Collier County™
POLLUTION CONTROL
LIVE GREEN. SAVE BLUE.

Field Sampling Report

Date: Tuesday, February 26, 2019
Sampler: Geoff Rosenaw
Meter/Notes: Danny Berger

NEFAP ACCREDITED
TNI
FIELD SAMPLING & MEASUREMENT ORGANIZATION

Certificate No
4262.01

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

CCV: Morning

Sonde / Handheld	ProDSS #10	Serial #:	17E102963
Date/Time:	2/26/19 7:11 AM	Operator:	Josh Gravlin
Project:	MARCO		

***** Conductivity *****

Standard (µmhos/cm) ± 5%	CDI#	Reading	Pass/Fail
70000	11302	69844	Pass

Associated Calibration File: Calibration_10_022219.xlsm

***** pH *****

pH (QA Criteria ±.2)	CDI#	Reading	Pass/Fail
4.00			
7.00	11641	7.08	Pass
10.00			

All CCV Results Pass? **Yes**

***** Dissolved Oxygen *****

D.O. (QA Criteria ±3mg/l)	mg/L	%	°C	Pass/Fail	True Value	Barometric Pressure
CCV Readings --->	8.65	100.1	22.6	Pass	8.714	766.1

Notes:

CCV: Afternoon

Date/Time:	2/26/2019 12:44	Operator:	Danny Berger

***** Conductivity *****

Standard (µmhos/cm) ± 5%	CDI#	Reading	Pass/Fail
10000	11311	10022	Pass
70000	11302	70053	Pass

***** pH *****

pH (QA Criteria +.2)	CDI#	Reading	Pass/Fail
4.00			
7.00	11641	7.05	Pass
10.00	11648	9.97	Pass

All CCV Results Pass? **Yes**

***** Dissolved Oxygen *****

D.O. (QA Criteria ±3mg/l)	mg/L	%	°C	Pass/Fail	True Value	Barometric Pressure
CCV Readings --->	7.65	100.1	29.4	Pass	7.687	765.3

Notes:

Collier County Pollution Control Surface Water Field Workbook
Field Sheet Worksheet

Program: MARCO | Run: I | Sample Collector: Geoff Rosenaw | Meter / Notes: Danny Berger | Date: 2/26/2019

LAB ID	TIME	STATION	Temp (°C)	Sp Cond (µS/cm)	Sal (ppt)	ODO (% LocalB)	ODO (mg/L)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF53047	8:38	JH_PARK	26.0	50925	33.40	81.0	5.50	7.69	0.30		3.30	1.20
AF53047B	8:41	JH_PARK	26.0	51001	33.45	80.4	5.45	7.74	3.00		3.30	1.20
Collection Device	Pole Sampler; CDI: 10882		Cleaning Protocol:	J	Flow:	Flow.		Staff Gauge:			pH < 2:	YES
Comments:	Visible outgoing tide. Some small jellyfish present. Water flowing out of culvert upstream of site. Water flowing out of culvert appeared to have some suspended solids.										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)
AF53046	9:07	BARFIELD_BRIDGE	25.1	50953	33.44	90.5	6.23	7.68	0.30		1.90	1.30
AF53046B	9:09	BARFIELD_BRIDGE	25.4	51843	34.09	83.6	5.70	7.73	1.60		1.90	1.30
Collection Device	Pole Sampler; CDI: 10882		Cleaning Protocol:	J	Flow:	Flow.		Staff Gauge:			pH < 2:	YES
Comments:	Visible outgoing tide. Boat passed by while 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)
AF53050	9:37	KENDALL	25.8	50713	33.24	75.7	5.15	7.67	0.30		1.00	1.00
Collection Device	Pole Sampler; CDI: 10882		Cleaning Protocol:	J	Flow:	Flow.		Staff Gauge:			pH < 2:	YES
Comments:	Visible outgoing tide. Small amount of leaf debris present.										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)
AF53048	10:12	COLLIER_BRIDGE	26.0	50087	32.78	84.8	5.77	7.65	0.30		1.90	1.60
AF53048B	10:14	COLLIER_BRIDGE	26.0	50211	32.87	84.5	5.75	7.68	1.60		1.90	1.60
Collection Device	Pole Sampler; CDI: 10882		Cleaning Protocol:	J	Flow:	Flow.		Staff Gauge:			pH < 2:	YES
Comments:	Visible outgoing tide. Lot adjacent to sampling site was cleared and had no silt fence or erosion measures. Site did not appear to be influenced by lack of erosion control.										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:	Upper 70s and mostly sunny.		
Sampling SOP:	FSQM 03-03	24 HRS Prior Weather:	Similar.		

Prepared By: **Danny Berger** Signed: 2/28/2019 1:44:07 PM

Reviewed By: **Geoff Rosenaw** Signed: 3/1/2019 7:56:02 AM

Collier County Pollution Control Surface Water Field Workbook
Field Sheet Worksheet

Program: MARCO | Run: I | Sample Collector: Geoff Rosenaw | Meter / Notes: Danny Berger | Date: 2/26/2019

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)
AF53052	10:21	COLLIER_BRIDGE										
Collection Device: Sample Container		Cleaning Protocol:		Flow:			Staff Gauge:			pH < 2: YES		
Comments: FB taken from carboy CDI 08331.											Sample Type: FB	
AF53049	10:49	HC_CENTER	25.9	50074	32.77	96.4	6.58	7.77	0.30		2.10	1.40
AF53049B	10:51	HC_CENTER	25.8	50038	32.75	89.6	6.12	7.75	1.80		2.10	1.40
Collection Device: Pole Sampler; CDI: 10882		Cleaning Protocol: J		Flow: Flow.			Staff Gauge:			pH < 2: YES		
Comments: Visible outgoing tide.											Sample Type: SAMP	
AF53051	11:06	PERRINE										
Collection Device:		Cleaning Protocol:		Flow:			Staff Gauge:			pH < 2:		
Comments: Unable to access site due to new home. One photo by DB.											Sample Type: NO SAMPLE	
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:	Upper 70s and mostly sunny.	Prepared By:	Danny Berger
Sampling SOP Used:	FSQM 03-03	24 HRS Prior Weather:	Similar.	Reviewed By:	Geoff Rosenaw

Collier County Pollution Control Surface Water Field Workbook
Field Sheet Worksheet

Program: MARCO
Run: I
Sample Collector: Geoff Rosenaw
Meter / Notes: Danny Berger
Date: 2/26/2019

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:	

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:	Upper 70s and mostly sunny.	
Sampling SOP Used:	FSQM 03-03	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: I | Sample Collector: Geoff Rosenaw | Meter / Notes: Danny Berger | Date: 2/26/2019

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: | Sample Type:

Comments:

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: | Sample Type:

Comments:

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: | Sample Type:

Comments:

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: | Sample Type:

Comments:

Bottles Per Site / Shipped Per Site:	5 / 0	Matrix: SW	Named storm event that impacted sampling event?	No	
Sites Access By:	Truck	Weather:	Upper 70s and mostly sunny.	Prepared By:	Danny Berger
Sampling SOP Used:	FSQM 03-03	24 HRS Prior Weather:	Similar.	Reviewed By:	Geoff Rosenaw

Collier County
POLLUTION CONTROL
LIVE GREEN, SAVE BLUE.

