

# **Field Sampling Report**

Date: Wednesday, December 18, 2019

**Sampler:** Krystal Silas **Meter/Notes:** Josh Gravlin



Certificate No 4262.01

Client: City of Marco Island

**Project:** Marco Island

Run: I

CCV: Morning		Sonde / Handheld	ProDSS #11	Serial #:	19	9E104158
Date/Time:	12/18/19	6:07 AM	Operator:	Josh Gravlin	Project:	MARCO
** Conductivity ***					Associated	Calibration File
Standard (µmhos/cm) ± 5%	CI	OI#	Reading	Pass/Fail	Calibration	_11_121319.xlsm
2000	110	623	1988	Pass		
** pH ***						
oH (QA Criteria <u>+</u> .2)	CI	OI#	Reading	Pass/Fail	1	
4.00	13 <sup>-</sup>	177		Pass		
7.00					All CCV	Results Pass?
10.00						Yes
** Dissolved Oxygen ***			•		•	
D.O. (QA Criteria +3mg/l)	mg/L	%	l°C	Pass/Fail	True Value B	arometric Pressu
CCV Readings>	8.57	101.3	23.8	Pass	8,425	757.8
lotes:						
·						
Jotes:			Date/Time:	12/18/2019 14:02	Operator:	Josh Gravlin
lotes:  CCV: Afternoon					Operator:	Josh Gravlin
CCV: Afternoon ** Conductivity ***	CI	DI#	Date/Time:	12/18/2019 14:02 Pass/Fail	Operator:	Josh Gravlin
CCV: Afternoon ** Conductivity ***			Reading		Operator:	Josh Gravlin
CCV: Afternoon  *** Conductivity *** Standard (µmhos/cm) ± 5%  10000 70000	110	DI#	Reading	Pass/Fail Pass	Operator:	Josh Gravlin
CCV: Afternoon  *** Conductivity *** Standard (µmhos/cm) ± 5%  10000 70000	110	DI# 526	Reading 9920	Pass/Fail Pass	Operator:	Josh Gravlin
CCV: Afternoon  ** Conductivity *** Standard (µmhos/cm) ± 5%  10000  70000  *** pH ***	110 133	DI# 526	Reading 9920	Pass/Fail Pass	Operator:	Josh Gravlin
CCV: Afternoon  ** Conductivity *** Standard (µmhos/cm) ± 5%  10000  70000  *** pH ***	110 133	DI# 526 303	Reading 9920 68409	Pass/Fail Pass Pass	Operator:	Josh Gravlin
CCV: Afternoon  ** Conductivity *** Standard (µmhos/cm) ± 5%  10000  70000  ** pH ***  OH (QA Criteria +.2)	110 133 CI	DI# 526 303	Reading 9920 68409	Pass/Fail Pass Pass		Josh Gravlin  Results Pass?
CCV: Afternoon  ** Conductivity *** Standard (µmhos/cm) ± 5% 10000 70000  ** pH *** bH (QA Criteria +.2) 4.00	111 133 CI	DI# 626 303 DI#	Reading 9920 68409  Reading 7.03	Pass/Fail Pass Pass Pass/Fail		
CCV: Afternoon  *** Conductivity *** Standard (µmhos/cm) ± 5%  10000 70000  *** pH *** OH (QA Criteria +.2)  4.00 7.00	111 133 CI	DI# 526 303 DI#	Reading 9920 68409  Reading 7.03	Pass/Fail Pass Pass Pass/Fail Pass		Results Pass?
CCV: Afternoon  ** Conductivity *** Standard (µmhos/cm) ± 5%  10000 70000  ** pH *** bH (QA Criteria +.2)  4.00 7.00 10.00	111 133 CI	DI# 526 303 DI#	Reading 9920 68409  Reading 7.03	Pass/Fail Pass Pass Pass/Fail Pass	All CCV	Results Pass?

