
Nitrogen- Total	Nitrogen- Total	0.628	<0.3		mg/L	0.200	0.500	1	04/16/2020	15:13
Chlorophyll a	SM 10200 H	2.5	<4.9		mg/m3	1.00	1.00	1	04/28/2020	08:28
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	04/15/2020	10:45
Pheophytin	SM 10200 H	1.80			mg/m3	1.00	1.00	1	04/28/2020	08:28
Turbidity	SM 2130 B	2.2			NTU	0.10	0.50	1	04/15/2020	09:47
Digestion for TKN	SM 4500 NorgD	Completed						1	04/15/2020	11:37
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	04/15/2020	13:31
Persulfate Digestion for Total P	SM 4500-P B	Completed						1	04/17/2020	11:04
Phosphorus- Total	SM 4500-P E (P	0.055	<0.046		mg/L	0.014	0.040	2	04/20/2020	16:52

ANALYTICAL RESULTS

Report # 0420_MRCO_II

Location: COLLIER_BRIDGE		Field ID: AF59889		Lab ID: AF59889		Collect Date/Time: 4/14/20 10:55				
Analyte Name	Method	Result	Acceptable Limits	Qualifier	Units	MDL	PQL	DF	Analysis Date/Time	
CC-Nitrate-N	CC-Nitrate-N	0.011		U	mg/L	0.011	0.020	1	04/21/2020	08:18
Enterococci	Enterolert/QT	10	<130	U	MPN/100 mL	10	10	10	04/14/2020	15:24
Nitrogen- Total Kjeldahl	EPA 351.2	0.726			mg/L	0.200	0.500	1	04/16/2020	15:15
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	04/20/2020	14:43
pH	FDEP FT1100	7.7	6.5 - 8.5		SU			1	04/14/2020	10:55
Specific Conductance	FDEP FT1200	55522			umho/cm			1	04/14/2020	10:55
Dissolved Oxygen Saturation	FDEP FT1500	71.3	>42		%			1	04/14/2020	10:55
Nitrogen- Total	Nitrogen- Total	0.726	<0.3		mg/L	0.200	0.500	1	04/16/2020	15:15
Chlorophyll a	SM 10200 H	2.5	<4.9		mg/m3	1.00	1.00	1	04/28/2020	08:28
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	04/15/2020	10:45
Pheophytin	SM 10200 H	1.00		U	mg/m3	1.00	1.00	1	04/28/2020	08:28
Turbidity	SM 2130 B	2.7			NTU	0.10	0.50	1	04/15/2020	09:47
Digestion for TKN	SM 4500 NorgD	Completed						1	04/15/2020	11:37
Nitrite (N)	SM 4500-NO2 B	0.002		I	mg/L	0.002	0.005	1	04/15/2020	13:32
Persulfate Digestion for Total P	SM 4500-P B	Completed						1	04/17/2020	11:04
Phosphorus- Total	SM 4500-P E (P	0.057	<0.046		mg/L	0.014	0.040	2	04/20/2020	16:53

ANALYTICAL RESULTS

Report # 0420_MRCO_II

Location: KENDALL		Field ID: AF59890		Lab ID: AF59890		Collect Date/Time: 4/14/20 11:16				
Analyte Name	Method	Result	Acceptable Limits	Qualifier	Units	MDL	PQL	DF	Analysis Date/Time	
CC-Nitrate-N	CC-Nitrate-N	0.011		U	mg/L	0.011	0.020	1	04/21/2020	08:18
Enterococci	Enterolert/QT	10	<130	U	MPN/100 mL	10	10	10	04/14/2020	15:24
Nitrogen- Total Kjeldahl	EPA 351.2	0.581			mg/L	0.200	0.500	1	04/16/2020	15:19
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	04/20/2020	14:45
pH	FDEP FT1100	7.8	6.5 - 8.5		SU			1	04/14/2020	11:16
Specific Conductance	FDEP FT1200	55751			umho/cm			1	04/14/2020	11:16
Dissolved Oxygen Saturation	FDEP FT1500	85.3	>42		%			1	04/14/2020	11:16
Nitrogen- Total	Nitrogen- Total	0.581	<0.3		mg/L	0.200	0.500	1	04/16/2020	15:19
Chlorophyll a	SM 10200 H	3.2	<4.9		mg/m3	1.00	1.00	1	04/28/2020	08:28
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	04/15/2020	10:45
Pheophytin	SM 10200 H	1.00		U	mg/m3	1.00	1.00	1	04/28/2020	08:28
Turbidity	SM 2130 B	4.3			NTU	0.10	0.50	1	04/15/2020	09:47
Digestion for TKN	SM 4500 NorgD	Completed						1	04/15/2020	11:37
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	04/15/2020	13:32
Persulfate Digestion for Total P	SM 4500-P B	Completed						1	04/17/2020	11:04
Phosphorus- Total	SM 4500-P E (P	0.045	<0.046		mg/L	0.014	0.040	2	04/20/2020	16:56

ANALYTICAL RESULTS

Report # 0420_MRCO_II

Location: BARFIELD_BRIDGE		Field ID: AF59891		Lab ID: AF59891		Collect Date/Time: 4/14/20 11:42				
Analyte Name	Method	Result	Acceptable Limits	Qualifier	Units	MDL	PQL	DF	Analysis Date/Time	
CC-Nitrate-N	CC-Nitrate-N	0.011		U	mg/L	0.011	0.020	1	04/21/2020	08:18
Enterococci	Enterolert/QT	10	<130	U	MPN/100 mL	10	10	10	04/14/2020	15:24
Nitrogen- Total Kjeldahl	EPA 351.2	0.580			mg/L	0.200	0.500	1	04/16/2020	15:20
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	04/20/2020	14:48
pH	FDEP FT1100	7.9	6.5 - 8.5		SU			1	04/14/2020	11:42
Specific Conductance	FDEP FT1200	55757			umho/cm			1	04/14/2020	11:42
Dissolved Oxygen Saturation	FDEP FT1500	101.5	>42		%			1	04/14/2020	11:42
Nitrogen- Total	Nitrogen- Total	0.580	<0.3		mg/L	0.200	0.500	1	04/16/2020	15:20
Chlorophyll a	SM 10200 H	4.0	<4.9		mg/m3	1.00	1.00	1	04/28/2020	08:28
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	04/15/2020	10:45
Pheophytin	SM 10200 H	1.50			mg/m3	1.00	1.00	1	04/28/2020	08:28
Turbidity	SM 2130 B	5.7			NTU	0.10	0.50	1	04/15/2020	09:47
Digestion for TKN	SM 4500 NorgD	Completed						1	04/15/2020	11:37
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	04/15/2020	13:33
Persulfate Digestion for Total P	SM 4500-P B	Completed						1	04/17/2020	11:04
Phosphorus- Total	SM 4500-P E (P	0.046	<0.046		mg/L	0.014	0.040	2	04/20/2020	16:57

ANALYTICAL RESULTS

Report # 0420_MRCO_I

Location: LANDMARK		Field ID: AF59892		Lab ID: AF59892		Collect Date/Time: 4/14/20 09:04				
Analyte Name	Method	Result	Acceptable Limits	Qualifier	Units	MDL	PQL	DF	Analysis Date/Time	
CC-Nitrate-N	CC-Nitrate-N	0.014		I	mg/L	0.011	0.020	1	04/21/2020	08:18
Enterococci	Enterolert/QT	74	<130		MPN/100 mL	10	10	10	04/14/2020	15:24
Nitrogen- Total Kjeldahl	EPA 351.2	0.675			mg/L	0.200	0.500	1	04/16/2020	15:08
Nitrate-Nitrite (N)	EPA 353.2	0.014		I	mg/L	0.011	0.020	1	04/20/2020	14:50
pH	FDEP FT1100	7.9	6.5 - 8.5		SU			1	04/14/2020	09:04
Specific Conductance	FDEP FT1200	53176			umho/cm			1	04/14/2020	09:04
Dissolved Oxygen Saturation	FDEP FT1500	99.2	>42		%			1	04/14/2020	09:04
Nitrogen- Total	Nitrogen- Total	0.689	<0.3		mg/L	0.200	0.500	1	04/16/2020	15:08
Chlorophyll a	SM 10200 H	3.9	<4.9		mg/m3	1.00	1.00	1	04/28/2020	08:28
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	04/15/2020	15:15
Pheophytin	SM 10200 H	1.00		U	mg/m3	1.00	1.00	1	04/28/2020	08:28
Turbidity	SM 2130 B	3.1			NTU	0.10	0.50	1	04/15/2020	09:47
Digestion for TKN	SM 4500 NorgD	Completed						1	04/15/2020	11:37
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	04/15/2020	13:34
Persulfate Digestion for Total P	SM 4500-P B	Completed						1	04/17/2020	11:04
Phosphorus- Total	SM 4500-P E (P	0.069	<0.046		mg/L	0.014	0.040	2	04/20/2020	16:51