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

Project	MARCO
Sample Collector(s):	
Geoff Rosenaw	
Sample Collector Signature:	
Relinquished By: (Signature)	
Date/Time	2/26/19 12:54 PM
Received By: (Signature)	
Date/Time	2/26/19 12:54 PM
Relinquished By: (Signature)	
Date/Time	
Received By: (Signature)	
Date/Time	

MATRIX CODES
GW Ground Water
SW Surface Water
WW Waste Water
DW Drinking Water
Other_____

PRESERVATION CODES	Lot#	Prs. Vol.	Prs. Lot#	Prs. Supp.	Prs. Date	Initials
2C 1L Opaque HDPE/Light-shielded/Ice	AF52249, AF52364					
3S 125ml HDPE/H2SO4/Ice	CDI 10510	8 drops	RP 11975	Fisher	2/26/2019	DB, GR
4F 60ml Opaque HDPE/Filtered/Ice	CDI 10510					
5J 120mL HDPE w/Sodium Thiosulfate/Ice	CDI 10098					
6N 250ml HDPE/HNO3	CDI 10472					
14 Whatman Polydisc GW 0.45µm	A15785265					

Date	Time	Field pH	Sp. Cond.	Sample Depth	Location	Matrix	Parameters: Chlorophyll-PC, Pheophytin-PC, Prep-Chloro	Nitrate-Nitrite-PC, Nitrogen-TKN-PC, Prep-TKN	Nitrite-PC	Enterolert-PC	Phosphorous-ICP-PC, Prep Metals	TN-PC, CC-Nitrate-N-PC	Bottle Codes: 2C	3S	4F	5J	6N	Calc	# of sample Containers Submited	Lab ID #
2/26/2019	8:38	7.69	50925	0.30	JH_PARK	SW							1	1	1	1	1			AF53047
2/26/2019	9:07	7.68	50953	0.30	BARFIELD_BRIDGE	SW							1	1	1	1	1			AF53046
2/26/2019	9:37	7.67	50713	0.30	KENDALL	SW							1	1	1	1	1			AF53050
2/26/2019	10:12	7.65	50087	0.30	COLLIER_BRIDGE	SW							1	1	1	1	1			AF53048
2/26/2019	10:21	#N/A	#N/A	#N/A	COLLIER_BRIDGE	SW							1	1	1	1	1			AF53052
2/26/2019	10:49	7.77	50074	0.30	HC_CENTER	SW							1	1	1	1	1			AF53049
~~2/26/2019~~	~~11:06~~			~~#N/A~~	~~PERRINE~~	~~SW~~														~~AF53051~~

Sample Check-In	
Sample(s) Intact?	
Rec'd in wet ice?	
Temp°C:	
Proper Samp ID?	
Rec'd within hold time?	
Acid preserved samples pH<2?	
Cl Residual 0 ppm?	
Logged In?	
Scanned?	

Notes:

AF53051 not sampled. Unable to access site.

Sheet & Cell Reference	Initial Value	Changed To	User	Date & Time	Reason For Change	Analyst E-verified Signature
LabID_Upload_Record-A2:B2			joshuagravlin	2/26/2019 13:43		Joshua Gravlin
LabID_Upload_Record-A2:B7			joshuagravlin	2/26/2019 13:47		Joshua Gravlin
Chain of Custody-W8	DB	DB, GR	pcl	2/27/2019 14:52	Incorrect initial entry.	Danny Berger

