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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: 09/23/2020
Submittal Date: 09/23/2020 @ 12:05

Report Date : 10/16/2020
Report Time : 1:02:43PM

Project: MARCO
Report#: 0920_MRCO_II

Data Qualifier Code Key:

- O: Sampled, but analysis lost or not performed.
- 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 # 0920_MRCO_II

<i>Location:</i> JH_PARK		<i>Field ID:</i> AF61886		<i>Lab ID:</i> AF61886		<i>Collect Date/Time:</i> 9/23/20 08:57				
<i>Analyte Name</i>	<i>Method</i>	<i>Result</i>	<i>Acceptable Limits</i>	<i>Qualifier</i>	<i>Units</i>	<i>MDL</i>	<i>PQL</i>	<i>DF</i>	<i>Analysis Date/Time</i>	
CC-Nitrate-N	CC-Nitrate-N	0.011		U	mg/L	0.011	0.020	1	09/29/2020	10:11
Enterococci	Enterolert/QT	20	<130		MPN/100 mL	10	10	10	09/23/2020	15:02
Nitrogen- Total Kjeldahl	EPA 351.2	0.490		I	mg/L	0.200	0.500	1	10/08/2020	10:30
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	09/28/2020	17:37
pH	FDEP FT1100	7.970	6.5 - 8.5		SU			1	09/23/2020	08:57
Specific Conductance	FDEP FT1200	44089			umho/cm			1	09/23/2020	08:57
Dissolved Oxygen Saturation	FDEP FT1500	86.1	>42		%			1	09/23/2020	08:57
Nitrogen- Total	Nitrogen- Total	0.490	<0.3	I	mg/L	0.200	0.500	1	10/09/2020	10:48
Chlorophyll a	SM 10200 H	7.3	<4.9		mg/m3	1.00	1.00	1	10/09/2020	14:12
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	09/23/2020	14:49
Pheophytin	SM 10200 H	3.20			mg/m3	1.00	1.00	1	10/09/2020	14:12
Turbidity	SM 2130 B	1.3			NTU	0.10	0.50	1	09/25/2020	07:44
Digestion for TKN	SM 4500 NorgD	Complete						1	10/07/2020	10:30
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	09/24/2020	10:53
Persulfate Digestion for Total P	SM 4500-P B	Complete						1	09/28/2020	10:24
Phosphorus- Total	SM 4500-P E (P	0.045	<0.046		mg/L	0.014	0.040	2	09/29/2020	11:14

ANALYTICAL RESULTS

Report # 0920_MRCO_II

<i>Location:</i> HC_CENTER		<i>Field ID:</i> AF61887		<i>Lab ID:</i> AF61887		<i>Collect Date/Time:</i> 9/23/20 09:21				
<i>Analyte Name</i>	<i>Method</i>	<i>Result</i>	<i>Acceptable Limits</i>	<i>Qualifier</i>	<i>Units</i>	<i>MDL</i>	<i>PQL</i>	<i>DF</i>	<i>Analysis Date/Time</i>	
CC-Nitrate-N	CC-Nitrate-N	0.011		U	mg/L	0.011	0.020	1	09/29/2020	10:11
Enterococci	Enterolert/QT	10	<130	U	MPN/100 mL	10	10	10	09/23/2020	15:02
Nitrogen- Total Kjeldahl	EPA 351.2	0.523			mg/L	0.200	0.500	1	10/08/2020	10:26
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	09/28/2020	17:35
pH	FDEP FT1100	7.940	6.5 - 8.5		SU			1	09/23/2020	09:21
Specific Conductance	FDEP FT1200	42715			umho/cm			1	09/23/2020	09:21
Dissolved Oxygen Saturation	FDEP FT1500	84.1	>42		%			1	09/23/2020	09:21
Nitrogen- Total	Nitrogen- Total	0.523	<0.3		mg/L	0.200	0.500	1	10/14/2020	16:45
Chlorophyll a	SM 10200 H	8.2	<4.9		mg/m3	1.00	1.00	1	10/09/2020	14:12
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	09/23/2020	14:49
Pheophytin	SM 10200 H	3.70			mg/m3	1.00	1.00	1	10/09/2020	14:12
Turbidity	SM 2130 B	0.85			NTU	0.10	0.50	1	09/25/2020	07:44
Digestion for TKN	SM 4500 NorgD	Complete						1	10/07/2020	10:30
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	09/24/2020	10:46
Persulfate Digestion for Total P	SM 4500-P B	Complete						1	09/28/2020	10:24
Phosphorus- Total	SM 4500-P E (P	0.048	<0.046		mg/L	0.014	0.040	2	09/29/2020	11:17

ANALYTICAL RESULTS

Report # 0920_MRCO_II

Location: COLLIER_BRIDGE		Field ID: AF61888		Lab ID: AF61888		Collect Date/Time: 9/23/20 09:42				
Analyte Name	Method	Result	Acceptable Limits	Qualifier	Units	MDL	PQL	DF	Analysis Date/Time	
CC-Nitrate-N	CC-Nitrate-N	0.011		I	mg/L	0.011	0.020	1	09/29/2020	10:11
Enterococci	Enterolert/QT	10	<130		MPN/100 mL	10	10	10	09/23/2020	15:02
Nitrogen- Total Kjeldahl	EPA 351.2	0.383		I	mg/L	0.200	0.500	1	10/08/2020	10:31
Nitrate-Nitrite (N)	EPA 353.2	0.011		I	mg/L	0.011	0.020	1	09/28/2020	17:42
pH	FDEP FT1100	7.980	6.5 - 8.5		SU			1	09/23/2020	09:42
Specific Conductance	FDEP FT1200	42727			umho/cm			1	09/23/2020	09:42
Dissolved Oxygen Saturation	FDEP FT1500	87	>42		%			1	09/23/2020	09:42
Nitrogen- Total	Nitrogen- Total	0.394	<0.3	I	mg/L	0.200	0.500	1	10/09/2020	10:48
Chlorophyll a	SM 10200 H	5.8	<4.9		mg/m3	1.00	1.00	1	10/09/2020	14:12
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	09/23/2020	14:49
Pheophytin	SM 10200 H	1.40			mg/m3	1.00	1.00	1	10/09/2020	14:12
Turbidity	SM 2130 B	0.95			NTU	0.10	0.50	1	09/25/2020	07:44
Digestion for TKN	SM 4500 NorgD	Complete						1	10/07/2020	10:30
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	09/24/2020	11:01
Persulfate Digestion for Total P	SM 4500-P B	Complete						1	09/28/2020	10:24
Phosphorus- Total	SM 4500-P E (P	0.047	<0.046		mg/L	0.014	0.040	2	09/29/2020	11:18

ANALYTICAL RESULTS

Report # 0920_MRCO_II

Location: KENDALL		Field ID: AF61889		Lab ID: AF61889		Collect Date/Time: 9/23/20 10:09				
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	09/29/2020	10:11
Enterococci	Enterolert/QT	110	<130	J	MPN/100 mL	10	10	10	09/23/2020	15:02
Nitrogen- Total Kjeldahl	EPA 351.2	0.416		I	mg/L	0.200	0.500	1	10/08/2020	10:33
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	09/28/2020	17:47
pH	FDEP FT1100	7.970	6.5 - 8.5		SU			1	09/23/2020	10:09
Specific Conductance	FDEP FT1200	44037			umho/cm			1	09/23/2020	10:09
Dissolved Oxygen Saturation	FDEP FT1500	91.4	>42		%			1	09/23/2020	10:09
Nitrogen- Total	Nitrogen- Total	0.416	<0.3	I	mg/L	0.200	0.500	1	10/09/2020	10:48
Chlorophyll a	SM 10200 H	5.3	<4.9		mg/m3	1.00	1.00	1	10/09/2020	14:12
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	09/23/2020	14:49
Pheophytin	SM 10200 H	6.80			mg/m3	1.00	1.00	1	10/09/2020	14:12
Turbidity	SM 2130 B	2.0			NTU	0.10	0.50	1	09/25/2020	07:44
Digestion for TKN	SM 4500 NorgD	Complete						1	10/07/2020	10:30
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	09/24/2020	10:59
Persulfate Digestion for Total P	SM 4500-P B	Complete						1	09/28/2020	10:24
Phosphorus- Total	SM 4500-P E (P	0.056	<0.046		mg/L	0.014	0.040	2	09/29/2020	11:19

ANALYTICAL RESULTS

Report # 0920_MRCO_II

Location: BARFIELD_BRIDGE		Field ID: AF61890		Lab ID: AF61890		Collect Date/Time: 9/23/20 10:41				
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	09/29/2020	10:11
Enterococci	Enterolert/QT	10	<130	U	MPN/100 mL	10	10	10	09/23/2020	15:02
Nitrogen- Total Kjeldahl	EPA 351.2	0.685			mg/L	0.200	0.500	1	10/08/2020	10:34
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	09/28/2020	19:06
pH	FDEP FT1100	7.920	6.5 - 8.5		SU			1	09/23/2020	10:41
Specific Conductance	FDEP FT1200	47026			umho/cm			1	09/23/2020	10:41
Dissolved Oxygen Saturation	FDEP FT1500	91.3	>42		%			1	09/23/2020	10:41
Nitrogen- Total	Nitrogen- Total	0.685	<0.3		mg/L	0.200	0.500	1	10/14/2020	16:45
Chlorophyll a	SM 10200 H	3.3	<4.9		mg/m3	1.00	1.00	1	10/09/2020	14:12
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	09/23/2020	14:49
Pheophytin	SM 10200 H	6.00			mg/m3	1.00	1.00	1	10/09/2020	14:12
Turbidity	SM 2130 B	1.5			NTU	0.10	0.50	1	09/25/2020	07:44
Digestion for TKN	SM 4500 NorgD	Complete						1	10/07/2020	10:30
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	09/24/2020	11:08
Persulfate Digestion for Total P	SM 4500-P B	Complete						1	09/28/2020	10:24
Phosphorus- Total	SM 4500-P E (P	0.022	<0.046	I	mg/L	0.014	0.040	2	09/29/2020	11:20