ANALYTICAL RESULTS

Report # 0420_MRCO_I

<i>Location:</i> W_WINTERBERRY_BRIDGE		<i>Field ID:</i> AF59893		<i>Lab ID:</i> AF59893		<i>Collect Date/Time:</i> 4/14/20 09:29				
Analyte Name	Method	Result	Acceptable Limits	Qualifier	Units	MDL	PQL	DF	Analysis Date/Time	
CC-Nitrate-N	CC-Nitrate-N	0.011		U	mg/L	0.011	0.020	1	04/21/2020	08:18
Enterococci	Enterolert/QT	10	<130	U	MPN/100 mL	10	10	10	04/14/2020	15:24
Nitrogen- Total Kjeldahl	EPA 351.2	0.561			mg/L	0.200	0.500	1	04/16/2020	15:16
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	04/20/2020	14:52
pH	FDEP FT1100	7.8	6.5 - 8.5		SU			1	04/14/2020	09:29
Specific Conductance	FDEP FT1200	55185			umho/cm			1	04/14/2020	09:29
Dissolved Oxygen Saturation	FDEP FT1500	87.1	>42		%			1	04/14/2020	09:29
Nitrogen- Total	Nitrogen- Total	0.561	<0.3		mg/L	0.200	0.500	1	04/16/2020	15:16
Chlorophyll a	SM 10200 H	3.0	<4.9		mg/m3	1.00	1.00	1	04/28/2020	08:28
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	04/15/2020	15:15
Pheophytin	SM 10200 H	2.10			mg/m3	1.00	1.00	1	04/28/2020	08:28
Turbidity	SM 2130 B	7.1			NTU	0.10	0.50	1	04/15/2020	09:47
Digestion for TKN	SM 4500 NorgD	Completed						1	04/15/2020	11:37
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	04/15/2020	13:35
Persulfate Digestion for Total P	SM 4500-P B	Completed						1	04/17/2020	11:04
Phosphorus- Total	SM 4500-P E (P	0.055	<0.046		mg/L	0.014	0.040	2	04/20/2020	16:54

ANALYTICAL RESULTS

Report # 0420_MRCO_I

<i>Location:</i> MCILVAINE		<i>Field ID:</i> AF59894		<i>Lab ID:</i> AF59894		<i>Collect Date/Time:</i> 4/14/20 10:11				
Analyte Name	Method	Result	Acceptable Limits	Qualifier	Units	MDL	PQL	DF	Analysis Date/Time	
CC-Nitrate-N	CC-Nitrate-N	0.028		J	mg/L	0.011	0.020	1	04/21/2020	09:12
Enterococci	Enterolert/QT	10	<130	U	MPN/100 mL	10	10	10	04/14/2020	15:24
Nitrogen- Total Kjeldahl	EPA 351.2	1.96			mg/L	0.200	0.500	1	04/16/2020	15:17
Nitrate-Nitrite (N)	EPA 353.2	0.028		J	mg/L	0.011	0.020	1	04/20/2020	15:05
pH	FDEP FT1100	7.8	6.5 - 8.5		SU			1	04/14/2020	10:11
Specific Conductance	FDEP FT1200	55779			umho/cm			1	04/14/2020	10:11
Dissolved Oxygen Saturation	FDEP FT1500	86.8	>42		%			1	04/14/2020	10:11
Nitrogen- Total	Nitrogen- Total	1.99	<0.3	J	mg/L	0.200	0.500	1	04/16/2020	15:17
Chlorophyll a	SM 10200 H	3.9	<4.9		mg/m3	1.00	1.00	1	04/28/2020	08:28
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	04/15/2020	15:15
Pheophytin	SM 10200 H	1.60			mg/m3	1.00	1.00	1	04/28/2020	08:28
Turbidity	SM 2130 B	12			NTU	0.10	0.50	1	04/15/2020	09:47
Digestion for TKN	SM 4500 NorgD	Completed						1	04/15/2020	11:37
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	04/15/2020	13:36
Persulfate Digestion for Total P	SM 4500-P B	Completed						1	04/17/2020	11:04
Phosphorus- Total	SM 4500-P E (P	0.053	<0.046		mg/L	0.014	0.040	2	04/20/2020	16:55

ANALYTICAL RESULTS

Report # 0420_MRCO_I

Location: WINDMILL		Field ID: AF59895		Lab ID: AF59895		Collect Date/Time: 4/14/20 10:44				
Analyte Name	Method	Result	Acceptable Limits	Qualifier	Units	MDL	PQL	DF	Analysis Date/Time	
CC-Nitrate-N	CC-Nitrate-N	0.011		U	mg/L	0.011	0.020	1	04/21/2020	08:18
Enterococci	Enterolert/QT	10	<130	U	MPN/100 mL	10	10	10	04/14/2020	15:24
Nitrogen- Total Kjeldahl	EPA 351.2	0.796			mg/L	0.200	0.500	1	04/16/2020	15:22
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	04/20/2020	15:12
pH	FDEP FT1100	7.8	6.5 - 8.5		SU			1	04/14/2020	10:44
Specific Conductance	FDEP FT1200	55265			umho/cm			1	04/14/2020	10:44
Dissolved Oxygen Saturation	FDEP FT1500	84.1	>42		%			1	04/14/2020	10:44
Nitrogen- Total	Nitrogen- Total	0.796	<0.3		mg/L	0.200	0.500	1	04/16/2020	15:22
Chlorophyll a	SM 10200 H	5.7	<4.9		mg/m3	1.00	1.00	1	04/28/2020	08:28
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	04/15/2020	15:15
Pheophytin	SM 10200 H	1.50			mg/m3	1.00	1.00	1	04/28/2020	08:28
Turbidity	SM 2130 B	7.1			NTU	0.10	0.50	1	04/15/2020	09:47
Digestion for TKN	SM 4500 NorgD	Completed						1	04/15/2020	11:37
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	04/15/2020	13:39
Persulfate Digestion for Total P	SM 4500-P B	Completed						1	04/17/2020	11:04
Phosphorus- Total	SM 4500-P E (P	0.048	<0.046		mg/L	0.014	0.040	2	04/20/2020	16:58

ANALYTICAL RESULTS

Report # 0420_MRCO_I

Location: HUMMINGBIRD		Field ID: AF59896		Lab ID: AF59896		Collect Date/Time: 4/14/20 11:25				
Analyte Name	Method	Result	Acceptable Limits	Qualifier	Units	MDL	PQL	DF	Analysis Date/Time	
CC-Nitrate-N	CC-Nitrate-N	0.011		U	mg/L	0.011	0.020	1	04/21/2020	08:18
Enterococci	Enterolert/QT	10	<130	U	MPN/100 mL	10	10	10	04/14/2020	15:24
Nitrogen- Total Kjeldahl	EPA 351.2	0.753			mg/L	0.200	0.500	1	04/16/2020	16:14
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	04/20/2020	15:14
pH	FDEP FT1100	7.7	6.5 - 8.5		SU			1	04/14/2020	11:25
Specific Conductance	FDEP FT1200	54910			umho/cm			1	04/14/2020	11:25
Dissolved Oxygen Saturation	FDEP FT1500	85	>42		%			1	04/14/2020	11:25
Nitrogen- Total	Nitrogen- Total	0.753	<0.3		mg/L	0.200	0.500	1	04/16/2020	16:14
Chlorophyll a	SM 10200 H	3.7	<4.9		mg/m3	1.00	1.00	1	04/28/2020	08:28
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	04/15/2020	15:15
Pheophytin	SM 10200 H	3.40			mg/m3	1.00	1.00	1	04/28/2020	08:28
Turbidity	SM 2130 B	3.9			NTU	0.10	0.50	1	04/15/2020	09:47
Digestion for TKN	SM 4500 NorgD	Completed						1	04/15/2020	11:37
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	04/15/2020	13:40
Persulfate Digestion for Total P	SM 4500-P B	Completed						1	04/17/2020	11:04
Phosphorus- Total	SM 4500-P E (P	0.051	<0.046		mg/L	0.014	0.040	2	04/20/2020	17:10