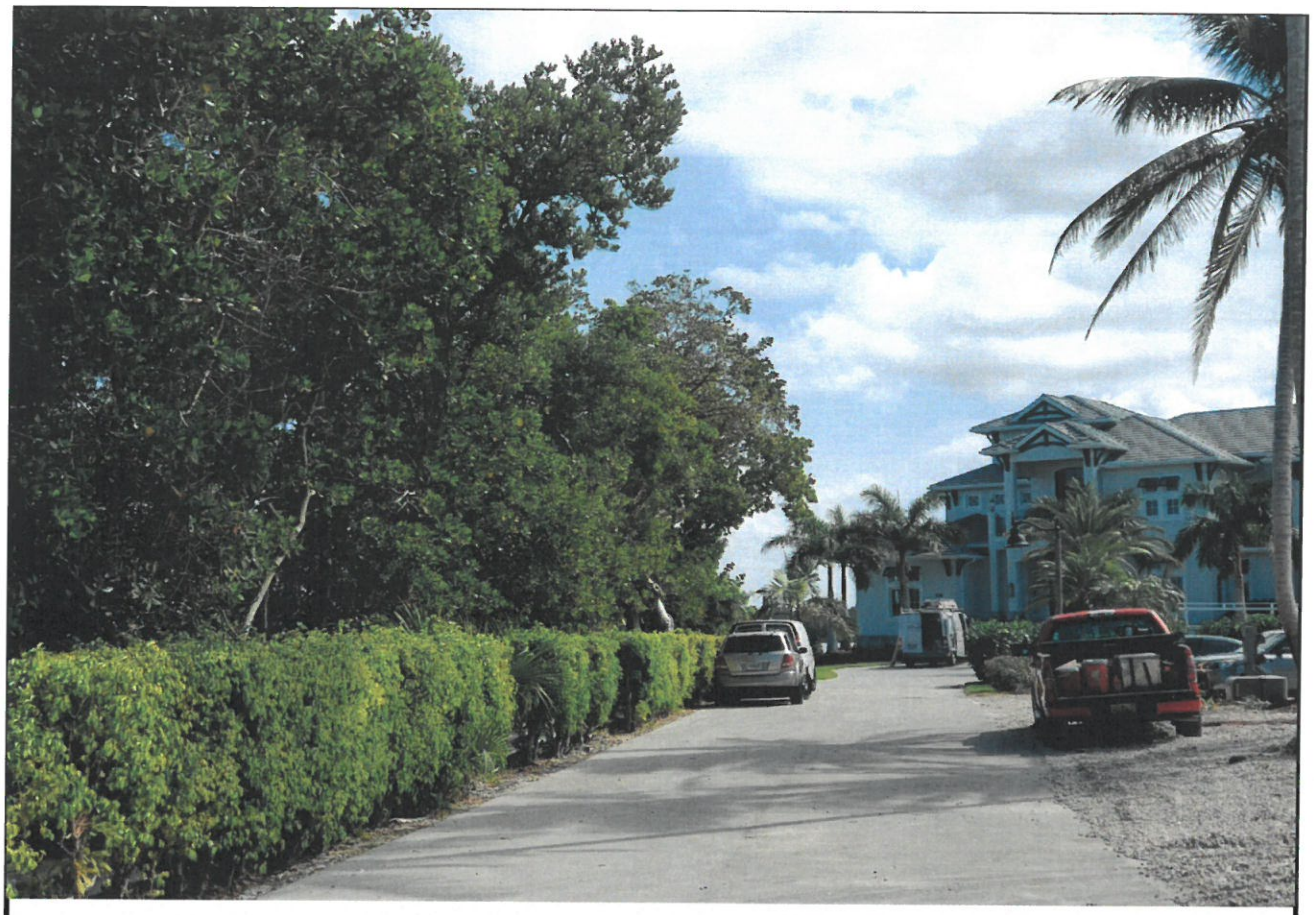
KorDSS MEASUREMENT DATA FILE EXPORT

FILE CREATED: 2/26/2019 17:56

DATE	TIME	SITE	Barometer (mmHg)	Temp (°C)	Cond (µS/cm)	Sp Cond (µS/cm)	nLFCond (µS/cm)	Sal (ppt)	Sigma-T (s t)	Sigma (s)	pH	pH (mV)	ORP (mV)	ODO (% Sat)	ODO (mg/L)	ODO (% LocalB)
2/26/2019	8:38:49 AM	af53047	767.1	26	51889.2	50925.4	50826.5	33.4	21.8	21.8	7.69	-72.4	-1181.9	81.8	5.5	81
2/26/2019	8:41:19 AM	af53047	767.4	26	51979.8	51000.8	50898.2	33.45	21.9	21.9	7.74	-75.8	-1181.9	81.2	5.45	80.4
2/26/2019	9:07:33 AM	af53046	767.3	25.1	51019.7	50953.3	50946.5	33.44	22.1	22.1	7.68	-71.9	-1181.8	91.3	6.23	90.5
2/26/2019	9:09:07 AM	af53046	767.3	25.4	52247.2	51842.5	51800.5	34.09	22.5	22.5	7.73	-74.9	-1181.9	84.4	5.7	83.6
2/26/2019	9:37:52 AM	af53050	767.2	25.8	51523.2	50713.4	50628.7	33.24	21.8	21.8	7.67	-71.6	-1181.9	76.4	5.15	75.7
2/26/2019	10:12:09 AM	af53048	767.4	26	51046.1	50087	49986.4	32.78	21.4	21.4	7.65	-70.3	-1181.9	85.6	5.77	84.8
2/26/2019	10:14:03 AM	af53048	767.4	26	51166.1	50210.9	50110.7	32.87	21.4	21.4	7.68	-72	-1181.9	85.3	5.75	84.5
2/26/2019	10:49:27 AM	af53049	767.3	25.9	50914.9	50074	49986	32.77	21.4	21.4	7.77	-77.2	-1181.9	97.4	6.58	96.4
2/26/2019	10:51:02 AM	af53049	767.3	25.8	50767	50038.3	49962.2	32.75	21.4	21.4	7.75	-75.9	-1181.9	90.4	6.12	89.6

Collier County Pollution Control

Data Export Worksheet



Description: Unable to access site due to new home.

Collier County™
POLLUTION CONTROL
LIVE GREEN. SAVE BLUE.

Field Sampling Report

Date: Tuesday, February 26, 2019
Sampler: Josh Gravlin
Meter/Notes: Chris Lienhardt

NEFAP ACCREDITED
TNI
FIELD SAMPLING & MEASUREMENT ORGANIZATION

Certificate No
4262.01

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

CCV: Morning

Sonde / Handheld	ProDSS #8	Serial #:	16A101840
Date/Time:	2/26/19 7:10 AM	Operator:	Josh Gravlin
Project:	MARCO		

***** Conductivity *****

Standard (µmhos/cm) ± 5%	CDI#	Reading	Pass/Fail
70000	11302	70034	Pass

Associated Calibration File: Calibration_8_022219.xlsm

***** pH *****

pH (QA Criteria ±.2)	CDI#	Reading	Pass/Fail
4.00			
7.00	11641	7.05	Pass
10.00			

All CCV Results Pass? **Yes**

***** Dissolved Oxygen *****

D.O. (QA Criteria ±3mg/l)	mg/L	%	°C	Pass/Fail	True Value	Barometric Pressure
CCV Readings --->	8.68	99.5	22.6	Pass	8.714	766.1

Notes:

CCV: Afternoon

Date/Time:	2/26/2019 11:59	Operator:	Chris Lienhardt

***** Conductivity *****

Standard (µmhos/cm) ± 5%	CDI#	Reading	Pass/Fail
10000	11311	10010	Pass
70000	11302	69806	Pass

***** pH *****

pH (QA Criteria +.2)	CDI#	Reading	Pass/Fail
4.00			
7.00	11641	7.11	Pass
10.00	11648	10.04	Pass

All CCV Results Pass? **Yes**

***** Dissolved Oxygen *****

D.O. (QA Criteria ±3mg/l)	mg/L	%	°C	Pass/Fail	True Value	Barometric Pressure
CCV Readings --->	8.31	100.1	25.2	Pass	8.295	765.8

Notes:

Collier County Pollution Control Surface Water Field Workbook
Field Sheet Worksheet

Program: MARCO | Run: II | Sample Collector: Josh Gravlin | Meter / Notes: Chris Lienhardt | Date: 2/26/2019

LAB ID	TIME	STATION	Temp (°C)	Sp Cond (µS/cm)	Sal (ppt)	ODO (% LocalB)	ODO (mg/L)	pH	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF53053	8:28	WINDMILL										
Collection Device	VanDorn; CDI: 08721		Cleaning Protocol:			Flow:			Staff Gauge:		pH < 2:	YES
Comments:	EB taken from CDI09208 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)
AF53040	8:45	WINDMILL	25.8	51272	33.66	87.8	5.97	7.85	0.30		2.70	1.00
AF53040B	8:48	WINDMILL	25.8	51692	33.97	80.4	5.46	7.83	2.40		2.70	1.00
Collection Device	Pole Sampler; CDI: 11852		Cleaning Protocol:	J		Flow:	Flow.		Staff Gauge:		pH < 2:	YES
Comments:	Sampler reports smelling guano under bridge. Lawn company on site at adjacent house during sampling. Lawn workers observed blowing vegetative debris into canal.										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)
AF53041	9:05	HOLLYHOCK	25.9	51591	33.89	75.0	5.08	7.76	0.30		1.25	0.95
Collection Device	Pole Sampler; CDI: 11852		Cleaning Protocol:	J		Flow:	Flow.		Staff Gauge:		pH < 2:	YES
Comments:	Numerous comb jelly species observed in water column at 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)
AF53054	9:10	HOLLYHOCK	25.9	51586	33.88	76.7	5.20	7.77	0.30		1.25	0.95
Collection Device	Pole Sampler; CDI: 11852		Cleaning Protocol:	J		Flow:	Flow.		Staff Gauge:		pH < 2:	YES
Comments:	Numerous comb jelly species observed in water column at site.										Sample Type:	REP

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 warm. Temps in the 80s.		
Sampling SOP:	FSQM 03-03	24 HRS Prior Weather:	Similar.		

Prepared By: **Christopher Lienhardt** Signed: 2/28/2019 2:53:45 PM

Reviewed By: **Geoff Rosenaw** Signed: 3/1/2019 7:43:27 AM

Collier County Pollution Control Surface Water Field Workbook
Field Sheet Worksheet

Program: MARCO | Run: II | Sample Collector: Josh Gravlin | Meter / Notes: Chris Lienhardt | Date: 2/26/2019

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)
AF53042	9:28	HUMMINGBIRD	26.1	50853	33.34	91.8	6.22	7.84	0.30		1.35	1.10

Collection Device: Pole Sampler; CDI: 11852 | Cleaning Protocol: J | Flow: Flow. | Staff Gauge: | pH < 2: YES | Sample Type: SAMP

Comments:

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)
AF53043	9:53	MCILVAINE	25.3	52080	34.26	87.6	5.98	7.85	0.30		1.45	1.00

Collection Device: Pole Sampler; CDI: 11852 | Cleaning Protocol: J | Flow: Flow. | Staff Gauge: | pH < 2: YES | Sample Type: SAMP

Comments: Vegetative debris floating on surface at site.