ANALYTICAL RESULTS

Report # 0920_MRCO_I

Location: LANDMARK		Field ID: AF61891		Lab ID: AF61891		Collect Date/Time: 9/23/20 10:14				
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	09/29/2020	10:10
Enterococci	Enterolert/QT	31	<130		MPN/100 mL	10	10	10	09/23/2020	15:02
Nitrogen- Total Kjeldahl	EPA 351.2	0.569			mg/L	0.200	0.500	1	10/08/2020	10:35
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	09/28/2020	17:20
pH	FDEP FT1100	7.960	6.5 - 8.5		SU			1	09/23/2020	10:14
Specific Conductance	FDEP FT1200	46516			umho/cm			1	09/23/2020	10:14
Dissolved Oxygen Saturation	FDEP FT1500	89.2	>42		%			1	09/23/2020	10:14
Nitrogen- Total	Nitrogen- Total	0.569	<0.3		mg/L	0.200	0.500	1	10/14/2020	16:45
Chlorophyll a	SM 10200 H	4.2	<4.9		mg/m3	1.00	1.00	1	10/09/2020	14:12
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	09/24/2020	14:06
Pheophytin	SM 10200 H	1.70		V	mg/m3	1.00	1.00	1	10/09/2020	14:12
Turbidity	SM 2130 B	0.90			NTU	0.10	0.50	1	09/25/2020	07:44
Digestion for TKN	SM 4500 NorgD	Complete						1	10/07/2020	10:30
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	09/24/2020	11:29
Persulfate Digestion for Total P	SM 4500-P B	Complete						1	09/28/2020	10:24
Phosphorus- Total	SM 4500-P E (P	0.048	<0.046		mg/L	0.014	0.040	2	09/29/2020	11:20

ANALYTICAL RESULTS

Report # 0920_MRCO_I

<i>Location:</i> W_WINTERBERRY_BRIDGE		<i>Field ID:</i> AF61892		<i>Lab ID:</i> AF61892		<i>Collect Date/Time:</i> 9/23/20 11:21				
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	09/29/2020	10:11
Enterococci	Enterolert/QT	10	<130	U	MPN/100 mL	10	10	10	09/23/2020	15:02
Nitrogen- Total Kjeldahl	EPA 351.2	0.792			mg/L	0.200	0.500	1	10/08/2020	10:37
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	09/28/2020	17:30
pH	FDEP FT1100	7.950	6.5 - 8.5		SU			1	09/23/2020	11:21
Specific Conductance	FDEP FT1200	46885			umho/cm			1	09/23/2020	11:21
Dissolved Oxygen Saturation	FDEP FT1500	90.8	>42		%			1	09/23/2020	11:21
Nitrogen- Total	Nitrogen- Total	0.792	<0.3		mg/L	0.200	0.500	1	10/14/2020	16:45
Chlorophyll a	SM 10200 H	5.1	<4.9		mg/m3	1.00	1.00	1	10/09/2020	14:12
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	09/24/2020	14:06
Pheophytin	SM 10200 H	2.30		V	mg/m3	1.00	1.00	1	10/09/2020	14:12
Turbidity	SM 2130 B	1.2			NTU	0.10	0.50	1	09/25/2020	07:44
Digestion for TKN	SM 4500 NorgD	Complete						1	10/07/2020	10:30
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	09/24/2020	11:03
Persulfate Digestion for Total P	SM 4500-P B	Complete						1	09/28/2020	10:24
Phosphorus- Total	SM 4500-P E (P	0.038	<0.046	I	mg/L	0.014	0.040	2	09/29/2020	11:21

ANALYTICAL RESULTS

Report # 0920_MRCO_I

<i>Location:</i> MCILVAINE		<i>Field ID:</i> AF61893		<i>Lab ID:</i> AF61893		<i>Collect Date/Time:</i> 9/23/20 12:09				
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	09/29/2020	10:11
Enterococci	Enterolert/QT	10	<130	U	MPN/100 mL	10	10	10	09/23/2020	15:02
Nitrogen- Total Kjeldahl	EPA 351.2	0.578			mg/L	0.200	0.500	1	10/08/2020	10:38
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	09/28/2020	17:32
pH	FDEP FT1100	7.990	6.5 - 8.5		SU			1	09/23/2020	12:09
Specific Conductance	FDEP FT1200	49844			umho/cm			1	09/23/2020	12:09
Dissolved Oxygen Saturation	FDEP FT1500	83.3	>42		%			1	09/23/2020	12:09
Nitrogen- Total	Nitrogen- Total	0.578	<0.3		mg/L	0.200	0.500	1	10/14/2020	16:45
Chlorophyll a	SM 10200 H	2.6	<4.9		mg/m3	1.00	1.00	1	10/09/2020	14:12
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	09/24/2020	14:06
Pheophytin	SM 10200 H	3.70		V	mg/m3	1.00	1.00	1	10/09/2020	14:12
Turbidity	SM 2130 B	2.4			NTU	0.10	0.50	1	09/25/2020	07:44
Digestion for TKN	SM 4500 NorgD	Complete						1	10/07/2020	10:30
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	09/24/2020	11:07
Persulfate Digestion for Total P	SM 4500-P B	Complete						1	09/28/2020	10:24
Phosphorus- Total	SM 4500-P E (P	0.036	<0.046	I	mg/L	0.014	0.040	2	09/29/2020	11:22

ANALYTICAL RESULTS

Report # 0920_MRCO_I

Location: WINDMILL		Field ID: AF61894		Lab ID: AF61894		Collect Date/Time: 9/23/20 08:30				
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	09/29/2020	10:10
Enterococci	Enterolert/QT	20	<130		MPN/100 mL	10	10	10	09/23/2020	15:02
Nitrogen- Total Kjeldahl	EPA 351.2	0.319		I	mg/L	0.200	0.500	1	10/08/2020	10:40
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	09/28/2020	17:27
pH	FDEP FT1100	7.930	6.5 - 8.5		SU			1	09/23/2020	08:30
Specific Conductance	FDEP FT1200	42133			umho/cm			1	09/23/2020	08:30
Dissolved Oxygen Saturation	FDEP FT1500	97.5	>42		%			1	09/23/2020	08:30
Nitrogen- Total	Nitrogen- Total	0.319	<0.3	I	mg/L	0.200	0.500	1	10/09/2020	10:48
Chlorophyll a	SM 10200 H	7.6	<4.9		mg/m3	1.00	1.00	1	10/09/2020	14:12
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	09/24/2020	14:06
Pheophytin	SM 10200 H	4.60		V	mg/m3	1.00	1.00	1	10/09/2020	14:12
Turbidity	SM 2130 B	1.2			NTU	0.10	0.50	1	09/25/2020	07:44
Digestion for TKN	SM 4500 NorgD	Complete						1	10/07/2020	10:30
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	09/24/2020	10:57
Persulfate Digestion for Total P	SM 4500-P B	Complete						1	09/28/2020	10:24
Phosphorus- Total	SM 4500-P E (P	0.041	<0.046		mg/L	0.014	0.040	2	09/29/2020	11:29

ANALYTICAL RESULTS

Report # 0920_MRCO_I

Location: HUMMINGBIRD		Field ID: AF61895		Lab ID: AF61895		Collect Date/Time: 9/23/20 09:39				
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	09/29/2020	10:11
Enterococci	Enterolert/QT	10	<130	U	MPN/100 mL	10	10	10	09/23/2020	15:02
Nitrogen- Total Kjeldahl	EPA 351.2	0.413		I	mg/L	0.200	0.500	1	10/08/2020	10:44
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	09/28/2020	18:06
pH	FDEP FT1100	7.930	6.5 - 8.5		SU			1	09/23/2020	09:39
Specific Conductance	FDEP FT1200	41858			umho/cm			1	09/23/2020	09:39
Dissolved Oxygen Saturation	FDEP FT1500	94.1	>42		%			1	09/23/2020	09:39
Nitrogen- Total	Nitrogen- Total	0.413	<0.3	I	mg/L	0.200	0.500	1	10/09/2020	10:48
Chlorophyll a	SM 10200 H	6.7	<4.9		mg/m3	1.00	1.00	1	10/09/2020	14:12
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	09/24/2020	14:06
Pheophytin	SM 10200 H	2.50		V	mg/m3	1.00	1.00	1	10/09/2020	14:12
Turbidity	SM 2130 B	1.0			NTU	0.10	0.50	1	09/25/2020	07:44
Digestion for TKN	SM 4500 NorgD	Complete						1	10/07/2020	10:30
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	09/24/2020	10:55
Persulfate Digestion for Total P	SM 4500-P B	Complete						1	09/28/2020	10:24
Phosphorus- Total	SM 4500-P E (P	0.030	<0.046	I	mg/L	0.014	0.040	2	09/29/2020	11:32