ANALYTICAL RESULTS

Report # 0420_MRCO_I

Location: HOLLYHOCK		Field ID: AF59897		Lab ID: AF59897		Collect Date/Time: 4/14/20 11:05				
Analyte Name	Method	Result	Acceptable Limits	Qualifier	Units	MDL	PQL	DF	Analysis Date/Time	
CC-Nitrate-N	CC-Nitrate-N	0.011		U	mg/L	0.011	0.020	1	04/21/2020	08:18
Enterococci	Enterolert/QT	10	<130		MPN/100 mL	10	10	10	04/14/2020	15:24
Nitrogen- Total Kjeldahl	EPA 351.2	0.792			mg/L	0.200	0.500	1	04/16/2020	16:16
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	04/20/2020	15:17
pH	FDEP FT1100	7.7	6.5 - 8.5		SU			1	04/14/2020	11:05
Specific Conductance	FDEP FT1200	56008			umho/cm			1	04/14/2020	11:05
Dissolved Oxygen Saturation	FDEP FT1500	91.1	>42		%			1	04/14/2020	11:05
Nitrogen- Total	Nitrogen- Total	0.792	<0.3		mg/L	0.200	0.500	1	04/16/2020	16:16
Chlorophyll a	SM 10200 H	7.6	<4.9		mg/m3	1.00	1.00	1	04/28/2020	08:28
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	04/15/2020	15:15
Pheophytin	SM 10200 H	3.00			mg/m3	1.00	1.00	1	04/28/2020	08:28
Turbidity	SM 2130 B	2.7			NTU	0.10	0.50	1	04/15/2020	09:47
Digestion for TKN	SM 4500 NorgD	Completed						1	04/15/2020	11:37
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	04/15/2020	13:43
Persulfate Digestion for Total P	SM 4500-P B	Completed						1	04/17/2020	11:04
Phosphorus- Total	SM 4500-P E (P	0.056	<0.046		mg/L	0.014	0.040	2	04/20/2020	17:11

ANALYTICAL RESULTS

Report # 0420_MRCO_I

Location: E_WINTERBERRY_BRIDGE		Field ID: AF59898		Lab ID: AF59898		Collect Date/Time: 4/14/20 11:46				
Analyte Name	Method	Result	Acceptable Limits	Qualifier	Units	MDL	PQL	DF	Analysis Date/Time	
CC-Nitrate-N	CC-Nitrate-N	0.011		U	mg/L	0.011	0.020	1	04/21/2020	08:18
Enterococci	Enterolert/QT	10	<130	U	MPN/100 mL	10	10	10	04/14/2020	15:24
Nitrogen- Total Kjeldahl	EPA 351.2	1.60			mg/L	0.200	0.500	1	04/16/2020	16:13
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	04/20/2020	15:19
pH	FDEP FT1100	7.9	6.5 - 8.5		SU			1	04/14/2020	11:46
Specific Conductance	FDEP FT1200	55136			umho/cm			1	04/14/2020	11:46
Dissolved Oxygen Saturation	FDEP FT1500	95.9	>42		%			1	04/14/2020	11:46
Nitrogen- Total	Nitrogen- Total	1.60	<0.3		mg/L	0.200	0.500	1	04/16/2020	16:13
Chlorophyll a	SM 10200 H	6.5	<4.9		mg/m3	1.00	1.00	1	04/28/2020	08:28
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	04/15/2020	15:15
Pheophytin	SM 10200 H	1.10			mg/m3	1.00	1.00	1	04/28/2020	08:28
Turbidity	SM 2130 B	6.1			NTU	0.10	0.50	1	04/15/2020	09:47
Digestion for TKN	SM 4500 NorgD	Completed						1	04/15/2020	11:37
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	04/15/2020	13:46
Persulfate Digestion for Total P	SM 4500-P B	Completed						1	04/17/2020	11:04
Phosphorus- Total	SM 4500-P E (P	0.050	<0.046		mg/L	0.014	0.040	2	04/20/2020	17:03

ANALYTICAL RESULTS

Report # 0420_MRCO_I

Location: SWALLOW		Field ID: AF59899		Lab ID: AF59899		Collect Date/Time: 4/14/20 12:08				
Analyte Name	Method	Result	Acceptable Limits	Qualifier	Units	MDL	PQL	DF	Analysis Date/Time	
CC-Nitrate-N	CC-Nitrate-N	0.013		I	mg/L	0.011	0.020	1	04/21/2020	08:18
Enterococci	Enterolert/QT	10	<130	U	MPN/100 mL	10	10	10	04/14/2020	15:24
Nitrogen- Total Kjeldahl	EPA 351.2	0.694			mg/L	0.200	0.500	1	04/16/2020	16:02
Nitrate-Nitrite (N)	EPA 353.2	0.013		I	mg/L	0.011	0.020	1	04/20/2020	15:22
pH	FDEP FT1100	7.9	6.5 - 8.5		SU			1	04/14/2020	12:08
Specific Conductance	FDEP FT1200	54630			umho/cm			1	04/14/2020	12:08
Dissolved Oxygen Saturation	FDEP FT1500	103.7	>42		%			1	04/14/2020	12:08
Nitrogen- Total	Nitrogen- Total	0.707	<0.3		mg/L	0.200	0.500	1	04/16/2020	16:02
Chlorophyll a	SM 10200 H	4.9	<4.9	J	mg/m3	1.00	1.00	1	04/28/2020	08:28
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	04/15/2020	15:15
Pheophytin	SM 10200 H	1.00		U	mg/m3	1.00	1.00	1	04/28/2020	08:28
Turbidity	SM 2130 B	2.8			NTU	0.10	0.50	1	04/15/2020	09:47
Digestion for TKN	SM 4500 NorgD	Completed						1	04/15/2020	11:37
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	04/15/2020	13:47
Persulfate Digestion for Total P	SM 4500-P B	Completed						1	04/17/2020	11:04
Phosphorus- Total	SM 4500-P E (P	0.040	<0.046		mg/L	0.014	0.040	2	04/20/2020	17:06

ANALYTICAL RESULTS

Report # 0420_MRCO_I

Location: MARCO_BLANK		Field ID: AF59900		Lab ID: AF59900		Collect Date/Time: 4/14/20 09:55				
Analyte Name	Method	Result	Acceptable Limits	Qualifier	Units	MDL	PQL	DF	Analysis Date/Time	
CC-Nitrate-N	CC-Nitrate-N	0.011		U	mg/L	0.011	0.020	1	04/21/2020	08:18
Enterococci	Enterolert/QT	1	<130	U	MPN/100 mL	1	1	1	04/14/2020	15:24
Nitrogen- Total Kjeldahl	EPA 351.2	0.200		U	mg/L	0.200	0.500	1	04/16/2020	16:06
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	04/20/2020	15:24
pH	FDEP FT1100	NA	6.5 - 8.5		SU			1	04/14/2020	09:55
Specific Conductance	FDEP FT1200	NA			umho/cm			1	04/14/2020	09:55
Dissolved Oxygen Saturation	FDEP FT1500	NA	>42		%			1	04/14/2020	09:55
Nitrogen- Total	Nitrogen- Total	0.200	<0.3	U	mg/L	0.200	0.500	1	04/21/2020	08:18
Chlorophyll a	SM 10200 H	1.0	<4.9	U	mg/m3	1.00	1.00	1	04/28/2020	08:28
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	04/15/2020	15:15
Pheophytin	SM 10200 H	1.00		U	mg/m3	1.00	1.00	1	04/28/2020	08:28
Turbidity	SM 2130 B	0.10		U	NTU	0.10	0.50	1	04/15/2020	09:47
Digestion for TKN	SM 4500 NorgD	Completed						1	04/15/2020	11:37
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	04/15/2020	13:47
Persulfate Digestion for Total P	SM 4500-P B	Completed						1	04/17/2020	11:04
Phosphorus- Total	SM 4500-P E (P	0.007	<0.046	U	mg/L	0.007	0.020	1	04/20/2020	17:07