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)
AF53044	10:14	E_WINTERBERRY_BRIDGE	25.9	51196	33.60	81.0	5.50	7.79	0.30		1.60	1.40
AF53044B	10:16	E_WINTERBERRY_BRIDGE	25.8	51491	33.82	76.2	5.18	7.81	1.30		1.60	1.40

Collection Device: Pole Sampler; CDI: 11852 | Cleaning Protocol: J | Flow: Flow. | Staff Gauge: | pH < 2: YES | Sample Type: SAMP

Comments: Evidence of bats dwelling under nearby bridge.

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)
AF53045	10:42	W_WINTERBERRY_BRIDGE	25.9	51737	34.00	85.3	5.78	7.85	0.30		4.20	1.00
AF53045B	10:44	W_WINTERBERRY_BRIDGE	25.7	51900	34.12	78.2	5.31	7.85	3.90		4.20	1.00

Collection Device: VanDorn; CDI: 08721 | Cleaning Protocol: J | Flow: Flow. | Staff Gauge: | pH < 2: YES | Sample Type: SAMP

Comments: Two cownose rays swam through site multiple times during sampling. Vegetative debris floating on surface.

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 warm. Temps in the 80s.	Prepared By:	Christopher Lienhardt
Sampling SOP Used:	FSQM 03-03	24 HRS Prior Weather:	Similar.	Reviewed By:	Geoff Rosenaw

Collier County Pollution Control Surface Water Field Workbook
Field Sheet Worksheet

Program: MARCO

Run: II

Sample Collector: Josh Gravlin

Meter / Notes: Chris Lienhardt

Date: 2/26/2019

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:	

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 warm. Temps in the 80s.	
Sampling SOP Used:	FSQM 03-03	24 HRS Prior Weather:	Similar.	

Prepared By: Christopher Lienhardt

Reviewed By: Geoff Rosenaw

Collier County Pollution Control Surface Water Field Workbook
Field Sheet Worksheet

Program: MARCO | Run: II | Sample Collector: Josh Gravlin | Meter / Notes: Chris Lienhardt | Date: 2/26/2019

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: | Sample Type:

Comments:

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: | Sample Type:

Comments:

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: | Sample Type:

Comments:

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: | Sample Type:

Comments:

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 warm. Temps in the 80s.		
Sampling SOP Used:	FSQM 03-03	24 HRS Prior Weather:	Similar.		

Prepared By: Christopher Lienhardt

Reviewed By: Geoff Rosenaw

Collier County
POLLUTION CONTROL
LIVE GREEN. SAVE BLUE.

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

Project	MARCO
Sample Collector(s):	
Josh Gravlin	
Sample Collector Signature:	
Relinquished By: (Signature)	
Received By: (Signature)	
Relinquished By: (Signature)	
Received By: (Signature)	

MATRIX CODES
GW Ground Water
SW Surface Water
WW Waste Water
DW Drinking Water
Other

Date/Time 2/26/19 12:20 PM
Date/Time 2/26/19 12:20 PM
Date/Time
Date/Time

PRESERVATION CODES	Lot#	Prs. Vol.	Prs. Lot#	Prs. Supp.	Prs. Date	Initials
2C 1L Opaque HDPE/Light-shielded/Ice	AF52249, 52364					
3S 125ml HDPE/H2SO4/Ice	CDI10510	8 Drops	RP11976	Fisher	2/26/2019	CTL, JAG
4F 125ml HDPE/Filtered/Ice	CDI10510					
5J 120mL HDPE w/Sodium Thiosulfate/Ice	CDI10098					
6N 250ml HDPE/HNO3	CDI10472					
14 Whatman Polydisc GW 0.45µm	A15785265					

Date	Time	Field pH	Sp. Cond.	Sample Depth	Location	Matrix	Parameters: Chlorophyll-PC, Pheophytin-PC, Prep-Chloro	Nitrate-Nitrite-PC, Nitrogen-TKN-PC, Prep-TKN	Nitrite-PC	Enterolert-PC	Phosphorous-ICP-PC, Prep Metals	TN-PC, CC-Nitrate-N-PC	Sample Check-In	
							Bottle Codes: 2C	3S	4F	5J	6N	Calc		
							# of sample Containers Submited							Lab ID #
2/26/2019	8:28	#N/A	#N/A	#N/A	WINDMILL	SW	1	1	1	1	1		Sample(s) Intact?	AF53053
2/26/2019	8:45	7.85	51272	0.30	WINDMILL	SW	1	1	1	1	1		Rec'd in wet ice?	AF53040
2/26/2019	9:05	7.76	51591	0.30	HOLLYHOCK	SW	1	1	1	1	1		Temp°C:	AF53041
2/26/2019	9:10	7.77	51586	0.30	REPLICATE	SW	1	1	1	1	1		Proper Samp ID?	AF53054
2/26/2019	9:28	7.84	50853	0.30	HUMMINGBIRD	SW	1	1	1	1	1		Rec'd within hold time?	AF53042
2/26/2019	9:53	7.85	52080	0.30	MCILVAINE	SW	1	1	1	1	1		Acid preserved samples pH<2?	AF53043
2/26/2019	10:14	7.79	51196	0.30	E_WINTERBERRY_BRIDGE	SW	1	1	1	1	1		Cl Residual 0 ppm?	AF53044
2/26/2019	10:42	7.85	51737	0.30	W_WINTERBERRY_BRIDGE	SW	1	1	1	1	1		Logged In?	AF53045
													Scanned?	