ANALYTICAL RESULTS

Report # 0920_MRCO_I

Location: HOLLYHOCK		Field ID: AF61896		Lab ID: AF61896		Collect Date/Time: 9/23/20 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	09/29/2020	10:11
Enterococci	Enterolert/QT	10	<130	U	MPN/100 mL	10	10	10	09/23/2020	15:02
Nitrogen- Total Kjeldahl	EPA 351.2	0.413		I	mg/L	0.200	0.500	1	10/08/2020	12:28
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	09/28/2020	18:11
pH	FDEP FT1100	7.850	6.5 - 8.5		SU			1	09/23/2020	09:14
Specific Conductance	FDEP FT1200	44057			umho/cm			1	09/23/2020	09:14
Dissolved Oxygen Saturation	FDEP FT1500	85.6	>42		%			1	09/23/2020	09:14
Nitrogen- Total	Nitrogen- Total	0.413	<0.3	I	mg/L	0.200	0.500	1	10/09/2020	10:48
Chlorophyll a	SM 10200 H	4.5	<4.9		mg/m3	1.00	1.00	1	10/09/2020	14:12
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	09/24/2020	14:06
Pheophytin	SM 10200 H	1.90		V	mg/m3	1.00	1.00	1	10/09/2020	14:12
Turbidity	SM 2130 B	1.4			NTU	0.10	0.50	1	09/25/2020	07:44
Digestion for TKN	SM 4500 NorgD	Complete						1	10/07/2020	10:30
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	09/24/2020	11:19
Persulfate Digestion for Total P	SM 4500-P B	Complete						1	09/28/2020	10:24
Phosphorus- Total	SM 4500-P E (P	0.039	<0.046	I	mg/L	0.014	0.040	2	09/29/2020	11:33

ANALYTICAL RESULTS

Report # 0920_MRCO_I

Location: E_WINTERBERRY_BRIDGE		Field ID: AF61897		Lab ID: AF61897		Collect Date/Time: 9/23/20 11:44				
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	09/29/2020	10:11
Enterococci	Enterolert/QT	10	<130	U	MPN/100 mL	10	10	10	09/23/2020	15:02
Nitrogen- Total Kjeldahl	EPA 351.2	0.882			mg/L	0.200	0.500	1	10/08/2020	10:52
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	09/28/2020	17:44
pH	FDEP FT1100	7.930	6.5 - 8.5		SU			1	09/23/2020	11:44
Specific Conductance	FDEP FT1200	47263			umho/cm			1	09/23/2020	11:44
Dissolved Oxygen Saturation	FDEP FT1500	95.9	>42		%			1	09/23/2020	11:44
Nitrogen- Total	Nitrogen- Total	0.882	<0.3		mg/L	0.200	0.500	1	10/14/2020	16:45
Chlorophyll a	SM 10200 H	9.7	<4.9		mg/m3	1.00	1.00	1	10/09/2020	14:12
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	09/24/2020	14:06
Pheophytin	SM 10200 H	2.60		V	mg/m3	1.00	1.00	1	10/09/2020	14:12
Turbidity	SM 2130 B	1.6			NTU	0.10	0.50	1	09/25/2020	07:44
Digestion for TKN	SM 4500 NorgD	Complete						1	10/07/2020	10:30
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	09/24/2020	11:21
Persulfate Digestion for Total P	SM 4500-P B	Complete						1	09/28/2020	10:24
Phosphorus- Total	SM 4500-P E (P	0.056	<0.046		mg/L	0.014	0.040	2	09/29/2020	11:34

ANALYTICAL RESULTS

Report # 0920_MRCO_I

Location: SWALLOW		Field ID: AF61898		Lab ID: AF61898		Collect Date/Time: 9/23/20 10:44				
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	09/29/2020	10:11
Enterococci	Enterolert/QT	10	<130	U	MPN/100 mL	10	10	10	09/23/2020	15:02
Nitrogen- Total Kjeldahl	EPA 351.2	1.07			mg/L	0.200	0.500	1	10/08/2020	10:54
Nitrate-Nitrite (N)	EPA 353.2	0.014		I	mg/L	0.011	0.020	1	09/28/2020	17:39
pH	FDEP FT1100	8.020	6.5 - 8.5		SU			1	09/23/2020	10:44
Specific Conductance	FDEP FT1200	44349			umho/cm			1	09/23/2020	10:44
Dissolved Oxygen Saturation	FDEP FT1500	84.7	>42		%			1	09/23/2020	10:44
Nitrogen- Total	Nitrogen- Total	1.08	<0.3		mg/L	0.200	0.500	1	10/14/2020	16:45
Chlorophyll a	SM 10200 H	173	<4.9		mg/m3	1.00	1.00	1	10/09/2020	14:12
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	09/24/2020	14:06
Pheophytin	SM 10200 H	6.30		V	mg/m3	1.00	1.00	1	10/09/2020	14:12
Turbidity	SM 2130 B	6.9			NTU	0.10	0.50	1	09/25/2020	07:44
Digestion for TKN	SM 4500 NorgD	Complete						1	10/07/2020	10:30
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	09/24/2020	11:23
Persulfate Digestion for Total P	SM 4500-P B	Complete						1	09/28/2020	10:24
Phosphorus- Total	SM 4500-P E (P	0.125	<0.046		mg/L	0.014	0.040	2	09/29/2020	11:35

ANALYTICAL RESULTS

Report # 0920_MRCO_II

Location: MARCO_BLANK		Field ID: AF61899		Lab ID: AF61899		Collect Date/Time: 9/23/20 09:51				
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	09/29/2020	10:11
Enterococci	Enterolert/QT	1	<130	U	MPN/100 mL	1	1	1	09/23/2020	15:02
Nitrogen- Total Kjeldahl	EPA 351.2	0.200		U	mg/L	0.200	0.500	1	10/13/2020	16:41
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	09/28/2020	18:16
pH	FDEP FT1100	NA	6.5 - 8.5		SU			1	09/23/2020	09:51
Specific Conductance	FDEP FT1200	NA			umho/cm			1	09/23/2020	09:51
Dissolved Oxygen Saturation	FDEP FT1500	NA	>42		%			1	09/23/2020	09:51
Nitrogen- Total	Nitrogen- Total	0.200	<0.3	U	mg/L	0.200	0.500	1	10/14/2020	11:20
Chlorophyll a	SM 10200 H	1.0	<4.9	U	mg/m3	1.00	1.00	1	10/09/2020	14:12
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	09/23/2020	14:49
Pheophytin	SM 10200 H	1.00		U	mg/m3	1.00	1.00	1	10/09/2020	14:12
Turbidity	SM 2130 B	0.10		U	NTU	0.10	0.50	1	09/25/2020	07:44
Digestion for TKN	SM 4500 NorgD	Complete						1	10/09/2020	09:44
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	09/24/2020	11:25
Persulfate Digestion for Total P	SM 4500-P B	Complete						1	09/28/2020	10:24
Phosphorus- Total	SM 4500-P E (P	0.007	<0.046	U	mg/L	0.007	0.020	1	09/29/2020	11:35

ANALYTICAL RESULTS

Report # 0920_MRCO_II

Location: DUP1		Field ID: AF61900		Lab ID: AF61900		Collect Date/Time: 9/23/20 10:16				
Analyte Name	Method	Result	Acceptable Limits	Qualifier	Units	MDL	PQL	DF	Analysis Date/Time	
Enterococci	Enterolert/QT	10	<130	UJ	MPN/100 mL	10	10	10	09/23/2020	15:02
pH	FDEP FT1100	7.970	6.5 - 8.5		SU			1	09/23/2020	10:16
Specific Conductance	FDEP FT1200	44020			umho/cm			1	09/23/2020	10:16
Dissolved Oxygen Saturation	FDEP FT1500	92.3	>42		%			1	09/23/2020	10:16
Chlorophyll a	SM 10200 H	5.5	<4.9		mg/m3	1.00	1.00	1	10/09/2020	14:12
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	09/23/2020	14:49
Pheophytin	SM 10200 H	5.80			mg/m3	1.00	1.00	1	10/09/2020	14:12
Turbidity	SM 2130 B	2.1			NTU	0.10	0.50	1	09/25/2020	07:44
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	09/24/2020	11:27

ANALYTICAL RESULTS

Report # 0920_MRCO_II

Location: OLDE_MARCO		Field ID: AF61901		Lab ID: AF61901		Collect Date/Time: 9/23/20 08:30				
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	09/29/2020	10:11
Enterococci	Enterolert/QT	10	<130	U	MPN/100 mL	10	10	10	09/23/2020	15:02
Nitrogen- Total Kjeldahl	EPA 351.2	0.919			mg/L	0.200	0.500	1	10/08/2020	10:56
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	09/28/2020	18:13
pH	FDEP FT1100	7.980	6.5 - 8.5		SU			1	09/23/2020	08:30
Specific Conductance	FDEP FT1200	48907			umho/cm			1	09/23/2020	08:30
Dissolved Oxygen Saturation	FDEP FT1500	86.1	>42		%			1	09/23/2020	08:30
Nitrogen- Total	Nitrogen- Total	0.919	<0.3		mg/L	0.200	0.500	1	10/14/2020	16:45
Chlorophyll a	SM 10200 H	4.0	<4.9		mg/m3	1.00	1.00	1	10/09/2020	14:12
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	09/23/2020	14:49
Pheophytin	SM 10200 H	1.80			mg/m3	1.00	1.00	1	10/09/2020	14:12
Turbidity	SM 2130 B	2.2			NTU	0.10	0.50	1	09/25/2020	07:44
Digestion for TKN	SM 4500 NorgD	Complete						1	10/07/2020	10:30
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	09/24/2020	11:13
Persulfate Digestion for Total P	SM 4500-P B	Complete						1	09/28/2020	10:24
Phosphorus- Total	SM 4500-P E (P)	0.027	<0.046	I	mg/L	0.014	0.040	2	09/29/2020	11:36