ANALYTICAL RESULTS

Report # 0420_MRCO_I

Location: DUP1		Field ID: AF59901		Lab ID: AF59901		Collect Date/Time: 4/14/20 12:14				
Analyte Name	Method	Result	Acceptable Limits	Qualifier	Units	MDL	PQL	DF	Analysis Date/Time	
CC-Nitrate-N	CC-Nitrate-N	0.011		U	mg/L	0.011	0.020	1	04/21/2020	08:18
Enterococci	Enterolert/QT	10	<130	U	MPN/100 mL	10	10	10	04/14/2020	15:24
Nitrogen- Total Kjeldahl	EPA 351.2	0.631			mg/L	0.200	0.500	1	04/16/2020	15:23
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	04/20/2020	15:27
pH	FDEP FT1100	7.9	6.5 - 8.5		SU			1	04/14/2020	12:14
Specific Conductance	FDEP FT1200	54555			umho/cm			1	04/14/2020	12:14
Dissolved Oxygen Saturation	FDEP FT1500	101.9	>42		%			1	04/14/2020	12:14
Nitrogen- Total	Nitrogen- Total	0.631	<0.3		mg/L	0.200	0.500	1	04/16/2020	15:23
Chlorophyll a	SM 10200 H	2.8	<4.9	J	mg/m3	1.00	1.00	1	04/28/2020	08:28
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	04/15/2020	15:15
Pheophytin	SM 10200 H	1.00		U	mg/m3	1.00	1.00	1	04/28/2020	08:28
Turbidity	SM 2130 B	3.2			NTU	0.10	0.50	1	04/15/2020	09:47
Digestion for TKN	SM 4500 NorgD	Completed						1	04/15/2020	11:37
Nitrite (N)	SM 4500-NO2 B	0.002		I	mg/L	0.002	0.005	1	04/15/2020	13:48
Persulfate Digestion for Total P	SM 4500-P B	Completed						1	04/17/2020	11:04
Phosphorus- Total	SM 4500-P E (P	0.048			mg/L	0.014	0.040	2	04/20/2020	17:01

ANALYTICAL RESULTS

Report # 0420_MRCO_II

Location: OLDE_MARCO		Field ID: AF59902		Lab ID: AF59902		Collect Date/Time: 4/14/20 09:14				
Analyte Name	Method	Result	Acceptable Limits	Qualifier	Units	MDL	PQL	DF	Analysis Date/Time	
CC-Nitrate-N	CC-Nitrate-N	0.011		U	mg/L	0.011	0.020	1	04/21/2020	08:18
Enterococci	Enterolert/QT	10	<130	U	MPN/100 mL	10	10	10	04/14/2020	15:24
Nitrogen- Total Kjeldahl	EPA 351.2	0.725			mg/L	0.200	0.500	1	04/16/2020	16:10
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	04/20/2020	15:29
pH	FDEP FT1100	7.8	6.5 - 8.5		SU			1	04/14/2020	09:14
Specific Conductance	FDEP FT1200	56343			umho/cm			1	04/14/2020	09:14
Dissolved Oxygen Saturation	FDEP FT1500	86.2	>42		%			1	04/14/2020	09:14
Nitrogen- Total	Nitrogen- Total	0.725	<0.3		mg/L	0.200	0.500	1	04/16/2020	16:10
Chlorophyll a	SM 10200 H	5.4	<4.9		mg/m3	1.00	1.00	1	04/28/2020	08:28
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	04/15/2020	10:45
Pheophytin	SM 10200 H	2.10			mg/m3	1.00	1.00	1	04/28/2020	08:28
Turbidity	SM 2130 B	16			NTU	0.10	0.50	1	04/15/2020	09:47
Digestion for TKN	SM 4500 NorgD	Completed						1	04/15/2020	11:37
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	04/15/2020	13:49
Persulfate Digestion for Total P	SM 4500-P B	Completed						1	04/17/2020	11:04
Phosphorus- Total	SM 4500-P E (P	0.077	<0.046		mg/L	0.014	0.040	2	04/20/2020	17:08

ANALYTICAL RESULTS

Report # 0420_MRCO_II

Location: MARCO_BLANK		Field ID: AF59933		Lab ID: AF59933		Collect Date/Time: 4/14/20 09:24				
Analyte Name	Method	Result	Acceptable Limits	Qualifier	Units	MDL	PQL	DF	Analysis Date/Time	
CC-Nitrate-N	CC-Nitrate-N	0.011		U	mg/L	0.011	0.020	1	04/21/2020	08:18
Enterococci	Enterolert/QT	1	<130	U	MPN/100 mL	1	1	1	04/14/2020	15:24
Nitrogen- Total Kjeldahl	EPA 351.2	0.200		U	mg/L	0.200	0.500	1	04/16/2020	17:14
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	04/20/2020	15:31
pH	FDEP FT1100	NA	6.5 - 8.5		SU			1	04/14/2020	09:24
Specific Conductance	FDEP FT1200	NA			umho/cm			1	04/14/2020	09:24
Dissolved Oxygen Saturation	FDEP FT1500	NA	>42		%			1	04/14/2020	09:24
Nitrogen- Total	Nitrogen- Total	0.200	<0.3	U	mg/L	0.200	0.500	1	04/21/2020	08:18
Chlorophyll a	SM 10200 H	1.0	<4.9	U	mg/m3	1.00	1.00	1	04/28/2020	08:28
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	04/15/2020	10:45
Pheophytin	SM 10200 H	1.00		U	mg/m3	1.00	1.00	1	04/28/2020	08:28
Turbidity	SM 2130 B	0.10		U	NTU	0.10	0.50	1	04/15/2020	09:47
Digestion for TKN	SM 4500 NorgD	Completed						1	04/15/2020	11:37
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	04/15/2020	13:50
Persulfate Digestion for Total P	SM 4500-P B	Completed						1	04/17/2020	11:04
Phosphorus- Total	SM 4500-P E (P	0.007	<0.046	U	mg/L	0.007	0.020	1	04/20/2020	17:09



Collier County™

POLLUTION CONTROL

LIVE GREEN. SAVE BLUE.

Field Sampling Report

Date: Tuesday, April 14, 2020

Sampler: Krystal Silas

Meter/Notes: Chris Lienhardt



Certificate No

[4262.01](#)

Client: City of Marco Island
Project: Marco Island
Run: MARCO_I

CCV: Morning		Sonde / Handheld	ProDSS #11	Serial #:	19E104158		
Date/Time:	4/13/20 1:13 PM		Operator:	Chris Lienhardt	Project:	MARCO	
*** Conductivity ***					Associated Calibration File:		
Standard (µmhos/cm) ± 5%	CDI#	Reading	Pass/Fail	Calibration_11_041020			
10000	11624	10186	Pass				
70000	13503	71417	Pass				
*** pH ***							
pH (QA Criteria ±.2)	CDI#	Reading	Pass/Fail	All CCV Results Pass? Yes			
4.00							
7.00	13953	7.03	Pass				
10.00	13951	10.02	Pass				
*** Dissolved Oxygen ***							
D.O. (QA Criteria ±3mg/l)	mg/L	%	°C	Pass/Fail	True Value	Barometric Pressure	
CCV Readings --->	8.48	101.2	24.4	Pass	8.370	761.4	
Notes:							
CCV: Afternoon		Date/Time:	4/14/2020 13:36	Operator:	Chris Lienhardt		
*** Conductivity ***							
Standard (µmhos/cm) ± 5%	CDI#	Reading	Pass/Fail				
10000	11624	10160	Pass				
70000	13301	71560	Pass				
*** pH ***					All CCV Results Pass? Yes		
pH (QA Criteria +.2)	CDI#	Reading	Pass/Fail				
4.00							
7.00	13953	7.05	Pass				
10.00	13951	10.06	Pass				
*** Dissolved Oxygen ***							
D.O. (QA Criteria ±3mg/l)	mg/L	%	°C	Pass/Fail	True Value	Barometric Pressure	
CCV Readings --->	8.65	101.2	23.2	Pass	8.556	760.9	
Notes:							

Collier County Pollution Control Surface Water Field Workbook
Field Sheet Worksheet

MARCO_I_041420
3 of 10

Program: MARCO

Run: MARCO_I

Sample Collector: Krystal Silas

Meter / Notes: Chris Lienhardt

Date: 4/14/2020

LAB ID	TIME	STATION	Temp (°C)	Sp Cond (µS/cm)	Sal (ppt)	D.O. (% SAT)	ODO (mg/L)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF59892	9:04	LANDMARK	27.9	53176	35.00	99.2	6.42	7.92	0.30		2.00	2.00
AF59892B	9:06	LANDMARK	28.5	54641	36.07	92.4	5.89	7.89	1.70		2.00	2.00
Collection Device	Pole Sampler; CDI: 10882		Cleaning Protocol: J			Flow: [REDACTED]		Staff Gauge:		pH < 2:		YES
Comments: Strong breeze making it difficult to determine tidal flow. Tide chart shows outgoing until ~12:40. Leaf littler observed on surface.											Sample Type:	SAMP

LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF59893	9:29	W_WINTERBERRY_BRIDGE	28.3	55185	36.49	87.1	5.55	7.82	0.30		2.50	1.50
AF59893B	9:31	W_WINTERBERRY_BRIDGE	28.3	55256	36.54	80.6	5.14	7.81	2.20		2.50	1.50
Collection Device	Pole Sampler; CDI: 10882		Cleaning Protocol: J			Flow: [REDACTED]		Staff Gauge:		pH < 2:		YES
Comments: Strong breeze making it difficult to determine tidal flow. Tide chart shows outgoing until ~12:40. Boat passed within 100' during sampling.											Sample Type:	SAMP

LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF59900	9:55	MCILVAINE										
Collection Device	VanDorn; CDI: 06978		Cleaning Protocol:			Flow:		Staff Gauge:		pH < 2:		YES
Comments: EB taken from CDI08334 carboy.											Sample Type:	EB

LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF59894	10:11	MCILVAINE	28.0	55779	36.94	86.8	5.55	7.84	0.30		2.00	0.50
AF59894B	10:13	MCILVAINE	28.0	55826	36.98	87.5	5.60	7.84	1.70		2.00	0.50
Collection Device	VanDorn; CDI: 06978		Cleaning Protocol: J			Flow: [REDACTED]		Staff Gauge:		pH < 2:		YES
Comments: Strong breeze making it difficult to determine tidal flow. Tide chart shows outgoing until ~12:40.											Sample Type:	SAMP

Bottles Per Site / Shipped Per Site:	5 / 0	Matrix: SW	Named storm event that impacted sampling event?	No
Sites Access By:	Truck	Weather:	Sunny and hot. Temps in mid 90s. Strong breeze out of the SSE.	
Sampling SOP:	FSQM 03-04	24 HRS Prior Weather:	Similar and windy.	

Prepared By: Christopher Lienhardt Signed: 4/27/2020 2:05:13 PM

Reviewed By: *Krystal Silas* Signed: 4/14/2020 2:20:47 PM

Collier County Pollution Control Surface Water Field Workbook
Field Sheet Worksheet

MARCO_I_041420
4 of 10

Program: MARCO

Run: MARCO_I

Sample Collector: Krystal Silas

Meter / Notes: Chris Lienhardt

Date: 4/14/2020

LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF59895	10:44	WINDMILL	28.7	55265	36.54	84.1	5.34	7.75	0.30		2.10	1.30
AF59895B	10:46	WINDMILL	28.6	55412	36.65	82.0	5.21	7.74	1.80		2.10	1.30
Collection Device	Pole Sampler; CDI: 10882		Cleaning Protocol: J			Flow: [REDACTED]		Staff Gauge:			pH < 2:	YES
Comments:	Strong breeze making it difficult to determine tidal flow. Tide chart shows outgoing until ~12:40. Leaf littler observed on surface.										Sample Type:	SAMP

LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF59897	11:05	HOLLYHOCK	29.1	56008	37.08	91.1	5.73	7.72	0.30		1.30	1.30
Collection Device	Pole Sampler; CDI: 10882		Cleaning Protocol: J			Flow: [REDACTED]		Staff Gauge:			pH < 2:	YES
Comments:	Strong breeze making it difficult to determine tidal flow. Tide chart shows outgoing until ~12:40. Leaf littler observed on surface.										Sample Type:	SAMP

LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF59896	11:25	HUMMINGBIRD	29.0	54910	36.26	85.0	5.37	7.72	0.30		1.60	1.60
AF59896B	11:27	HUMMINGBIRD	29.0	54915	36.26	84.2	5.32	7.72	1.30		1.60	1.60
Collection Device	Pole Sampler; CDI: 10882		Cleaning Protocol: J			Flow: [REDACTED]		Staff Gauge:			pH < 2:	YES
Comments:	Strong breeze making it difficult to determine tidal flow. Tide chart shows outgoing until ~12:40. Boat passed within 100' during sampling.										Sample Type:	SAMP

LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF59898	11:46	E_WINTERBERRY_BRIDGE	29.0	55136	36.43	95.9	6.05	7.86	0.30		1.80	1.30
AF59898B	11:48	E_WINTERBERRY_BRIDGE	28.8	55135	36.43	88.1	5.58	7.85	1.50		1.80	1.30
Collection Device	Pole Sampler; CDI: 10882		Cleaning Protocol: J			Flow: [REDACTED]		Staff Gauge:			pH < 2:	YES
Comments:	Strong breeze making it difficult to determine tidal flow. Tide chart shows outgoing until ~12:40. New construction occurring across canal.										Sample Type:	SAMP

Bottles Per Site / Shipped Per Site:	5 / 0	Matrix: SW	Named storm event that impacted sampling event?	No
Sites Access By:	Truck	Weather:	Sunny and hot. Temps in mid 90s. Strong breeze out of the SSE.	
Sampling SOP Used:	FSQM 03-04	24 HRS Prior Weather:	Similar and windy.	

Prepared By: Christopher Lienhardt

Reviewed By: Krystal Silas

Collier County Pollution Control Surface Water Field Workbook
Field Sheet Worksheet

MARCO_I_041420
5 of 10

Program: MARCO

Run: MARCO_I

Sample Collector: Krystal Silas

Meter / Notes: Chris Lienhardt

Date: 4/14/2020

LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF59899	12:08	SWALLOW	28.8	54630	36.06	103.7	6.58	7.92	0.30		1.90	1.20
AF59899B	12:10	SWALLOW	28.4	54952	36.31	63.6	4.05	7.80	1.60		1.90	1.20
Collection Device	Pole Sampler; CDI: 10882		Cleaning Protocol: J			Flow:		Staff Gauge:		pH < 2:		YES
Comments:	Unable to determine tidal flow. Tide charts show outgoing tide until ~12:40. Heavy fish presence with some stirring up bottom near site.										Sample Type:	SAMP

LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF59901	12:14	SWALLOW	28.8	54555	36.00	101.9	6.46	7.91	0.30		1.90	1.20
AF59901B	12:16	SWALLOW	28.4	54946	36.30	66.3	4.23	7.83	1.60		1.90	1.20
Collection Device	Pole Sampler; CDI: 10882		Cleaning Protocol: J			Flow:		Staff Gauge:		pH < 2:		YES
Comments:	Unable to determine tidal flow. Tide charts show outgoing tide until ~12:40. Heavy fish presence with some stirring up bottom near site.										Sample Type:	REP

LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
Collection Device			Cleaning Protocol:			Flow:		Staff Gauge:		pH < 2:		
Comments:											Sample Type:	

LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
Collection Device			Cleaning Protocol:			Flow:		Staff Gauge:		pH < 2:		
Comments:											Sample Type:	

Bottles Per Site / Shipped Per Site:	5 / 0	Matrix: SW	Named storm event that impacted sampling event?	No
Sites Access By:	Truck	Weather:	Sunny and hot. Temps in mid 90s. Strong breeze out of the SSE.	
Sampling SOP Used:	FSQM 03-04	24 HRS Prior Weather:	Similar and windy.	

Prepared By: Christopher Lienhardt

Reviewed By: Krystal Silas

Collier County Pollution Control Surface Water Field Workbook
Field Sheet Worksheet

MARCO_I_041420
6 of 10

Program: MARCO

Run: MARCO_I

Sample Collector: Krystal Silas

Meter / Notes: Chris Lienhardt

Date: 4/14/2020

LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
Collection Device			Cleaning Protocol:			Flow:		Staff Gauge:		pH < 2:		
Comments:										Sample Type:		

LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
Collection Device			Field Cleaning Protocol:			Flow:		Staff Gauge:		pH < 2:		
Comments:										Sample Type:		

LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
Collection Device			Cleaning Protocol:			Flow:		Staff Gauge:		pH < 2:		
Comments:										Sample Type:		

LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
Collection Device			Cleaning Protocol:			Flow:		Staff Gauge:		pH < 2:		
Comments:										Sample Type:		

Bottles Per Site / Shipped Per Site:	5 / 0	Matrix: SW	Named storm event that impacted sampling event?	No
Sites Access By:	Truck	Weather:	Sunny and hot. Temps in mid 90s. Strong breeze out of the SSE.	
Sampling SOP Used:	FSQM 03-04	24 HRS Prior Weather:	Similar and windy.	