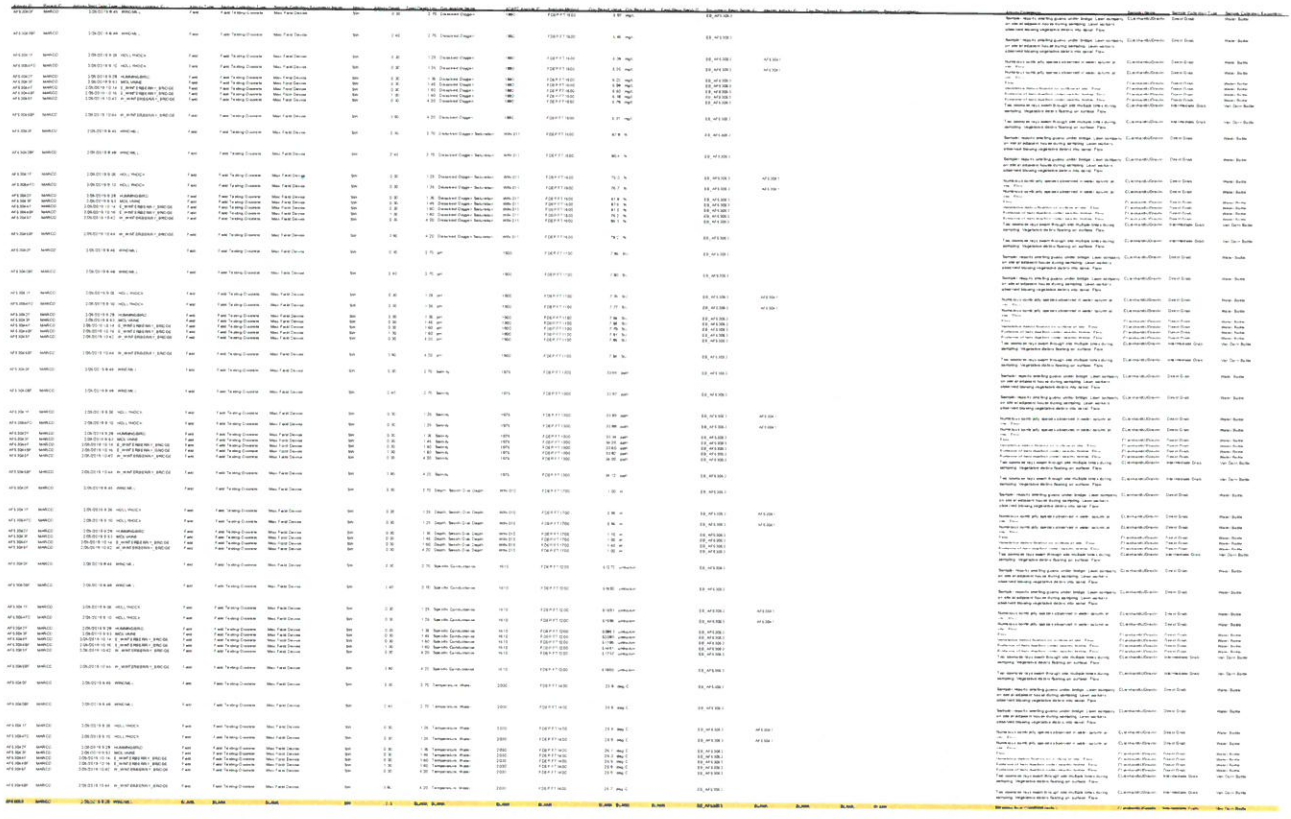
Notes:

Sheet & Cell Reference	Initial Value	Changed To	User	Date & Time	Reason For Change	Analyst E-verified Signature
Field Sheet-B51	0.427777778	0.426388889	Sampler	2/26/2019 10:19	Incorrect initial entry.	Joshua Gravlin
Chain of Custody-F9	4F 125ml HDPE/Filtered?ice	4F 125ml HDPE/Filtered/Ice	Sampler	2/26/2019 12:02	Incorrect initial entry.	Joshua Gravlin
Calibration-C37	1001	100.1	Sampler	2/26/2019 12:05	Incorrect initial entry.	Joshua Gravlin
Field Sheet-H1	Chris Lienhardt	Josh Gravlin	pcl	2/26/2019 12:16	Incorrect initial entry.	Christopher Lienhardt

KorDSS MEASUREMENT DATA FILE EXPORT

FILE CREATED: 2/26/2019 17:02

DATE	TIME	SITE	Barometer (mmHg)	Temp (°C)	Sp Cond (µS/cm)	TDS (mg/L)	Sal (ppt)	pH	pH (mV)	TSS (mg/L)	Turbidty (NTU)	ODO (% Sat)	ODO (mg/L)	ODO (% LocalB)
2/26/2019	8:45:47 AM	af53040	767.1	25.8	51271.5	33326	33.66	7.85	-66.9	0	4.56	88.6	5.97	87.8
2/26/2019	8:48:44 AM	af53040	767.1	25.8	51691.7	33600	33.97	7.83	-66	0	7.95	81.2	5.46	80.4
2/26/2019	9:05:57 AM	af53041	767.4	25.9	51590.9	33534	33.89	7.76	-61.9	0	7.85	75.7	5.08	75
2/26/2019	9:10:31 AM	af53054	767.5	25.9	51586.4	33531	33.88	7.77	-62.2	0	7.15	77.5	5.2	76.7
2/26/2019	9:28:17 AM	af53042	767.5	26.1	50852.6	33054	33.34	7.84	-66.5	0	4.4	92.7	6.22	91.8
2/26/2019	9:53:20 AM	af53042	767.5	25.3	52080.4	33852	34.26	7.85	-66.9	0	6.51	88.5	5.98	87.6
2/26/2019	10:14:18 AM	af53044	767.7	25.9	51195.7	33277	33.6	7.79	-63.4	0	1.93	81.8	5.5	81
2/26/2019	10:16:21 AM	af53044	767.7	25.8	51491.4	33469	33.82	7.81	-65	0	5.84	77	5.18	76.2
2/26/2019	10:42:05 AM	af53045	767.3	25.9	51737.1	33629	34	7.85	-67.3	0	6.11	86.2	5.78	85.3
2/26/2019	10:44:21 AM	af53045	767.4	25.7	51899.7	33735	34.12	7.85	-67.3	0	8.89	79	5.31	78.2



Collier County™
POLLUTION CONTROL
LIVE GREEN. SAVE BLUE.

www.LiveGreenSaveBlue.com

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

Collected by: CCPCD
Collection Date: 02/26/2019
Submittal Date: 02/26/2019 @ 12:20

Report Date : 4/3/2019
Report Time : 4:54:33PM

Project: MARCO
Report#: 0219_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.

NEFAP ACCREDITED TNI FIELD SAMPLING & MEASUREMENT ORGANIZATION

NELAP ACCREDITED TNI LABORATORY

Respectfully Submitted,

Nosbel Perez

Nosbel Perez
Laboratory Supervisor

ANALYTICAL RESULTS Report # 0219_MRCO_II

Location: **WINDMILL**	*Field ID:* **AF53040**		*Lab ID:* **AF53040**		*Collect Date/Time:* **2/26/19**			**08:45**	
Analyte Name	**Method**	**Result**	**Acceptable Limits**	**Qualifier**	**Units**	**MDL**	**PQL**	**DF**	**Analysis Date/Time**	
CC-Nitrate-N	CC-Nitrate-N	<MDL		U	mg/L	0.011	0.020	1	02/28/2019	10:06
Enterococci	Enterolert/QT	10	<130	UJ	MPN/100 mL	10	10	10	02/26/2019	14:50
Digestion for Metals	EPA 200.8	Completed						8	03/11/2019	09:15
Phosphorus- Total	EPA 200.8	0.073	<0.046	IY	mg/L	0.256	1.28	8	03/13/2019	14:30
Nitrogen- Total Kjeldahl	EPA 351.2	0.324		I	mg/L	0.230	0.500	1	03/15/2019	13:22
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	02/27/2019	16:25
Nitrogen- Total	Nitrogen- Total	0.324	<0.3	I	mg/L	0.230	0.500	1	03/15/2019	15:42
Chlorophyll a	SM 10200 H	7.6	<4.9		mg/m3	1.00	1.00	1	03/08/2019	09:09
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	02/27/2019	09:46
Pheophytin	SM 10200 H	1.80			mg/m3	1.00	1.00	1	03/08/2019	09:09
Digestion for TKN	SM 4500 NorgD	Complete						1	03/11/2019	11:16
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	02/27/2019	17:20