ANALYTICAL RESULTS

Report # 0920_MRCO_I

Location: MARCO_BLANK		Field ID: AF61902		Lab ID: AF61902		Collect Date/Time: 9/23/20 08:50				
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	09/29/2020	10:11
Enterococci	Enterolert/QT	1	<130	U	MPN/100 mL	1	1	1	09/23/2020	15:02
Nitrogen- Total Kjeldahl	EPA 351.2	0.200		U	mg/L	0.200	0.500	1	10/08/2020	10:58
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	09/28/2020	18:09
pH	FDEP FT1100	NA	6.5 - 8.5		SU			1	09/23/2020	08:50

Specific Conductance	FDEP FT1200	NA			umho/cm			1	09/23/2020	08:50
Dissolved Oxygen Saturation	FDEP FT1500	NA	>42		%			1	09/23/2020	08:50
Nitrogen- Total	Nitrogen- Total	0.200	<0.3	U	mg/L	0.200	0.500	1	10/09/2020	10:48
Chlorophyll a	SM 10200 H	1.0	<4.9	U	mg/m3	1.00	1.00	1	10/09/2020	14:12
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	09/24/2020	14:06
Pheophytin	SM 10200 H	1.00		U	mg/m3	1.00	1.00	1	10/09/2020	14:12
Turbidity	SM 2130 B	0.10		U	NTU	0.10	0.50	1	09/25/2020	07:44
Digestion for TKN	SM 4500 NorgD	Complete						1	10/07/2020	10:30
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	09/24/2020	10:51
Persulfate Digestion for Total P	SM 4500-P B	Complete						1	09/28/2020	10:24
Phosphorus- Total	SM 4500-P E (P	0.007	<0.046	U	mg/L	0.007	0.020	1	09/29/2020	11:37



Collier County™

POLLUTION CONTROL

LIVE GREEN. SAVE BLUE.

Field Sampling Report

Date: Wednesday, September 23, 2020

Sampler: Monica McKenzie

Meter/Notes: Josh Gravlin



Certificate No

[4262.01](#)

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

CCV: Morning		Sonde / Handheld	ProDSS #7	Serial #:	15K101015	
Date/Time:	9/23/20 6:51 AM	Operator:	Josh Gravlin	Project:	MARCO	
*** Conductivity ***				Associated Calibration File:		
Standard (µmhos/cm) ± 5%	CDI#	Reading	Pass/Fail	Calibration_7_091820.xlsm		
1000	14102	998	Pass			
*** pH ***						
pH (QA Criteria ±.2)	CDI#	Reading	Pass/Fail			
4.00						
7.00	14385	6.96	Pass	All CCV Results Pass?		
10.00				Yes		
*** Dissolved Oxygen ***						
D.O. (QA Criteria ±3mg/l)	mg/L	%	°C	Pass/Fail	True Value	Barometric Pressure
CCV Readings --->	8.70	99.8	22.2	Pass	8.715	760.3
Notes:						
CCV: Afternoon		Date/Time:	9/23/2020 13:10	Operator:	Josh Gravlin	
*** Conductivity ***						
Standard (µmhos/cm) ± 5%	CDI#	Reading	Pass/Fail			
10000	11627	9974	Pass			
70000	14438	70483	Pass			
*** pH ***						
pH (QA Criteria +.2)	CDI#	Reading	Pass/Fail			
4.00						
7.00	14385	7.11	Pass	All CCV Results Pass?		
10.00	14396	10.10	Pass	Yes		
*** Dissolved Oxygen ***						
D.O. (QA Criteria ±3mg/l)	mg/L	%	°C	Pass/Fail	True Value	Barometric Pressure
CCV Readings --->	8.70	100.1	22.4	Pass	8.682	760.4
Notes:						
Surface Water Field Workbook Rev 17.3				Effective September 3rd, 2020		

Collier County Pollution Control Surface Water Field Workbook
Field Sheet Worksheet

Program: MARCO

Run: I

Sample Collector: Monica McKenzie

Meter / Notes: Josh Gravlin

Date: 9/23/2020

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)
AF61894	8:30	WINDMILL	28.8	42133	26.95	97.5	6.50	7.93	0.30		3.70	1.70
AF61894B	8:32	WINDMILL	28.7	47827	31.05	76.5	5.00	7.89	3.40		3.70	1.70
Collection Device		VanDorn; CDI: 05512		Cleaning Protocol: J		Flow: Flow.		Staff Gauge:		pH < 2: Yes		
Comments:		Visibly outgoing tide.						Thermally Preserved Within 15 Minutes?		Yes	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)
AF61902	8:50	WINDMILL										
Collection Device		VanDorn; CDI: 05512		Cleaning Protocol:		Flow:		Staff Gauge:		pH < 2: Yes		
Comments:		FCEB Collected from CDI 10967 carboy.						Thermally Preserved Within 15 Minutes?		Yes	Sample Type: FCEB	

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)
AF61896	9:14	HOLLYHOCK	27.8	44057	28.35	85.6	5.75	7.85	0.30		1.40	1.40
Collection Device		Pole Sampler; CDI: 11853		Cleaning Protocol: J		Flow: No flow.		Staff Gauge:		pH < 2: Yes		
Comments:		No visible tidal movement. Jellies in water column. Vegetative debris on water surface and in water column.						Thermally Preserved Within 15 Minutes?		Yes	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)
AF61895	9:39	HUMMINGBIRD	28.7	41858	26.75	94.1	6.29	7.93	0.30		1.40	1.40
Collection Device		Pole Sampler; CDI: 11853		Cleaning Protocol: J		Flow: No flow.		Staff Gauge:		pH < 2: Yes		
Comments:		No visible tidal movement. Vegetative debris on water surface. Jellies present.						Thermally Preserved Within 15 Minutes?		Yes	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. High in the 80s.	
Sampling SOP:	FSQM 03-04	24 HRS Prior Weather:	Similar.	

Prepared By: *Joshua Gravlin* Signed: 9/30/2020 10:25:39 AM

Reviewed By: *Monica McKenzie* Signed: 9/23/2020 1:59:38 PM

Collier County Pollution Control Surface Water Field Workbook
Field Sheet Worksheet

Program: MARCO

Run: I

Sample Collector: Monica McKenzie

Meter / Notes: Josh Gravlin

Date: 9/23/2020

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)
AF61898	10:44	SWALLOW	28.9	44349	28.53	84.7	5.59	8.02	0.30		1.60	1.30
AF61898B	10:46	SWALLOW	30.2	50733	33.13	15.5	0.98	7.72	1.30		1.60	1.30
Collection Device	Pole Sampler; CDI: 11853		Cleaning Protocol: J			Flow:	Flow.	Staff Gauge:			pH < 2:	Yes
Comments:	Active discharge from stormwater outflow at sample site. No visible tidal movement. Vegetative debris on water surface.						Thermally Preserved Within 15 Minutes?		Yes	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)
AF61892	11:21	W_WINTERBERRY_BRIDGE	29.2	46885	30.35	90.8	5.90	7.95	0.30		3.50	2.00
AF61892B	11:22	W_WINTERBERRY_BRIDGE	29.7	48607	31.59	74.3	4.76	7.92	3.20		3.50	2.00
Collection Device	VanDorn; CDI: 05512		Cleaning Protocol: J			Flow:	Flow.	Staff Gauge:			pH < 2:	Yes
Comments:	Visibly outgoing tide. Jellies in water. Vegetative debris on water surface.						Thermally Preserved Within 15 Minutes?		Yes	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)
AF61897	11:44	E_WINTERBERRY_BRIDGE	29.7	47263	30.61	95.9	6.17	7.93	0.30		2.50	1.70
AF61897B	11:45	E_WINTERBERRY_BRIDGE	29.8	49545	32.27	72.1	4.59	7.93	2.20		2.50	1.70
Collection Device	VanDorn; CDI: 05512		Cleaning Protocol: J			Flow:	Flow.	Staff Gauge:			pH < 2:	Yes
Comments:	Visibly outgoing tide. Several rays upstream of sample site. Vegetative debris on water surface.						Thermally Preserved Within 15 Minutes?		Yes	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)
AF61893	12:09	MCILVAINE	28.6	49844	32.53	83.3	5.40	7.99	0.30		3.00	2.00
AF61893B	12:10	MCILVAINE	28.7	51330	33.62	86.0	5.54	8.03	2.70		3.00	2.00
Collection Device	VanDorn; CDI: 05512		Cleaning Protocol: J			Flow:	Flow.	Staff Gauge:			pH < 2:	Yes
Comments:	Visibly outgoing tide.						Thermally Preserved Within 15 Minutes?		Yes	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. High in the 80s.	
Sampling SOP Used:	FSQM 03-04	24 HRS Prior Weather:	Similar.	

Prepared By: Joshua Gravlin

Reviewed By: Monica McKenzie

Collier County Pollution Control Surface Water Field Workbook
Field Sheet Worksheet

Program: MARCO

Run: I

Sample Collector: Monica McKenzie

Meter / Notes: Josh Gravlin

Date: 9/23/2020

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)
AF61891	10:14	LANDMARK	28.9	46516	30.09	89.2	5.83	7.96	0.30		1.50	1.50
AF61891B	10:16	LANDMARK	29.0	46946	30.40	88.0	5.73	7.98	1.20		1.50	1.50
Collection Device	Pole Sampler; CDI: 11853		Cleaning Protocol: J			Flow: No flow.		Staff Gauge:			pH < 2:	Yes
Comments:	No visible tidal movement.							Thermally Preserved Within 15 Minutes?	Yes	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:								Thermally Preserved Within 15 Minutes?		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:								Thermally Preserved Within 15 Minutes?		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:								Thermally Preserved Within 15 Minutes?		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. High in the 80s.		
Sampling SOP Used:	FSQM 03-04	24 HRS Prior Weather:	Similar.		