Prepared By: Christopher Lienhardt

Reviewed By: Krystal Silas



Collier County Pollution Control Department Chain of Custody

3339 Tamiami Trail East, Bldg. Ste. 304 Naples, Florida 34112

Phone: (239) 252-2502 FAX: (239) 252-6479

NELAC Certification: #E45464

Client Information

Name: Rhonda Watkins
Company Name: Collier County Natural Resources
Address: 2685 South Horseshoe Drive Ste 103, Fl 34104
Phone: (239) 252-2502 Ext. 6049
Fax: (239) 252-6479

PRESERVATION CODES	Lot#	Prs. Vol.	Prs. Lot#	Prs. Supp.	Prs. Date	Initials
1G 1000mL HDPE/Ice	74670					
2C 1L Opaque HDPE/Light-shielded/Ice	AF59928, 59929					
3S 250ml HDPE/H2SO4/Ice	CDI13012	16 Drops	RP14814	Fisher	4/14/2020	CTL, KS
4F 60ml Opaque HDPE/Filtered/Ice	AF55358					
5J 120mL HDPE w/Sodium Thiosulfate/Ice	CDI12141, 13470					
14 Whatman Polydisc GW 0.45µm	A29352435					

Project	MARCO	MATRIX CODES
Sample Collector(s):		GW Ground Water
Krystal Silas		SW Surface Water
Sample Collector Signature:		WW Waste Water
		DW Drinking Water
		Other _____
Relinquished By: (Signature)		

Received By: (Signature)	Date/Time	4/14/20 2:30 PM
Relinquished By: (Signature)	Date/Time	4/14/20 2:30 PM
Received By: (Signature)	Date/Time	

Parameters										Sample Check-In		
Turbidity-PC Chlorophyll-PC, Pheophytin-PC, Prep-Chloro Nitrogen-TKN-PC, Phosphorous-Total-PC, Nitrate-Nitrite-PC, Prep-TKN Nitrite-PC Enterolert-PC TN-PC, CC-Nitrate-N-PC											Sample(s) Intact?	
											Rec'd in wet ice?	
											Temp °C:	
											Proper Samp ID?	
											Rec'd within hold time?	
											Acid preserved samples pH<2?	
Bottle Codes										Logged In?		
											Scanned?	

Date	Time	Field pH	Sp. Cond.	Sample Depth	Location	Matrix	# of sample Containers Submitted										Lab ID #				
							1G	2C	3S	4F	5J	Calc									
4/14/2020	9:04	7.92	53176	0.30	LANDMARK	SW	1	1	1	1	1										AF59892
4/14/2020	9:29	7.82	55185	0.30	W_WINTERBERRY_BRIDGE	SW	1	1	1	1	1										AF59893
4/14/2020	9:55	#N/A	#N/A	#N/A	MCILVAINE	SW	1	1	1	1	1										AF59900
4/14/2020	10:11	7.84	55779	0.30	MCILVAINE	SW	1	1	1	1	1										AF59894
4/14/2020	10:44	7.75	55265	0.30	WINDMILL	SW	1	1	1	1	1										AF59895
4/14/2020	11:05	7.72	56008	0.30	HOLLYHOCK	SW	1	1	1	1	1										AF59897
4/14/2020	11:25	7.72	54910	0.30	HUMMINGBIRD	SW	1	1	1	1	1										AF59896
4/14/2020	11:46	7.86	55136	0.30	E_WINTERBERRY_BRIDGE	SW	1	1	1	1	1										AF59898
4/14/2020	12:08	7.92	54630	0.30	SWALLOW	SW	1	1	1	1	1										AF59899
4/14/2020	12:14	7.91	54555	0.30	REPLICATE	SW	1	1	1	1	1										AF59901

Notes:

Collier County Pollution Control Surface Water Field Workbook
Audit Trail Worksheet

Sheet & Cell Reference	Initial Value	Changed To	User	Date & Time	Reason For Change	Analyst E-verified Signature
Field Sheet-B29	Tide chart shows outgo	Tide chart shows outgoing until ~12:40.	Sampler	4/14/2020 10:18	Incorrect initial entry.	Christopher Lienhardt
Calibration-F5:H5			Sampler	4/14/2020 13:36		Christopher Lienhardt
Field Sheet-B61	Tide chart shows outgoing until ~12:40. New construction occurring across canal.	Tide chart shows outgoing until ~12:40. New construction occurring across canal.	Sampler	4/14/2020 13:38	SPELLING	Christopher Lienhardt
Field Sheet-M69		1.9	1.2 Sampler	4/14/2020 13:38	Incorrect initial entry.	Christopher Lienhardt
Field Sheet-L69		1.2	1.9 Sampler	4/14/2020 13:38	Incorrect initial entry.	Christopher Lienhardt
Field Sheet-E31	Sunny and hot. Temps in mid 90s.	Sunny and hot. Temps in mid 90s. Strong breeze out of the SSE.	ChristopherLienhardt	4/16/2020 13:54	more details	Christopher Lienhardt
Field Sheet-B8	Tide chart shows outgoing until ~12:40. Leaf littler observed on surface.	Strong breeze making it difficult to determine tidal flow. Tide chart shows outgoing until ~12:40. Leaf littler observed on surface.	ChristopherLienhardt	4/16/2020 13:55	more details	Christopher Lienhardt
Field Sheet-B15	Tide chart shows outgoing until ~12:40. Boat passed within 100' during sampling.	Strong breeze making it difficult to determine tidal flow. Tide chart shows outgoing until ~12:40. Boat passed within 100' during sampling.	ChristopherLienhardt	4/16/2020 13:55	more details	Christopher Lienhardt
Field Sheet-B29	Tide chart shows outgoing until ~12:40.	Strong breeze making it difficult to determine tidal flow. Tide chart shows outgoing until ~12:40.	ChristopherLienhardt	4/16/2020 13:56	Incorrect initial entry.	Christopher Lienhardt
Field Sheet-B40	Tide chart shows outgoing until ~12:40. Leaf littler observed on surface.	Strong breeze making it difficult to determine tidal flow. Tide chart shows outgoing until ~12:40. Leaf littler observed on surface.	ChristopherLienhardt	4/16/2020 13:56	more details	Christopher Lienhardt
Field Sheet-B47	Tide chart shows outgoing until ~12:40. Leaf littler observed on surface.	Strong breeze making it difficult to determine tidal flow. Tide chart shows outgoing until ~12:40. Leaf littler observed on surface.	ChristopherLienhardt	4/16/2020 13:56	more details	Christopher Lienhardt
Field Sheet-B54	Tide chart shows outgoing until ~12:40. Boat passed within 100' during sampling.	Strong breeze making it difficult to determine tidal flow. Tide chart shows outgoing until ~12:40. Boat passed within 100' during sampling.	ChristopherLienhardt	4/16/2020 13:56	more details	Christopher Lienhardt
Field Sheet-B61	Tide chart shows outgoing until ~12:40. New construction occurring across canal.	Tide chart shows outgoing until ~12:40. New construction occurring across canal.	ChristopherLienhardt	4/16/2020 13:57	more details	Christopher Lienhardt
Calibration-F5	Calibration_11_041020(ABORT).xlsm	Calibration_11_041020	ChristopherLienhardt	4/16/2020 13:57	Incorrect initial entry.	Christopher Lienhardt
Field Sheet-M22	EB	FB	ChristopherLienhardt	4/27/2020 14:04	Incorrect initial entry.	Christopher Lienhardt
Field Sheet-B22	EB taken from CDI08334 carboy.	FB taken from CDI08334 carboy.	ChristopherLienhardt	4/27/2020 14:04	Incorrect initial entry.	Christopher Lienhardt
Field Sheet-M22	FB	EB	geoffreyrosenaw	5/5/2020 9:41	Incorrect initial entry.	Geoff Rosenaw
Field Sheet-B22	FB taken from CDI08334 carboy.	EB taken from CDI08334 carboy.	geoffreyrosenaw	5/5/2020 9:41	Incorrect initial entry.	Geoff Rosenaw