ANALYTICAL RESULTS Report # 0219_MRCO_II

Location: **HOLLYHOCK**	*Field ID:* **AF53041**		*Lab ID:* **AF53041**		*Collect Date/Time:* **2/26/19**			**09:05**	
Analyte Name	**Method**	**Result**	**Acceptable Limits**	**Qualifier**	**Units**	**MDL**	**PQL**	**DF**	**Analysis Date/Time**	
CC-Nitrate-N	CC-Nitrate-N	0.199		?	mg/L	0.011	0.020	1	02/28/2019	10:06
Enterococci	Enterolert/QT	31	<130	J	MPN/100 mL	10	10	10	02/26/2019	14:50
Digestion for Metals	EPA 200.8	Completed						8	03/11/2019	09:15
Phosphorus- Total	EPA 200.8	0.075	<0.046	IY	mg/L	0.256	1.28	8	03/13/2019	14:33
Nitrogen- Total Kjeldahl	EPA 351.2	0.240		I	mg/L	0.230	0.500	1	03/15/2019	13:24
Nitrate-Nitrite (N)	EPA 353.2	0.199		?	mg/L	0.011	0.020	1	02/27/2019	16:27
Nitrogen- Total	Nitrogen- Total	0.439	<0.3	I?	mg/L	0.230	0.500	1	03/15/2019	15:42
Chlorophyll a	SM 10200 H	10.0	<4.9		mg/m3	1.00	1.00	1	03/08/2019	09:09
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	02/27/2019	09:46
Pheophytin	SM 10200 H	3.80			mg/m3	1.00	1.00	1	03/08/2019	09:09
Digestion for TKN	SM 4500 NorgD	Complete						1	03/11/2019	11:16
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	02/27/2019	17:21

ANALYTICAL RESULTS Report # 0219_MRCO_II

Location: **HUMMINGBIRD**	*Field ID:* **AF53042**		*Lab ID:* **AF53042**		*Collect Date/Time:* **2/26/19**			**09:28**	
Analyte Name	**Method**	**Result**	**Acceptable Limits**	**Qualifier**	**Units**	**MDL**	**PQL**	**DF**	**Analysis Date/Time**	
CC-Nitrate-N	CC-Nitrate-N	<MDL		U	mg/L	0.011	0.020	1	02/28/2019	10:06
Enterococci	Enterolert/QT	20	<130		MPN/100 mL	10	10	10	02/26/2019	14:50
Digestion for Metals	EPA 200.8	Completed						8	03/11/2019	09:15
Phosphorus- Total	EPA 200.8	0.092	<0.046	IY	mg/L	0.256	1.28	8	03/13/2019	14:36
Nitrogen- Total Kjeldahl	EPA 351.2	0.276		I	mg/L	0.230	0.500	1	03/15/2019	13:36

Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	02/27/2019	16:30
Nitrogen- Total	Nitrogen- Total	0.276	<0.3	I	mg/L	0.230	0.500	1	03/15/2019	15:42
Chlorophyll a	SM 10200 H	7.1	<4.9		mg/m3	1.00	1.00	1	03/08/2019	09:09
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	02/27/2019	09:46
Pheophytin	SM 10200 H	3.20			mg/m3	1.00	1.00	1	03/08/2019	09:09
Digestion for TKN	SM 4500 NorgD	Complete						1	03/11/2019	11:16
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	02/27/2019	17:22

ANALYTICAL RESULTS Report # 0219_MRCO_II

Location: **MCILVAINE** ***Field ID:*** **AF53043** ***Lab ID:*** **AF53043** ***Collect Date/Time:*** **2/26/19 09:53**

Analyte Name	Method	Result	Acceptable Limits	Qualifier	Units	MDL	PQL	DF	Analysis Date/Time	
CC-Nitrate-N	CC-Nitrate-N	<MDL		U	mg/L	0.011	0.020	1	02/28/2019	10:06
Enterococci	Enterolert/QT	10	<130	U	MPN/100 mL	10	10	10	02/26/2019	14:50
Digestion for Metals	EPA 200.8	Completed						8	03/11/2019	09:15
Phosphorus- Total	EPA 200.8	0.062	<0.046	IY	mg/L	0.256	1.28	8	03/13/2019	14:39
Nitrogen- Total Kjeldahl	EPA 351.2	0.316		I	mg/L	0.230	0.500	1	03/15/2019	14:54
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	02/27/2019	16:29
Nitrogen- Total	Nitrogen- Total	0.316	<0.3	I	mg/L	0.230	0.500	1	03/15/2019	15:42
Chlorophyll a	SM 10200 H	3.6	<4.9		mg/m3	1.00	1.00	1	03/15/2019	09:45
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	02/27/2019	09:46
Pheophytin	SM 10200 H	1.00		U	mg/m3	1.00	1.00	1	03/15/2019	09:45
Digestion for TKN	SM 4500 NorgD	Complete						1	03/11/2019	11:16
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	02/27/2019	17:22

ANALYTICAL RESULTS Report # 0219_MRCO_II

Location: **E_WINTERBERRY_BRIDGE** ***Field ID:*** **AF53044** ***Lab ID:*** **AF53044** ***Collect Date/Time:*** **2/26/19 10:14**

Analyte Name	Method	Result	Acceptable Limits	Qualifier	Units	MDL	PQL	DF	Analysis Date/Time	
CC-Nitrate-N	CC-Nitrate-N	<MDL		U	mg/L	0.011	0.020	1	02/28/2019	10:06
Enterococci	Enterolert/QT	10	<130		MPN/100 mL	10	10	10	02/26/2019	14:50
Digestion for Metals	EPA 200.8	Completed						8	03/11/2019	09:15
Phosphorus- Total	EPA 200.8	0.055	<0.046	IY	mg/L	0.256	1.28	8	03/13/2019	14:43
Nitrogen- Total Kjeldahl	EPA 351.2	0.230		U	mg/L	0.230	0.500	1	03/15/2019	13:25
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	02/27/2019	16:49
Nitrogen- Total	Nitrogen- Total	<MDL	<0.3	U	mg/L	0.230	0.500	1	03/15/2019	15:42
Chlorophyll a	SM 10200 H	2.9	<4.9		mg/m3	1.00	1.00	1	03/15/2019	09:45
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	02/27/2019	09:46
Pheophytin	SM 10200 H	1.00		U	mg/m3	1.00	1.00	1	03/15/2019	09:45
Digestion for TKN	SM 4500 NorgD	Complete						1	03/11/2019	11:16
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	02/27/2019	17:31