Prepared By: Joshua Gravlin
Reviewed By: Monica McKenzie

Collier County Pollution Control Surface Water Field Workbook
Field Sheet Worksheet

Program: MARCO

Run: I

Sample Collector: Monica McKenzie

Meter / Notes: Josh Gravlin

Date: 9/23/2020

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:		Thermally Preserved Within 15 Minutes?			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:		Thermally Preserved Within 15 Minutes?			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:		Thermally Preserved Within 15 Minutes?			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:		Thermally Preserved Within 15 Minutes?			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. High in the 80s.		
Sampling SOP Used:	FSQM 03-04	24 HRS Prior Weather:	Similar.		

Prepared By:	Joshua Gravlin
Reviewed By:	Monica McKenzie



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	75529					
2C 1L Opaque HDPE/Light-shielded/Ice	AF61452					
3S 250ml HDPE/H2SO4/Ice	CDI 14242	16 drops	RP16032	Fisher	9/23/2020	JAG/MM
4F 60ml Opaque HDPE/Filtered/Ice	CDI 13021					
5J 120mL HDPE w/Sodium Thiosulfate/Ice	CDI 13466					
14 Whatman Polydisc GW 0.45µm	A29352435					

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

Received By: (Signature)	Date/Time	9/23/20 2:01 PM
	Date/Time	9/23/20 2:01 PM
Relinquished By: (Signature)	Date/Time	
Received By: (Signature)	Date/Time	

Parameters										Sample Check-In		
Turbidity-PC	Chlorophyll-PC, Pheophytin-PC, Prep-Chloro	Nitrogen-TKN, Phosphorous-Total, Nitrate-Nitrite, 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?	
											Logged In?	
											Scanned?	

Date	Time	Field pH	Sp. Cond.	Sample Depth	Location	Matrix	Bottle Codes						# of sample Containers Submitted	Lab ID #		
							1G	2C	3S	4F	5J	Calc				
9/23/2020	8:30	7.93	42133	0.30	WINDMILL	SW	1	1	1	1	1					AF61894
9/23/2020	8:50	#N/A	#N/A	#N/A	WINDMILL	SW	1	1	1	1	1					AF61902
9/23/2020	9:14	7.85	44057	0.30	HOLLYHOCK	SW	1	1	1	1	1					AF61896
9/23/2020	9:39	7.93	41858	0.30	HUMMINGBIRD	SW	1	1	1	1	1					AF61895
9/23/2020	10:44	8.02	44349	0.30	SWALLOW	SW	1	1	1	1	1					AF61898
9/23/2020	11:21	7.95	46885	0.30	W_WINTERBERRY_BRIDGE	SW	1	1	1	1	1					AF61892
9/23/2020	11:44	7.93	47263	0.30	E_WINTERBERRY_BRIDGE	SW	1	1	1	1	1					AF61897
9/23/2020	12:09	7.99	49844	0.30	MCILVAINE	SW	1	1	1	1	1					AF61893
9/23/2020	10:14	7.96	46516	0.30	LANDMARK	SW	1	1	1	1	1					AF61891

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-B40	Active discharge from stormwat	Active discharge from stormwat	Sampler	9/23/2020 11:05	Added vegetative debris comment.	Joshua Gravlin
Chain of Custody-I39:L39			Sampler	9/23/2020 13:49		Joshua Gravlin

KorDSS MEASUREMENT DATA FILE EXPORT

FILE CRE/ #####

DATE	TIME	SITE	GPS Latitu	GPS Longi	Barometer	Temp (°C)	Cond (µS/c	Sp Cond (µ	Sal (ppt)
9/23/2020	#####	af61894	25.94984	-81.7082	761.1	28.8	45168.4	42133.2	26.95
9/23/2020	#####	af61894	25.94984	-81.7082	761.2	28.7	51165.3	47826.7	31.05
9/23/2020	#####	af61896	25.94347	-81.6925	761.9	27.8	46445.1	44056.6	28.35
9/23/2020	#####	af61895	25.94349	-81.7035	761.9	28.7	44821.7	41858	26.75
9/23/2020	#####	af61891	25.93617	-81.7267	762	28.9	50005.6	46515.9	30.09
9/23/2020	#####	af61891	25.93617	-81.7267	761.9	29	50530.2	46945.6	30.4
9/23/2020	#####	af61898	25.91324	-81.7241	762	28.9	47657.2	44349.3	28.53
9/23/2020	#####	af61898	25.91324	-81.7241	762	30.2	55728.1	50732.9	33.13
9/23/2020	#####	wwint	25.92336	-81.7143	761.7	29.2	50636.8	46884.5	30.35
9/23/2020	#####	wwint	25.92332	-81.7142	761.5	29.7	52927.9	48607.4	31.59
9/23/2020	#####	af61897	25.92603	-81.703	761.5	29.7	51511	47263.1	30.61
9/23/2020	#####	af61897	25.92601	-81.703	761.7	29.8	54049	49544.6	32.27
9/23/2020	#####	mcilvane	25.91209	-81.7087	761.5	28.6	53254.7	49843.7	32.53
9/23/2020	#####	mcilvane	25.91206	-81.7087	761.5	28.7	54924.8	51329.9	33.62

pH	pH (mV)	ODO (mg/l)	ODO (% LocalB)
7.93	-104.4	6.5	97.5
7.89	-101.4	5	76.5
7.85	-99	5.75	85.6
7.93	-104.1	6.29	94.1
7.96	-105.7	5.83	89.2
7.98	-107.2	5.73	88
8.02	-109.2	5.59	84.7
7.72	-92.1	0.98	15.5
7.95	-105.1	5.9	90.8
7.92	-103.8	4.76	74.3
7.93	-104.5	6.17	95.9
7.93	-104.1	4.59	72.1
7.99	-107.6	5.4	83.3
8.03	-109.7	5.54	86