KorDSS MEASUREMENT DATA FILE EXPORT

FILE CREATED: 4/14/2020 17:37

DATE	TIME	SITE	DATA ID	Barometer (mmHg)	Temp (°C)	Cond (µS/cm)	Sp Cond (µS/cm)	Sal (ppt)	pH	pH (mV)	ODO (mg/L)	ODO (% LocalB)
4/14/2020	9:04:02 AM	af59892		762.2	27.9	56170.4	53175.6	35	7.92	-97.5	6.42	99.2
4/14/2020	9:06:06 AM	af59892		762.2	28.5	58320.4	54641	36.07	7.89	-96	5.89	92.4
4/14/2020	9:29:03 AM	af59893		762.3	28.3	58661.3	55185.2	36.49	7.82	-91.8	5.55	87.1
4/14/2020	9:31:20 AM	af59893		762.3	28.3	58774.1	55255.9	36.54	7.81	-91.3	5.14	80.6
4/14/2020	10:11:48 AM	af59894		762.5	28	58975	55779.1	36.94	7.84	-92.7	5.55	86.8
4/14/2020	10:13:41 AM	af59894		762.5	28	59004.8	55825.6	36.98	7.84	-92.9	5.6	87.5
4/14/2020	10:44:07 AM	af59895		762.9	28.7	59131.7	55265.2	36.54	7.75	-87.6	5.34	84.1
4/14/2020	10:46:09 AM	af59895		762.9	28.6	59218	55412.1	36.65	7.74	-87.2	5.21	82
4/14/2020	11:05:43 AM	af59897		762.9	29.1	60351	56008.2	37.08	7.72	-85.6	5.73	91.1
4/14/2020	11:25:03 AM	af59896		762.9	29	59157.8	54910.4	36.26	7.72	-85.7	5.37	85
4/14/2020	11:27:09 AM	af59896		762.9	29	59093.1	54915.1	36.26	7.72	-85.9	5.32	84.2
4/14/2020	11:46:28 AM	af59898		762.9	29	59333.4	55135.9	36.43	7.86	-94.3	6.05	95.9
4/14/2020	11:48:17 AM	af59898		762.8	28.8	59146.2	55135	36.43	7.85	-93.4	5.58	88.1
4/14/2020	12:08:37 PM	af59899		762.9	28.8	58620.2	54630.3	36.06	7.92	-97.4	6.58	103.7
4/14/2020	12:10:19 PM	af59899		762.8	28.4	58561.9	54952.3	36.31	7.8	-90.7	4.05	63.6
4/14/2020	12:14:54 PM	af59901		762.9	28.8	58542.6	54555.4	36	7.91	-96.9	6.46	101.9
4/14/2020	12:16:05 PM	af59901		762.7	28.4	58562.6	54946.3	36.3	7.83	-92.1	4.23	66.3



Collier County™

POLLUTION CONTROL

LIVE GREEN. SAVE BLUE.

Field Sampling Report

Date: Tuesday, April 14, 2020

Sampler: Geoff Rosenaw

Meter/Notes: Danny Berger



Certificate No

[4262.01](#)

Client: City of Marco Island
Project: Marco Island
Run: MARCO_II

CCV: Morning		Sonde / Handheld	ProDSS #7	Serial #:	15K101015		
Date/Time:	4/13/20 1:30 PM		Operator:	Danny Berger		Project:	MARCO
*** Conductivity ***						Associated Calibration File:	
Standard (μ mhos/cm) \pm 5%	CDI#	Reading	Pass/Fail	Calibration_7_041020.xlsm			
10000	11624	10363	Pass				
70000	13503	72982	Pass				
*** pH ***							
pH (QA Criteria \pm 2)	CDI#	Reading	Pass/Fail				
4.00							
7.00	13953	7.05	Pass	All CCV Results Pass?			
10.00	13951	10.09	Pass	Yes			
*** Dissolved Oxygen ***							
D.O. (QA Criteria \pm 3mg/l)	mg/L	%	$^{\circ}$ C	Pass/Fail	True Value	Barometric Pressure	
CCV Readings --->	7.60	101.6	30.7	Pass	7.477	761.3	
Notes:							
CCV: Afternoon			Date/Time:	4/14/2020 14:09	Operator:	Danny Berger	
*** Conductivity ***							
Standard (μ mhos/cm) \pm 5%	CDI#	Reading	Pass/Fail				
10000	11624	10362	Pass				
70000	13301	73128	Pass				
*** pH ***							
pH (QA Criteria \pm 2)	CDI#	Reading	Pass/Fail				
4.00							
7.00	13953	7.04	Pass	All CCV Results Pass?			
10.00	13951	10.05	Pass	Yes			
*** Dissolved Oxygen ***							
D.O. (QA Criteria \pm 3mg/l)	mg/L	%	$^{\circ}$ C	Pass/Fail	True Value	Barometric Pressure	
CCV Readings --->	7.68	101.8	30.2	Pass	7.537	760.8	
Notes:							
Surface Water Field Workbook Rev 16.6 Effective February 21st, 2020							

Collier County Pollution Control Surface Water Field Workbook
Field Sheet Worksheet

MARCO_II_041420
3 of 10

Program: MARCO

Run: MARCO_II

Sample Collector: Geoff Rosenaw

Meter / Notes: Danny Berger

Date: 4/14/2020

LAB ID	TIME	STATION	Temp (°C)	Sp Cond (µS/cm)	Sal (ppt)	D.O. (% SAT)	ODO (mg/L)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF59902	9:14	OLDE_MARCO	28.0	56343	37.36	86.2	5.50	7.84	0.30		1.60	0.80
AF59902B	9:16	OLDE_MARCO	28.0	56347	37.37	85.8	5.47	7.90	1.30		1.60	0.80
Collection Device	Pole Sampler; CDI: 11853		Cleaning Protocol: J			Flow:	Flow.	Staff Gauge:			pH < 2:	YES
Comments: Two boats passed by prior to sampling. Some vegetative debris near site. Visible outgoing tide.											Sample Type:	SAMP

LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF59933	9:24	OLDE_MARCO										
Collection Device	Sample Container		Cleaning Protocol:			Flow:		Staff Gauge:			pH < 2:	YES
Comments: FB taken from carboy CDI 10964.											Sample Type:	FB

LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF59887	9:54	JH_PARK	28.5	55786	36.93	82.4	5.23	7.81	0.30		3.50	1.20
AF59887B	9:55	JH_PARK	28.5	55812	36.95	80.5	5.11	7.82	3.20		3.50	1.20
Collection Device	Pole Sampler; CDI: 11853		Cleaning Protocol: J			Flow:	Flow.	Staff Gauge:			pH < 2:	YES
Comments: Visible outgoing tide. Bait fish near sampling site. Small bits of vegetative debris also floating near site.											Sample Type:	SAMP

LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF59888	10:16	HC_CENTER	28.8	55494	36.70	76.0	4.81	7.72	0.30		1.70	1.70
AF59888B	10:18	HC_CENTER	28.7	55610	36.79	73.5	4.65	7.71	1.40		1.70	1.70
Collection Device	Pole Sampler; CDI: 11853		Cleaning Protocol: J			Flow:	No flow.	Staff Gauge:			pH < 2:	YES
Comments: Bait fish present near sampling site.											Sample Type:	SAMP

Bottles Per Site / Shipped Per Site:	5 / 0	Matrix: SW	Named storm event that impacted sampling event?	No
Sites Access By:	Truck	Weather:	Low 90s and sunny.	
Sampling SOP:	FSQM 03-04	24 HRS Prior Weather:	Similar.	

Prepared By: **Danny Berger** Signed: 4/14/2020 3:21:43 PM
Reviewed By: **Geoff Rosenaw** Signed: 4/14/2020 2:42:11 PM

Collier County Pollution Control Surface Water Field Workbook
Field Sheet Worksheet

MARCO_II_041420
4 of 10

Program: MARCO

Run: MARCO_II

Sample Collector: Geoff Rosenaw

Meter / Notes: Danny Berger

Date: 4/14/2020

LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF59889	10:55	COLLIER_BRIDGE	28.6	55522	36.73	71.3	4.52	7.69	0.30		1.90	1.90
AF59889B	10:57	COLLIER_BRIDGE	28.5	55536	36.74	63.4	4.03	7.68	1.60		1.90	1.90
Collection Device	Pole Sampler; CDI: 11853		Cleaning Protocol: J			Flow:	Flow.	Staff Gauge:			pH < 2:	YES
Comments:	Several sheephead and a ray present at site. Visible outgoing tide.										Sample Type:	SAMP

LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF59890	11:16	KENDALL	28.8	55751	36.89	85.3	5.39	7.76	0.30		1.40	1.40
Collection Device	Pole Sampler; CDI: 11853		Cleaning Protocol: J			Flow:	Flow.	Staff Gauge:			pH < 2:	YES
Comments:	Bait fish present near sampling site. Visible outgoing tide.										Sample Type:	SAMP

LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF59891	11:42	BARFIELD_BRIDGE	28.6	55757	36.90	101.5	6.43	7.90	0.30		1.80	1.30
AF59891B	11:43	BARFIELD_BRIDGE	28.6	55821	36.95	99.5	6.31	7.90	1.50		1.80	1.30
Collection Device	Pole Sampler; CDI: 11853		Cleaning Protocol: J			Flow:	Flow.	Staff Gauge:			pH < 2:	YES
Comments:	Boat passed by during sampling. Visible outgoing tide.										Sample Type:	SAMP

LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
Collection Device			Cleaning Protocol:			Flow:		Staff Gauge:			pH < 2:	
Comments:											Sample Type:	

Bottles Per Site / Shipped Per Site:	5 / 0	Matrix: SW	Named storm event that impacted sampling event?	No
Sites Access By:	Truck	Weather:	Low 90s and sunny.	
Sampling SOP Used:	FSQM 03-04	24 HRS Prior Weather:	Similar.	