ANALYTICAL RESULTS Report # 0219_MRCO_II

Location: W_WINTERBERRY_BRIDGE	*Field ID:* AF53045		*Lab ID:* AF53045		*Collect Date/Time:* 2/26/19 10:42			
Analyte Name	**Method**	**Result**	**Acceptable Limits**	**Qualifier**	**Units**	**MDL**	**PQL**	**DF**	**Analysis Date/Time**
CC-Nitrate-N	CC-Nitrate-N	<MDL		U	mg/L	0.011	0.020	1	02/28/2019 10:06
Enterococci	Enterolert/QT	10	<130	U	MPN/100 mL	10	10	10	02/26/2019 14:50
Digestion for Metals	EPA 200.8	Completed						8	03/11/2019 09:15
Phosphorus- Total	EPA 200.8	0.062	<0.046	IY	mg/L	0.256	1.28	8	03/13/2019 15:05
Nitrogen- Total Kjeldahl	EPA 351.2	0.388		I	mg/L	0.230	0.500	1	03/15/2019 13:21
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	02/27/2019 16:48
Nitrogen- Total	Nitrogen- Total	0.388	<0.3	I	mg/L	0.230	0.500	1	03/15/2019 15:42
Chlorophyll a	SM 10200 H	3.5	<4.9		mg/m3	1.00	1.00	1	03/15/2019 09:45
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	02/27/2019 09:46
Pheophytin	SM 10200 H	1.00		U	mg/m3	1.00	1.00	1	03/15/2019 09:45
Digestion for TKN	SM 4500 NorgD	Complete						1	03/11/2019 11:16
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	02/27/2019 17:30

ANALYTICAL RESULTS Report # 0219_MRCO_I

Location: BARFIELD_BRIDGE	*Field ID:* AF53046		*Lab ID:* AF53046		*Collect Date/Time:* 2/26/19 09:07			
Analyte Name	**Method**	**Result**	**Acceptable Limits**	**Qualifier**	**Units**	**MDL**	**PQL**	**DF**	**Analysis Date/Time**
CC-Nitrate-N	CC-Nitrate-N	<MDL		U	mg/L	0.011	0.020	1	02/28/2019 10:06
Enterococci	Enterolert/QT	10	<130	U	MPN/100 mL	10	10	10	02/26/2019 14:50
Digestion for Metals	EPA 200.8	Completed						8	03/11/2019 09:15
Phosphorus- Total	EPA 200.8	0.071	<0.046	IY	mg/L	0.256	1.28	8	03/13/2019 15:15
Nitrogen- Total Kjeldahl	EPA 351.2	0.230		U	mg/L	0.230	0.500	1	03/15/2019 14:50
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	02/27/2019 16:19
Nitrogen- Total	Nitrogen- Total	<MDL	<0.3	U	mg/L	0.230	0.500	1	03/15/2019 15:42
Chlorophyll a	SM 10200 H	6.4	<4.9		mg/m3	1.00	1.00	1	03/15/2019 09:45
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	02/27/2019 09:46
Pheophytin	SM 10200 H	1.30			mg/m3	1.00	1.00	1	03/15/2019 09:45
Digestion for TKN	SM 4500 NorgD	Complete						1	03/11/2019 11:16
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	02/27/2019 17:16

ANALYTICAL RESULTS Report # 0219_MRCO_I

Location: JH_PARK	*Field ID:* AF53047		*Lab ID:* AF53047		*Collect Date/Time:* 2/26/19 08:38			
Analyte Name	**Method**	**Result**	**Acceptable Limits**	**Qualifier**	**Units**	**MDL**	**PQL**	**DF**	**Analysis Date/Time**
CC-Nitrate-N	CC-Nitrate-N	<MDL		U	mg/L	0.011	0.020	1	02/28/2019 10:06
Enterococci	Enterolert/QT	10	<130	U	MPN/100 mL	10	10	10	02/26/2019 14:50
Digestion for Metals	EPA 200.8	Completed						8	03/11/2019 09:15
Phosphorus- Total	EPA 200.8	0.063	<0.046	IY	mg/L	0.256	1.28	8	03/13/2019 15:18
Nitrogen- Total Kjeldahl	EPA 351.2	0.270		I	mg/L	0.230	0.500	1	03/15/2019 13:14
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	02/27/2019 16:20

Nitrogen- Total	Nitrogen- Total	0.270	<0.3	I	mg/L	0.230	0.500	1	03/15/2019	15:42
Chlorophyll a	SM 10200 H	5.9	<4.9		mg/m3	1.00	1.00	1	03/15/2019	09:45
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	02/27/2019	09:46
Pheophytin	SM 10200 H	1.80			mg/m3	1.00	1.00	1	03/15/2019	09:45
Digestion for TKN	SM 4500 NorgD	Complete						1	03/11/2019	11:16
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	02/27/2019	17:17

ANALYTICAL RESULTS Report # 0219_MRCO_I

Location: COLLIER_BRIDGE	*Field ID:* AF53048		*Lab ID:* AF53048		*Collect Date/Time:* 2/26/19 10:12				
Analyte Name	**Method**	**Result**	**Acceptable Limits**	**Qualifier**	**Units**	**MDL**	**PQL**	**DF**	**Analysis Date/Time**
CC-Nitrate-N	CC-Nitrate-N	<MDL		U	mg/L	0.011	0.020	1	02/28/2019 10:06
Enterococci	Enterolert/QT	10	<130		MPN/100 mL	10	10	10	02/26/2019 14:50
Digestion for Metals	EPA 200.8	Completed						8	03/11/2019 09:15
Phosphorus- Total	EPA 200.8	0.062	<0.046	IY	mg/L	0.256	1.28	8	03/13/2019 15:21
Nitrogen- Total Kjeldahl	EPA 351.2	0.527			mg/L	0.230	0.500	1	03/15/2019 13:15
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	02/27/2019 16:22
Nitrogen- Total	Nitrogen- Total	0.527	<0.3		mg/L	0.230	0.500	1	03/15/2019 15:42
Chlorophyll a	SM 10200 H	4.3	<4.9		mg/m3	1.00	1.00	1	03/15/2019 09:45
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	02/27/2019 09:46
Pheophytin	SM 10200 H	1.90			mg/m3	1.00	1.00	1	03/15/2019 09:45
Digestion for TKN	SM 4500 NorgD	Complete						1	03/11/2019 11:16
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	02/27/2019 17:18

ANALYTICAL RESULTS Report # 0219_MRCO_I

Location: HC_CENTER	*Field ID:* AF53049		*Lab ID:* AF53049		*Collect Date/Time:* 2/26/19 10:49				
Analyte Name	**Method**	**Result**	**Acceptable Limits**	**Qualifier**	**Units**	**MDL**	**PQL**	**DF**	**Analysis Date/Time**
CC-Nitrate-N	CC-Nitrate-N	<MDL		U	mg/L	0.011	0.020	1	02/28/2019 10:06
Enterococci	Enterolert/QT	10	<130	U	MPN/100 mL	10	10	10	02/26/2019 14:50
Digestion for Metals	EPA 200.8	Completed						8	03/11/2019 09:15
Phosphorus- Total	EPA 200.8	0.050	<0.046	IY	mg/L	0.256	1.28	8	03/13/2019 15:31
Nitrogen- Total Kjeldahl	EPA 351.2	0.230		U	mg/L	0.230	0.500	1	03/15/2019 13:18
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	02/27/2019 16:24
Nitrogen- Total	Nitrogen- Total	<MDL	<0.3	U	mg/L	0.230	0.500	1	03/15/2019 15:42
Chlorophyll a	SM 10200 H	5.7	<4.9		mg/m3	1.00	1.00	1	03/15/2019 09:45
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	02/27/2019 09:46
Pheophytin	SM 10200 H	3.10			mg/m3	1.00	1.00	1	03/15/2019 09:45
Digestion for TKN	SM 4500 NorgD	Complete						1	03/11/2019 11:16
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	02/27/2019 17:19