AF1892BF	MARCO	9/23/2020 11:22	W WINTERBERRY BRI	Field	Field Testino-Discrete	Misc Field Device	SW	3.20	3.50	Salinity	1975	FDEP FT 1300	31.43	00th	EB AF61902	Visible outpouring tide. Jellies in water. Vegetative debris on water s.	JGravinMMcKa Intermedia Van Dom E
AF18937F	MARCO	9/23/2020 11:44	E WINTERBERRY BRI	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	2.50	Salinity	1975	FDEP FT 1300	19.14	00th	EB AF61902	Visible outpouring tide. Several rays upstream of sample site. Vegeta	JGravinMMcKa Intermedia Van Dom E
AF1897BF	MARCO	9/23/2020 11:45	E WINTERBERRY BRI	Field	Field Testino-Discrete	Misc Field Device	SW	2.20	2.50	Salinity	1975	FDEP FT 1300	19.77	00th	EB AF61902	Visible outpouring tide. Flow.	JGravinMMcKa Intermedia Van Dom E
AF18982F	MARCO	9/23/2020 12:09	MCLIVANE	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	3.00	Salinity	1975	FDEP FT 1300	32.53	00th	EB AF61902	No visible tidal movement. No flow.	JGravinMMcKa Direct Gra Water Bott
AF18938F	MARCO	9/23/2020 12:10	MCLIVANE	Field	Field Testino-Discrete	Misc Field Device	SW	2.70	3.00	Salinity	1975	FDEP FT 1300	33.62	00th	EB AF61902	Visible outpouring tide. Several rays upstream of sample site. Vegeta	JGravinMMcKa Intermedia Van Dom E
AF18981F	MARCO	9/23/2020 10:14	LANDMARK	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	1.50	Salinity	1975	FDEP FT 1300	30.09	00th	EB AF61902	No visible tidal movement. No flow.	JGravinMMcKa Direct Gra Water Bott
AF18918F	MARCO	9/23/2020 10:16	LANDMARK	Field	Field Testino-Discrete	Misc Field Device	SW	1.20	1.50	Salinity	1975	FDEP FT 1300	30.40	00th	EB AF61902	No visible tidal movement. No flow.	JGravinMMcKa Direct Gra Water Bott
AF18984F	MARCO	9/23/2020 8:30	WINDMILL	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	3.70	Depth. Secchi Disk Depth	WIN-010	FDEP FT 1700	1.70	m	EB AF61902	Visible outpouring tide. Flow.	JGravinMMcKa Intermedia Van Dom E
AF18985F	MARCO	9/23/2020 8:39	HUMMINGBRD	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	1.40	Depth. Secchi Disk Depth	WIN-010	FDEP FT 1700	1.40	m	EB AF61902	No visible tidal movement. Jellies in water column. Vegetative debris	JGravinMMcKa Direct Gra Water Bott
AF18986F	MARCO	9/23/2020 10:44	SWALLOW	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	1.60	Depth. Secchi Disk Depth	WIN-010	FDEP FT 1700	1.30	m	EB AF61902	No visible tidal movement. No flow.	JGravinMMcKa Direct Gra Water Bott
AF18922F	MARCO	9/23/2020 11:21	W WINTERBERRY BRI	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	3.50	Depth. Secchi Disk Depth	WIN-010	FDEP FT 1700	2.00	m	EB AF61902	Visible outpouring tide. Jellies in water. Vegetative debris on water s.	JGravinMMcKa Intermedia Van Dom E
AF18977F	MARCO	9/23/2020 11:44	E WINTERBERRY BRI	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	2.50	Depth. Secchi Disk Depth	WIN-010	FDEP FT 1700	1.70	m	EB AF61902	Visible outpouring tide. Several rays upstream of sample site. Vegeta	JGravinMMcKa Intermedia Van Dom E
AF18933F	MARCO	9/23/2020 12:09	MCLIVANE	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	3.00	Depth. Secchi Disk Depth	WIN-010	FDEP FT 1700	2.00	m	EB AF61902	Visible outpouring tide. Flow.	JGravinMMcKa Intermedia Van Dom E
AF18919F	MARCO	9/23/2020 10:14	LANDMARK	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	1.50	Depth. Secchi Disk Depth	WIN-010	FDEP FT 1700	1.50	m	EB AF61902	No visible tidal movement. No flow.	JGravinMMcKa Direct Gra Water Bott
AF18945F	MARCO	9/23/2020 8:30	WINDMILL	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	3.70	Specific Conductance	1610	FDEP FT 1200	42133	umho/cm	EB AF61902	Visible outpouring tide. Flow.	JGravinMMcKa Intermedia Van Dom E
AF18946F	MARCO	9/23/2020 8:32	WINDMILL	Field	Field Testino-Discrete	Misc Field Device	SW	3.40	3.70	Specific Conductance	1610	FDEP FT 1200	47627	umho/cm	EB AF61902	Visible outpouring tide. Flow.	JGravinMMcKa Intermedia Van Dom E
AF18987F	MARCO	9/23/2020 11:44	E WINTERBERRY BRI	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	2.50	Specific Conductance	1610	FDEP FT 1200	44057	umho/cm	EB AF61902	No visible tidal movement. Jellies in water column. Vegetative debris	JGravinMMcKa Direct Gra Water Bott
AF18932F	MARCO	9/23/2020 12:09	MCLIVANE	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	3.00	Specific Conductance	1610	FDEP FT 1200	41668	umho/cm	EB AF61902	Visible outpouring tide. Flow.	JGravinMMcKa Intermedia Van Dom E
AF18952F	MARCO	9/23/2020 8:39	HUMMINGBRD	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	1.40	Specific Conductance	1610	FDEP FT 1200	44349	umho/cm	EB AF61902	No visible tidal movement. Vegetative debris on water surface. Jel	JGravinMMcKa Direct Gra Water Bott
AF18953F	MARCO	9/23/2020 10:44	SWALLOW	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	1.60	Specific Conductance	1610	FDEP FT 1200	50733	umho/cm	EB AF61902	Active discharge from stormwater outflow at sample site. No visible	JGravinMMcKa Direct Gra Water Bott
AF18988F	MARCO	9/23/2020 10:46	SWALLOW	Field	Field Testino-Discrete	Misc Field Device	SW	1.30	1.60	Specific Conductance	1610	FDEP FT 1200	50733	umho/cm	EB AF61902	Active discharge from stormwater outflow at sample site. No visible	JGravinMMcKa Direct Gra Water Bott
AF18923F	MARCO	9/23/2020 11:21	W WINTERBERRY BRI	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	3.50	Specific Conductance	1610	FDEP FT 1200	46884	umho/cm	EB AF61902	Visible outpouring tide. Jellies in water. Vegetative debris on water s.	JGravinMMcKa Intermedia Van Dom E
AF18928F	MARCO	9/23/2020 11:22	W WINTERBERRY BRI	Field	Field Testino-Discrete	Misc Field Device	SW	3.20	3.50	Specific Conductance	1610	FDEP FT 1200	48007	umho/cm	EB AF61902	Visible outpouring tide. Jellies in water. Vegetative debris on water s.	JGravinMMcKa Intermedia Van Dom E
AF18977F	MARCO	9/23/2020 11:44	E WINTERBERRY BRI	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	2.50	Specific Conductance	1610	FDEP FT 1200	47263	umho/cm	EB AF61902	Visible outpouring tide. Several rays upstream of sample site. Vegeta	JGravinMMcKa Intermedia Van Dom E
AF18978F	MARCO	9/23/2020 11:45	E WINTERBERRY BRI	Field	Field Testino-Discrete	Misc Field Device	SW	2.20	2.50	Specific Conductance	1610	FDEP FT 1200	49545	umho/cm	EB AF61902	Visible outpouring tide. Several rays upstream of sample site. Vegeta	JGravinMMcKa Intermedia Van Dom E
AF18933F	MARCO	9/23/2020 12:09	MCLIVANE	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	3.00	Specific Conductance	1610	FDEP FT 1200	49844	umho/cm	EB AF61902	Visible outpouring tide. Flow.	JGravinMMcKa Intermedia Van Dom E
AF18938F	MARCO	9/23/2020 12:10	MCLIVANE	Field	Field Testino-Discrete	Misc Field Device	SW	2.70	3.00	Specific Conductance	1610	FDEP FT 1200	44349	umho/cm	EB AF61902	Visible outpouring tide. Flow.	JGravinMMcKa Intermedia Van Dom E
AF18981F	MARCO	9/23/2020 10:14	LANDMARK	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	1.50	Specific Conductance	1610	FDEP FT 1200	46116	umho/cm	EB AF61902	No visible tidal movement. No flow.	JGravinMMcKa Direct Gra Water Bott
AF18918F	MARCO	9/23/2020 10:16	LANDMARK	Field	Field Testino-Discrete	Misc Field Device	SW	1.20	1.50	Specific Conductance	1610	FDEP FT 1200	46116	umho/cm	EB AF61902	No visible tidal movement. No flow.	JGravinMMcKa Direct Gra Water Bott
AF18945F	MARCO	9/23/2020 8:30	WINDMILL	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	3.70	Temperature. Water	2030	FDEP FT 1400	28.8	00C	EB AF61902	Visible outpouring tide. Flow.	JGravinMMcKa Intermedia Van Dom E
AF18946F	MARCO	9/23/2020 8:32	WINDMILL	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	3.70	Temperature. Water	2030	FDEP FT 1400	28.7	00C	EB AF61902	Visible outpouring tide. Flow.	JGravinMMcKa Intermedia Van Dom E
AF18987F	MARCO	9/23/2020 11:44	E WINTERBERRY BRI	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	1.40	Temperature. Water	2030	FDEP FT 1400	27.8	00C	EB AF61902	No visible tidal movement. Vegetative debris on water surface. Jel	JGravinMMcKa Direct Gra Water Bott
AF18932F	MARCO	9/23/2020 12:09	MCLIVANE	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	1.40	Temperature. Water	2030	FDEP FT 1400	28.7	00C	EB AF61902	Visible outpouring tide. Several rays upstream of sample site. Vegeta	JGravinMMcKa Intermedia Van Dom E
AF18952F	MARCO	9/23/2020 10:44	SWALLOW	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	1.60	Temperature. Water	2030	FDEP FT 1400	29.9	00C	EB AF61902	Active discharge from stormwater outflow at sample site. No visible	JGravinMMcKa Direct Gra Water Bott
AF18988F	MARCO	9/23/2020 10:46	SWALLOW	Field	Field Testino-Discrete	Misc Field Device	SW	1.30	1.60	Temperature. Water	2030	FDEP FT 1400	30.2	00C	EB AF61902	Active discharge from stormwater outflow at sample site. No visible	JGravinMMcKa Direct Gra Water Bott
AF18923F	MARCO	9/23/2020 11:21	W WINTERBERRY BRI	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	3.50	Temperature. Water	2030	FDEP FT 1400	29.7	00C	EB AF61902	Visible outpouring tide. Jellies in water. Vegetative debris on water s.	JGravinMMcKa Intermedia Van Dom E
AF18928F	MARCO	9/23/2020 11:22	W WINTERBERRY BRI	Field	Field Testino-Discrete	Misc Field Device	SW	3.20	3.50	Temperature. Water	2030	FDEP FT 1400	29.7	00C	EB AF61902	Visible outpouring tide. Several rays upstream of sample site. Vegeta	JGravinMMcKa Intermedia Van Dom E
AF18977F	MARCO	9/23/2020 11:44	E WINTERBERRY BRI	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	2.50	Temperature. Water	2030	FDEP FT 1400	29.7	00C	EB AF61902	Visible outpouring tide. Several rays upstream of sample site. Vegeta	JGravinMMcKa Intermedia Van Dom E
AF18978F	MARCO	9/23/2020 11:45	E WINTERBERRY BRI	Field	Field Testino-Discrete	Misc Field Device	SW	2.20	2.50	Temperature. Water	2030	FDEP FT 1400	29.8	00C	EB AF61902	Visible outpouring tide. Several rays upstream of sample site. Vegeta	JGravinMMcKa Intermedia Van Dom E
AF18933F	MARCO	9/23/2020 12:09	MCLIVANE	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	3.00	Temperature. Water	2030	FDEP FT 1400	28.6	00C	EB AF61902	Visible outpouring tide. Flow.	JGravinMMcKa Intermedia Van Dom E
AF18938F	MARCO	9/23/2020 12:10	MCLIVANE	Field	Field Testino-Discrete	Misc Field Device	SW	2.70	3.00	Temperature. Water	2030	FDEP FT 1400	28.7	00C	EB AF61902	Visible outpouring tide. Flow.	JGravinMMcKa Intermedia Van Dom E
AF18981F	MARCO	9/23/2020 10:14	LANDMARK	Field	Field Testino-Discrete	Misc Field Device	SW	0.30	1.50	Temperature. Water	2030	FDEP FT 1400	28.9	00C	EB AF61902	No visible tidal movement. No flow.	JGravinMMcKa Direct Gra Water Bott
AF18918F	MARCO	9/23/2020 10:16	LANDMARK	Field	Field Testino-Discrete	Misc Field Device	SW	1.20	1.50	Temperature. Water	2030	FDEP FT 1400	29.0	00C	EB AF61902	No visible tidal movement. No flow.	JGravinMMcKa Direct Gra Water Bott
AF18902	MARCO	9/23/2020 8:50	WINDMILL	BLANK	BLANK	BLANK	SW	0.3	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	EB AF61902	FCRB Collected from CDI 10667 canby.	JGravinMMcKa Intermedia Van Dom E



Collier County™

POLLUTION CONTROL

LIVE GREEN. SAVE BLUE.