Prepared By: Danny Berger

Reviewed By: Geoff Rosenaw

Collier County Pollution Control Surface Water Field Workbook
Field Sheet Worksheet

Program: MARCO

Run: MARCO_II

Sample Collector: Geoff Rosenaw

Meter / Notes: Danny Berger

Date: 4/14/2020

LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
Collection Device				Cleaning Protocol:		Flow:		Staff Gauge:		pH < 2:		
Comments:										Sample Type:		

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Collection Device				Cleaning Protocol:		Flow:		Staff Gauge:		pH < 2:		
Comments:										Sample Type:		

Bottles Per Site / Shipped Per Site:	5 / 0	Matrix: SW	Named storm event that impacted sampling event?	No
Sites Access By:	Truck	Weather:	Low 90s and sunny.	
Sampling SOP Used:	FSQM 03-04	24 HRS Prior Weather:	Similar.	

Prepared By: Danny Berger

Reviewed By: Geoff Rosenaw

Collier County Pollution Control Surface Water Field Workbook
Field Sheet Worksheet

Program: MARCO

Run: MARCO_II

Sample Collector: Geoff Rosenaw

Meter / Notes: Danny Berger

Date: 4/14/2020

LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
Collection Device			Cleaning Protocol:			Flow:		Staff Gauge:		pH < 2:		
Comments:											Sample Type:	

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Collection Device			Cleaning Protocol:			Flow:		Staff Gauge:		pH < 2:		
Comments:											Sample Type:	

LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
Collection Device			Field Cleaning Protocol:			Flow:		Staff Gauge:		pH < 2:		
Comments:											Sample Type:	

LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
Collection Device			Cleaning Protocol:			Flow:		Staff Gauge:		pH < 2:		
Comments:											Sample Type:	

Bottles Per Site / Shipped Per Site:	5 / 0	Matrix: SW	Named storm event that impacted sampling event?	No
Sites Access By:	Truck	Weather:	Low 90s and sunny.	
Sampling SOP Used:	FSQM 03-04	24 HRS Prior Weather:	Similar.	

Prepared By: Danny Berger

Reviewed By: Geoff Rosenaw



Collier County Pollution Control Department Chain of Custody

3339 Tamiami Trail East, Bldg. Ste. 304 Naples, Florida 34112

Phone: (239) 252-2502 FAX: (239) 252-6479

NELAC Certification: #E45464

Client Information

Name: Rhonda Watkins
 Company Name: Collier County Natural Resources
 Address: 2685 South Horseshoe Drive Ste 103, Fl 34104
 Phone: (239) 252-2502 Ext. 6049
 Fax: (239) 252-6479

PRESERVATION CODES	Lot#	Prs. Vol.	Prs. Lot#	Prs. Supp.	Prs. Date	Initials
1G 1000mL HDPE/Ice	74670					
2C 1L Opaque HDPE/Light-shielded/Ice	AF59928					
3S 250ml HDPE/HZSO4/Ice	CDI 13012	16 drops	RP 14813	Fisher	4/14/2020	DB, GR
4F 60ml Opaque HDPE/Filtered/Ice	AF55358					
5J 120mL HDPE w/Sodium Thiosulfate/Ice	CDI 13470					
14 Whatman Polydisc GW 0.45µm	A29352435					

Project	MARCO	MATRIX CODES
Sample Collector(s):	GW	Ground Water
Geoff Rosenaw	SW	Surface Water
Sample Collector Signature:	WW	Waste Water
	DW	Drinking Water
	Other	
Relinquished By: (Signature)		

Received By: (Signature)	Date/Time	4/14/20 3:45 PM
Relinquished By: (Signature)	Date/Time	4/14/20 3:45 PM
Received By: (Signature)	Date/Time	

Parameters											Sample Check-In	
Turbidity-PC Chlorophyll-PC, Pheophytin-PC, Prep-Chloro Nitrogen-TKN-PC, Phosphorous- Total-PC, Nitrate-Nitrite-PC, Prep- TKN Nitrite-PC Enterolert-PC TN-PC, CC-Nitrate-N-PC											Sample(s) Intact?	
											Rec'd in wet ice?	
											Temp °C:	
											Proper Samp ID?	
											Rec'd within hold time?	
											Acid preserved samples pH<2?	
Bottle Codes											Logged In?	
											Scanned?	

Date	Time	Field pH	Sp. Cond.	Sample Depth	Location	Matrix	# of sample Containers Submitted											Lab ID #			
							1G	2C	3S	4F	5J	Calc									
4/14/2020	9:14	7.84	56343	0.30	OLDE MARCO	SW	1	1	1	1	1										AF59902
4/14/2020	9:24	#N/A	#N/A	#N/A	OLDE MARCO	SW	1	1	1	1	1										AF59933
4/14/2020	9:54	7.81	55786	0.30	JH PARK	SW	1	1	1	1	1										AF59887
4/14/2020	10:16	7.72	55494	0.30	HC CENTER	SW	1	1	1	1	1										AF59888
4/14/2020	10:55	7.69	55522	0.30	COLLIER BRIDGE	SW	1	1	1	1	1										AF59889
4/14/2020	11:16	7.76	55751	0.30	KENDALL	SW	1	1	1	1	1										AF59890
4/14/2020	11:42	7.90	55757	0.30	BARFIELD BRIDGE	SW	1	1	1	1	1										AF59891

Notes:

Collier County Pollution Control Surface Water Field Workbook
Audit Trail Worksheet

Sheet & Cell Reference	Initial Value	Changed To	User	Date & Time	Reason For Change	Analyst E-verified Signature
Field Sheet-B21	Sample Container	Pole Sampler; CDI: 11853	Sampler	4/14/2020 10:01	Incorrect initial entry.	Danny Berger
Field Sheet-B26		0.429166667	0.427777778	4/14/2020 10:24	Incorrect initial entry.	Danny Berger
Field Sheet-L44		1	1.4	4/14/2020 11:23	Incorrect initial entry.	Danny Berger
Chain of Custody-W9	DB	DB, GR	Sampler	4/14/2020 12:58	Incorrect initial entry.	Danny Berger
Calibration-D34		9.79	Sampler	4/14/2020 14:23	That was a test.	Danny Berger
Field Sheet-B47	Bait fish present near sampling site.	Bait fish present near sampling site. Visible outgoing tide.	pcl	4/16/2020 7:20	Incorrect initial entry.	Geoff Rosenaw

KorDSS MEASUREMENT DATA FILE EXPORT

FILE CREATED: 4/14/2020 17:35

DATE	TIME	SITE	Barometer (mmHg)	Temp (°C)	Sp Cond (µS/cm)	TDS (mg/L)	Sal (ppt)	pH	pH (mV)	ODO (% Sat)	ODO (mg/L)	ODO (% LocalB)
4/14/2020	9:14:35 AM	af59902	762.4	28	56342.6	36623	37.36	7.84	-75.2	86.5	5.5	86.2
4/14/2020	9:16:45 AM	af59902	762.5	28	56346.5	36625	37.37	7.9	-79.2	86.1	5.47	85.8
4/14/2020	9:54:33 AM	af59887	762.7	28.5	55785.8	36261	36.93	7.81	-73.6	82.7	5.23	82.4
4/14/2020	9:55:46 AM	af59887	762.7	28.5	55811.9	36278	36.95	7.82	-74.6	80.8	5.11	80.5
4/14/2020	10:16:41 AM	af59888	762.9	28.8	55493.5	36071	36.7	7.72	-68.3	76.3	4.81	76
4/14/2020	10:18:13 AM	af59888	762.9	28.7	55609.7	36146	36.79	7.71	-68.1	73.8	4.65	73.5
4/14/2020	10:55:17 AM	af59889	763.2	28.6	55522.1	36089	36.73	7.69	-66.9	71.6	4.52	71.3
4/14/2020	10:57:13 AM	af59889	763.2	28.5	55535.5	36098	36.74	7.68	-66.4	63.6	4.03	63.4
4/14/2020	11:16:45 AM	af59890	763	28.8	55750.8	36238	36.89	7.76	-71.1	85.6	5.39	85.3
4/14/2020	11:42:08 AM	af59891	763.1	28.6	55756.7	36242	36.9	7.9	-78.8	101.9	6.43	101.5
4/14/2020	11:43:28 AM	af59891	763	28.6	55821.3	36284	36.95	7.9	-79.2	99.9	6.31	99.5
4/14/2020	12:44:23 PM	barrivn	762.5	28	56040.5	36426	37.14	7.33	-45.6	31.2	1.99	31.1