ANALYTICAL RESULTS Report # 0219_MRCO_I

Location: KENDALL	*Field ID:* AF53050		*Lab ID:* AF53050		*Collect Date/Time:* 2/26/19 09:37				
Analyte Name	**Method**	**Result**	**Acceptable Limits**	**Qualifier**	**Units**	**MDL**	**PQL**	**DF**	**Analysis Date/Time**
CC-Nitrate-N	CC-Nitrate-N	<MDL		U	mg/L	0.011	0.020	1	02/28/2019 10:06
Enterococci	Enterolert/QT	31	<130		MPN/100 mL	10	10	10	02/26/2019 14:50
Digestion for Metals	EPA 200.8	Completed						8	03/11/2019 09:15
Phosphorus- Total	EPA 200.8	0.065	<0.046	IY	mg/L	0.256	1.28	8	03/13/2019 15:25
Nitrogen- Total Kjeldahl	EPA 351.2	0.289		I	mg/L	0.230	0.500	1	03/15/2019 13:17
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	02/27/2019 16:17
Nitrogen- Total	Nitrogen- Total	0.289	<0.3	I	mg/L	0.230	0.500	1	03/15/2019 15:42
Chlorophyll a	SM 10200 H	3.7	<4.9		mg/m3	1.00	1.00	1	03/15/2019 09:45
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	02/27/2019 09:46
Pheophytin	SM 10200 H	2.00			mg/m3	1.00	1.00	1	03/15/2019 09:45
Digestion for TKN	SM 4500 NorgD	Complete						1	03/11/2019 11:16
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	02/27/2019 17:15

ANALYTICAL RESULTS Report # 0219_MRCO_I

Location: FCEB_MARCO	*Field ID:* AF53052		*Lab ID:* AF53052		*Collect Date/Time:* 2/26/19 10:21				
Analyte Name	**Method**	**Result**	**Acceptable Limits**	**Qualifier**	**Units**	**MDL**	**PQL**	**DF**	**Analysis Date/Time**
CC-Nitrate-N	CC-Nitrate-N	<MDL		UJ	mg/L	0.011	0.020	1	02/28/2019 10:06
Enterococci	Enterolert/QT	1	<130	U	MPN/100 mL	1	1	1	02/26/2019 14:50
Digestion for Metals	EPA 200.8	Completed						1	03/11/2019 09:15
Phosphorus- Total	EPA 200.8	0.004	<0.046	UY	mg/L	0.004	0.020	1	03/13/2019 15:42
Nitrogen- Total Kjeldahl	EPA 351.2	0.230		U	mg/L	0.230	0.500	1	03/15/2019 13:03
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	02/27/2019 16:12
Nitrogen- Total	Nitrogen- Total	<MDL	<0.3	U	mg/L	0.230	0.500	1	03/15/2019 15:42
Chlorophyll a	SM 10200 H	1.0	<4.9	U	mg/m3	1.00	1.00	1	03/15/2019 09:45
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	02/27/2019 09:46
Pheophytin	SM 10200 H	1.00		U	mg/m3	1.00	1.00	1	03/15/2019 09:45
Digestion for TKN	SM 4500 NorgD	Complete						1	03/11/2019 11:16
Nitrite (N)	SM 4500-NO2 B	0.002		UJ	mg/L	0.002	0.005	1	02/27/2019 17:12

ANALYTICAL RESULTS Report # 0219_MRCO_II

Location: EB_MARCO	*Field ID:* AF53053		*Lab ID:* AF53053		*Collect Date/Time:* 2/26/19 08:28				
Analyte Name	**Method**	**Result**	**Acceptable Limits**	**Qualifier**	**Units**	**MDL**	**PQL**	**DF**	**Analysis Date/Time**
CC-Nitrate-N	CC-Nitrate-N	<MDL		UJ	mg/L	0.011	0.020	1	02/28/2019 10:06
Enterococci	Enterolert/QT	1	<130	U	MPN/100 mL	1	1	1	02/26/2019 14:50
Digestion for Metals	EPA 200.8	Completed						1	03/11/2019 09:15
Phosphorus- Total	EPA 200.8	0.004	<0.046	UY	mg/L	0.004	0.020	1	03/13/2019 15:46
Nitrogen- Total Kjeldahl	EPA 351.2	0.230		U	mg/L	0.230	0.500	1	03/15/2019 13:01
Nitrate-Nitrite (N)	EPA 353.2	0.011		U	mg/L	0.011	0.020	1	02/27/2019 16:42

Nitrogen- Total	Nitrogen- Total	<MDL	<0.3	U	mg/L	0.230	0.500	1	03/15/2019	15:42
Chlorophyll a	SM 10200 H	1.0	<4.9	U	mg/m3	1.00	1.00	1	03/15/2019	09:45
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	02/27/2019	09:46
Pheophytin	SM 10200 H	1.00		U	mg/m3	1.00	1.00	1	03/15/2019	09:45
Digestion for TKN	SM 4500 NorgD	Complete						1	03/11/2019	11:16
Nitrite (N)	SM 4500-NO2 B	0.002		UJ	mg/L	0.002	0.005	1	02/27/2019	17:27

ANALYTICAL RESULTS

Report # 0219_MRCO_II

Location: **DUP1** ***Field ID:*** **AF53054** ***Lab ID:*** **AF53054** ***Collect Date/Time:*** **2/26/19 09:10**

Analyte Name	Method	Result	Acceptable Limits	Qualifier	Units	MDL	PQL	DF	Analysis Date/Time	
CC-Nitrate-N	CC-Nitrate-N	0.011		UJ	mg/L	0.011	0.020	1	03/19/2019	14:56
Enterococci	Enterolert/QT	52	<130	J	MPN/100 mL	10	10	10	02/26/2019	14:50
Digestion for Metals	EPA 200.8	Completed						8	03/11/2019	09:15
Phosphorus- Total	EPA 200.8	0.070	<0.046	IY	mg/L	0.256	1.28	8	03/13/2019	15:28
Nitrogen- Total Kjeldahl	EPA 351.2	0.273		I	mg/L	0.230	0.500	1	03/15/2019	13:20
Nitrate-Nitrite (N)	EPA 353.2	0.011		UJ	mg/L	0.011	0.020	1	02/27/2019	16:50
Nitrogen- Total	Nitrogen- Total	0.284	<0.3	IJ	mg/L	0.230	0.500	1	03/19/2019	14:56
Chlorophyll a	SM 10200 H	9.2	<4.9		mg/m3	1.00	1.00	1	03/15/2019	09:45
Filtration for Chlorophyll and Phe	SM 10200 H	Completed						1	02/27/2019	09:46
Pheophytin	SM 10200 H	3.70			mg/m3	1.00	1.00	1	03/15/2019	09:45
Digestion for TKN	SM 4500 NorgD	Complete						1	03/11/2019	11:16
Nitrite (N)	SM 4500-NO2 B	0.002		U	mg/L	0.002	0.005	1	02/27/2019	17:32