Field Sampling Report

Date: Wednesday, September 23, 2020

Sampler: Danny Berger

Meter/Notes: Chris Lienhardt



Certificate No

[4262.01](#)

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

CCV: Morning		Sonde / Handheld	ProDSS #9	Serial #:	18E104142	
Date/Time:	9/23/20 6:52 AM	Operator:	Josh Gravlin	Project:	MARCO	
*** Conductivity ***					Associated Calibration File:	
Standard (µmhos/cm) ± 5%	CDI#	Reading	Pass/Fail	Calibration_9_091820.xlsm		
1000	14102	1007	Pass			
*** pH ***						
pH (QA Criteria ±.2)	CDI#	Reading	Pass/Fail			
4.00						
7.00	14385	6.96	Pass	All CCV Results Pass?		
10.00				Yes		
*** Dissolved Oxygen ***						
D.O. (QA Criteria ±3mg/l)	mg/L	%	°C	Pass/Fail	True Value	Barometric Pressure
CCV Readings --->	8.57	100.3	23.3	Pass	8.536	760.5
Notes:						
CCV: Afternoon		Date/Time:	9/23/2020 11:35 AM	Operator:	Chris Lienhardt	
*** Conductivity ***						
Standard (µmhos/cm) ± 5%	CDI#	Reading	Pass/Fail			
10000	10028	10029	Pass			
70000	14438	71043	Pass			
*** pH ***						
pH (QA Criteria +.2)	CDI#	Reading	Pass/Fail			
4.00						
7.00	14385	7.06	Pass	All CCV Results Pass?		
10.00	14396	10.02	Pass	Yes		
*** Dissolved Oxygen ***						
D.O. (QA Criteria ±3mg/l)	mg/L	%	°C	Pass/Fail	True Value	Barometric Pressure
CCV Readings --->	8.43	99.5	23.8	Pass	8.463	761.2
Notes:						
Surface Water Field Workbook Rev 17.3				Effective September 3rd, 2020		

Collier County Pollution Control Surface Water Field Workbook
Field Sheet Worksheet

Program: MARCO

Run: II

Sample Collector: Danny Berger

Meter / Notes: Chris Lienhardt

Date: 9/23/2020

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)
AF61901	8:30	OLDE_MARCO	27.6	48907	31.87	86.1	5.69	7.98	0.30		1.85	1.85
AF61901B	8:32	OLDE_MARCO	28.0	50189	32.80	80.3	5.25	7.98	1.55		1.85	1.85
Collection Device	Pole Sampler; CDI: 13545		Cleaning Protocol: J			Flow:		Staff Gauge:			pH < 2:	YES
Comments:	Difficult to determine tidal flow. Chart shows outgoing until approximately 1 PM.							Thermally Preserved Within 15 Minutes?	Yes	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)
AF61886	8:57	JH_PARK	29.1	44089	28.34	86.1	5.66	7.97	0.30		4.20	1.90
AF61886B	9:00	JH_PARK	29.5	46246	29.88	75.3	4.88	7.92	3.90		4.20	1.90
Collection Device	Pole Sampler; CDI: 13545		Cleaning Protocol: J			Flow:		Staff Gauge:			pH < 2:	YES
Comments:	Visibly outgoing tide. Large school of baitfish swimming through site.							Thermally Preserved Within 15 Minutes?	Yes	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)
AF61887	9:21	HC_CENTER	29.1	42715	27.35	84.1	5.57	7.94	0.30		1.70	1.70
AF61887B	9:23	HC_CENTER	29.3	42831	27.43	77.4	5.10	7.91	1.40		1.70	1.70
Collection Device	Pole Sampler; CDI: 13545		Cleaning Protocol: J			Flow:		Staff Gauge:			pH < 2:	YES
Comments:	Large clusters of comb jellyfish observed near site. Visibly outgoing tide.							Thermally Preserved Within 15 Minutes?	Yes	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)
AF61888	9:42	COLLIER_BRIDGE	29.2	42727	27.36	87.0	5.75	7.98	0.30		1.40	1.40
Collection Device	Pole Sampler; CDI: 13545		Cleaning Protocol: J			Flow:		Staff Gauge:			pH < 2:	YES
Comments:	Visibly outgoing tide.							Thermally Preserved Within 15 Minutes?	Yes	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:	Breezy and cooler. Temps in the low 70s moving to the low 80s.	
Sampling SOP:	FSQM 03-04	24 HRS Prior Weather:	Similar.	

Prepared By: Christopher Lienhardt Signed: 9/23/2020 2:17:27 PM

Reviewed By: Danny Berger Signed: 9/23/2020 11:55:47 AM

Collier County Pollution Control Surface Water Field Workbook
Field Sheet Worksheet

Program: MARCO

Run: II

Sample Collector: Danny Berger

Meter / Notes: Chris Lienhardt

Date: 9/23/2020

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)
AF61899	9:51	COLLIER_BRIDGE										

Collection Device:	Sample Container	Cleaning Protocol:	Flow:	Staff Gauge:	pH < 2:	YES		
Comments:	FB taken from CDI08334 carboy.				Thermally Preserved Within 15 Minutes?	Yes	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)
AF61889	10:09	KENDALL	29.2	44037	28.30	91.4	6.01	7.97	0.30		0.95	0.95

Collection Device:	Pole Sampler; CDI: 13545	Cleaning Protocol:	J	Flow:	Staff Gauge:	pH < 2:	YES	
Comments:	Visibly outgoing tide. Landscaper observed blowing leaf litter and other debris off seawall across from sample location.				Thermally Preserved Within 15 Minutes?	Yes	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)
AF61900	10:16	KENDALL	29.3	44020	28.28	92.3	6.06	7.97	0.30		0.95	0.95

Collection Device:	Pole Sampler; CDI: 13545	Cleaning Protocol:	J	Flow:	Staff Gauge:	pH < 2:	YES	
Comments:	visibly outgoing tide. Landscaper observed blowing leaf litter and other debris on seawall across from sample location. House being serviced was 640 Kendall Dr. Unable to determine landscaping company name due to unmarked vehicles working at address.				Thermally Preserved Within 15 Minutes?	Yes	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)
AF61890	10:41	BARFIELD_BRIDGE	28.5	47026	30.48	91.3	6.00	7.92	0.30		2.30	1.90

Collection Device:	VanDorn; CDI: 08722	Cleaning Protocol:	J	Flow:	Staff Gauge:	pH < 2:	YES	
Comments:	Visibly outgoing tide.				Thermally Preserved Within 15 Minutes?	Yes	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:	Breezy and cooler. Temps in the low 70s moving to the low 80s.		
Sampling SOP Used:	FSQM 03-04	24 HRS Prior Weather:	Similar.		

Prepared By: Christopher Lienhardt

Reviewed By: Danny Berger

Collier County Pollution Control Surface Water Field Workbook
Field Sheet Worksheet

Program: MARCO

Run: II

Sample Collector: Danny Berger

Meter / Notes: Chris Lienhardt

Date: 9/23/2020

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:		Thermally Preserved Within 15 Minutes?			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:		Thermally Preserved Within 15 Minutes?			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:		Thermally Preserved Within 15 Minutes?			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:		Thermally Preserved Within 15 Minutes?			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:	Breezy and cooler. Temps in the low 70s moving to the low 80s.		
Sampling SOP Used:	FSQM 03-04	24 HRS Prior Weather:	Similar.		

Prepared By: Christopher Lienhardt

Reviewed By: Danny Berger

Collier County Pollution Control Surface Water Field Workbook
Field Sheet Worksheet

Program: MARCO

Run: II

Sample Collector: Danny Berger

Meter / Notes: Chris Lienhardt

Date: 9/23/2020

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:								Thermally Preserved Within 15 Minutes?		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:								Thermally Preserved Within 15 Minutes?		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:								Thermally Preserved Within 15 Minutes?		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:								Thermally Preserved Within 15 Minutes?		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:	Breezy and cooler. Temps in the low 70s moving to the low 80s.	
Sampling SOP Used:	FSQM 03-04	24 HRS Prior Weather:	Similar.	

Prepared By: Christopher Lienhardt

Reviewed By: Danny Berger



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	75529					
2C 1L Opaque HDPE/Light-shielded/Ice	AF61452					
3S 250ml HDPE/H2SO4/Ice	CDI14242	16 Drops	RP16033	Fisher	9/23/2020	CTL
4F 125mL HDPE/Filtered/Ice	CDI13021					
5J 120mL HDPE w/Sodium Thiosulfate/Ice	CDI13466					
14 Whatman Polydisc GW 0.45µm	A29352435					

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

Received By: (Signature)	Date/Time	9/23/20 12:05 PM
Relinquished By: (Signature)	Date/Time	9/23/20 12:05 PM
Received By: (Signature)	Date/Time	

Parameters										Sample Check-In		
Turbidity-PC Chlorophyll-PC, Pheophytin-PC, Prep-Chloro Nitrogen-TKN, Phosphorous-Total, Nitrate-Nitrite, 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												
9/23/2020	8:30	7.98	48907	0.30	OLDE MARCO	SW	1	1	1	1	1													AF61901
9/23/2020	8:57	7.97	44089	0.30	JH_PARK	SW	1	1	1	1	1													AF61886
9/23/2020	9:21	7.94	42715	0.30	HC_CENTER	SW	1	1	1	1	1													AF61887
9/23/2020	9:42	7.98	42727	0.30	COLLIER_BRIDGE	SW	1	1	1	1	1													AF61888
9/23/2020	9:51	#N/A	#N/A	#N/A	COLLIER_BRIDGE	SW	1	1	1	1	1													AF61899
9/23/2020	10:09	7.97	44037	0.30	KENDALL	SW	1	1	1	1	1													AF61889
9/23/2020	10:16	7.97	44020	0.30	REPLICATE	SW	1	1	1	1	1													AF61900
9/23/2020	10:41	7.92	47026	0.30	BARFIELD_BRIDGE	SW	1	1	1	1	1													AF61890

Notes: Sample AF61900 was received in the lab unpreserved.

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-M40	SAMP	FB	Sampler	9/23/2020 9:49	Incorrect initial entry.	Joshua Gravlin
Field Sheet-B54	Visibly outgoing tide. Landscape	Visibly outgoing tide. Landscape	ChristopherLienhardt	9/25/2020 10:09	more details	Christopher Lienhardt

KorDSS MEASUREMENT DATA FILE EXPORT

FILE CRE# #####

DATE	TIME	SITE	Barometer	Temp (°C)	Sp Cond (µ	TDS (mg/L	Sal (ppt)	pH	pH (mV)
9/23/2020	#####	af61901	761.9	27.6	48906.9	31789	31.87	7.98	-74.1
9/23/2020	#####	af61901	761.8	28	50188.6	32623	32.8	7.98	-74.1
9/23/2020	#####	af61886	762	29.1	44089.1	28658	28.34	7.97	-74
9/23/2020	#####	af61886	762	29.5	46245.6	30060	29.88	7.92	-71.3
9/23/2020	#####	af61887	762.2	29.1	42714.5	27764	27.35	7.94	-72.2
9/23/2020	#####	af61887	762.2	29.3	42830.6	27840	27.43	7.91	-70.3
9/23/2020	#####	af61888	762.2	29.2	42727.3	27773	27.36	7.98	-74.8
9/23/2020	#####	af61889	762.2	29.2	44037	28624	28.3	7.97	-73.9
9/23/2020	#####	af61900	762.1	29.3	44020.3	28613	28.28	7.97	-74.1
9/23/2020	#####	af61900	762	28.5	47026.2	30567	30.48	7.92	-71.2

ODO (% S:	ODO (mg/l	ODO (% LocalB)
86.3	5.69	86.1
80.5	5.25	80.3
86.3	5.66	86.1
75.5	4.88	75.3
84.3	5.57	84.1
77.6	5.1	77.4
87.2	5.75	87
91.7	6.01	91.4
92.5	6.06	92.3
91.5	6	91.3

AF61890F	MARCO	9/23/2020 10:41	BARFIELD_BRIDGE	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	2.30	Depth, Secchi Disk Depth	WIN010	F79P-FT1700	1 m	FB AF61899	Visible outpiping tide.	CLienhardDBe	Intermedia Van Dom F						
AF61901F	MARCO	9/23/2020 8:30	OLDE MARCO	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	1.85	Specific Conductance	1610	F79P-FT1700	40677 umho/cm	FB AF61899	Difficult to determine tidal flow. Chart shows outpiping until approx.	CLienhardDBe	Direct Gra Water Bott						
AF61901B	MARCO	9/23/2020 8:32	OLDE MARCO	Field	Field Testing-Discrete	Misc Field Device	SW	1.55	1.85	Specific Conductance	1610	F79P-FT1700	61918 umho/cm	FB AF61899	Difficult to determine tidal flow. Chart shows outpiping until approx.	CLienhardDBe	Direct Gra Water Bott						
AF61898F	MARCO	9/23/2020 8:57	JH PARK	Field	Field Testing-Discrete	Misc Field Device	SW	0.80	4.20	Specific Conductance	1610	FDEP-FT1200	44389 umho/cm	FB AF61899	Visible outpiping tide. Large school of baitfish swimming through site.	CLienhardDBe	Direct Gra Water Bott						
AF61898B	MARCO	9/23/2020 9:00	JH PARK	Field	Field Testing-Discrete	Misc Field Device	SW	3.90	4.20	Specific Conductance	1610	FDEP-FT1200	46246 umho/cm	FB AF61899	Visible outpiping tide. Large school of baitfish swimming through site.	CLienhardDBe	Direct Gra Water Bott						
AF61897F	MARCO	9/23/2020 9:21	HC CENTER	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	1.70	Specific Conductance	1610	FDEP-FT1200	42714 umho/cm	FB AF61899	Large clusters of comb jellyfish observed near site. Visible outpiping.	CLienhardDBe	Direct Gra Water Bott						
AF61897B	MARCO	9/23/2020 9:23	HC CENTER	Field	Field Testing-Discrete	Misc Field Device	SW	1.40	1.70	Specific Conductance	1610	FDEP-FT1200	42831 umho/cm	FB AF61899	Large clusters of comb jellyfish observed near site. Visible outpiping.	CLienhardDBe	Direct Gra Water Bott						
AF61898F	MARCO	9/23/2020 9:42	COLLIER BRIDGE	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	1.40	Specific Conductance	1610	FDEP-FT1200	42727 umho/cm	FB AF61899	Visible outpiping tide.	CLienhardDBe	Direct Gra Water Bott						
AF61898F	MARCO	9/23/2020 10:09	KENDALL	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	0.95	Specific Conductance	1610	FDEP-FT1200	44037 umho/cm	FB AF61899	Visible outpiping tide. Landscaper observed blowing leaf litter and o	CLienhardDBe	Direct Gra Water Bott						
AF61900FD	MARCO	9/23/2020 10:16	KENDALL	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	0.95	Specific Conductance	1610	FDEP-FT1200	44020 umho/cm	FB AF61899	Visible outpiping tide. Landscaper observed blowing leaf litter and o	CLienhardDBe	Direct Gra Water Bott						
AF61895F	MARCO	9/23/2020 10:41	BARFIELD BRIDGE	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	2.30	Specific Conductance	1610	FDEP-FT1200	47026 umho/cm	FB AF61899	Visible outpiping tide.	CLienhardDBe	Intermedia Van Dom F						
AF61901F	MARCO	9/23/2020 8:30	OLDE MARCO	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	1.85	Temperature, Water	2030	FDEP-FT1400	27.5 deg C	FB AF61899	Difficult to determine tidal flow. Chart shows outpiping until approx.	CLienhardDBe	Direct Gra Water Bott						
AF61901B	MARCO	9/23/2020 8:32	OLDE MARCO	Field	Field Testing-Discrete	Misc Field Device	SW	1.55	1.85	Temperature, Water	2030	FDEP-FT1400	28.0 deg C	FB AF61899	Difficult to determine tidal flow. Chart shows outpiping until approx.	CLienhardDBe	Direct Gra Water Bott						
AF61898F	MARCO	9/23/2020 8:57	JH PARK	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	4.20	Temperature, Water	2030	FDEP-FT1400	29.1 deg C	FB AF61899	Visible outpiping tide. Large school of baitfish swimming through site.	CLienhardDBe	Direct Gra Water Bott						
AF61898B	MARCO	9/23/2020 9:00	JH PARK	Field	Field Testing-Discrete	Misc Field Device	SW	3.90	4.20	Temperature, Water	2030	FDEP-FT1400	29.5 deg C	FB AF61899	Visible outpiping tide. Large school of baitfish swimming through site.	CLienhardDBe	Direct Gra Water Bott						
AF61897F	MARCO	9/23/2020 9:21	HC CENTER	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	1.70	Temperature, Water	2030	FDEP-FT1400	29.1 deg C	FB AF61899	Large clusters of comb jellyfish observed near site. Visible outpiping.	CLienhardDBe	Direct Gra Water Bott						
AF61897B	MARCO	9/23/2020 9:23	HC CENTER	Field	Field Testing-Discrete	Misc Field Device	SW	1.40	1.70	Temperature, Water	2030	FDEP-FT1400	29.3 deg C	FB AF61899	Large clusters of comb jellyfish observed near site. Visible outpiping.	CLienhardDBe	Direct Gra Water Bott						
AF61898F	MARCO	9/23/2020 9:42	COLLIER BRIDGE	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	1.40	Temperature, Water	2030	FDEP-FT1400	29.2 deg C	FB AF61899	Visible outpiping tide.	CLienhardDBe	Direct Gra Water Bott						
AF61898F	MARCO	9/23/2020 10:09	KENDALL	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	0.95	Temperature, Water	2030	FDEP-FT1400	29.2 deg C	FB AF61899	Visible outpiping tide. Landscaper observed blowing leaf litter and o	CLienhardDBe	Direct Gra Water Bott						
AF61900FD	MARCO	9/23/2020 10:16	KENDALL	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	0.95	Temperature, Water	2030	FDEP-FT1400	29.3 deg C	FB AF61899	Visible outpiping tide. Landscaper observed blowing leaf litter and o	CLienhardDBe	Direct Gra Water Bott						
AF61890F	MARCO	9/23/2020 10:41	BARFIELD BRIDGE	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	2.30	Temperature, Water	2030	FDEP-FT1400	29.5 deg C	FB AF61899	Visible outpiping tide.	CLienhardDBe	Intermedia Van Dom F						
AF61899	MARCO	9/23/2020 9:51	COLLIER BRIDGE	BLANK	BLANK	BLANK	SW	0.3	BLANK	BLANK	BLANK	BLANK	BLANK	FB AF61899	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	FB taken from C006934 carboy.	CLienhardDBe	Direct Gra Water Bott