Notes:

Surface Water Field Workbook Rev 16.2 Effective December 17th, 2019

Program	: MARCO		Run:	1		Sample Collector:	Krystal Silas	Meter / Notes:	Josh Graviin		Date:	12/18/2019
LAB ID	TIME	STATION	Temp (°C)	Sp Cond (μS/cm)	Sal (ppt)	ODO (% LocalB)	ODO (mg/L)	рН	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF57993	8:32	WINDMILL	23.5	46295	30.06	97.4	6.96	7.78	0.30		3.00	1.20
AF57993B	8:38	WINDMILL	24.4	52665	34.72	88.0	6.03	7.82	2.70		3.00	1.20
Collection Device	\	/anDorn; CDI: 05512		Cleaning Protocol:	J	Flow:	Flow.		Staff Gauge:		pH < 2:	Yes
Comments:	Visibly out	going tide. Vegetative debris	on water sur	face.							Sample Type:	SAMP
LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	рН	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF57998	8:59	WINDMILL										
Collection Device	\	/anDorn; CDI: 05512		Cleaning Protocol:		Flow:			Staff Gauge:		pH < 2:	Yes
Comments:	FCEB colle	ected from CDI 08334 carboy	_ . Light rain dւ	uring sampling ever	nt.	-		-	•		Sample Type:	FCEB
LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	рН	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF57995	9:24	HOLLYHOCK	24.4	51434	33.81	74.9	5.16	7.64	0.30		1.10	1.10
Collection Device Comments:		le Sampler; CDI: 11853 debris on water surface. No	visible tidal r	Cleaning Protocol:		1	No flow.		Staff Gauge:		pH < 2: Sample Type:	Yes SAMP
LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	рН	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF57994	9:48	HUMMINGBIRD	24.6	50413	33.05	77.5	5.35	7.62	0.30		1.10	1.10
Collection Device		le Sampler; CDI: 11853		Cleaning Protocol:	J	Flow:	Flow.		Staff Gauge:		pH < 2:	Yes SAMP
Comments:  Bottles Per Site		r		Named storm eve	ant that impact	ed sampling		1			Sample Type:	JAIVIF
Site	• • •	6/0	Matrix: SW	Ivanica storil eve	event?	ca sampling	No					
Sites Acce	ess By:	Truck	Weather:	Lig	ght rain. Cloud	y. High in the 7	0s.		Prepared By:	Joshua	v Gravlín Stal Øilas	Signed: 12/18/2019 2:43:44 PM
Sampling SOP:		FSQM 03-03	24 HRS	Prior Weather:	ŀ	ligh in the 80s.	Sunny.		Reviewed By:	Krys	tal Silas	Signed: 12/18/2019 2:40:54 PM

Program	: MARCO		Run:	I		Sample Collector:	Krystal Silas	Meter Notes	loch Gravlin		Date:	12/18/2019
LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	рН	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF57992	10:17	MCILVAINE	24.0	51525	33.88	85.5	5.93	7.91	0.30		1.10	1.10
Collection Device	Pol	le Sampler; CDI: 11853		Cleaning Protocol:	J	Flow:	Flow.		Staff Gauge:		pH < 2:	Yes
Comments:	Visibly out	tgoing tide. Vegetative debris	on water sur	rface.		•		-	<del>-</del>		Sample Type:	SAMP
LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	рН	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF57991	11:15	W_WINTERBERRY_BRIDGE	23.9	49928	32.71	94.8	6.63	7.96	0.30		2.40	2.20
AF57991B	11:17	W_WINTERBERRY_BRIDGE	23.9	50446	33.09	93.8	6.54	7.95	2.10		2.40	2.20
Collection Device	\	/anDorn; CDI: 05512		Cleaning Protocol:	J	Flow:	Flow.		Staff Gauge:		pH < 2:	Yes
Comments:	Visibly out	tgoing tide. Vegetative debris	on water sur	rface. Large piece o	of trash upstre	am of sample	site.				Sample Type:	SAMP
LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	рН	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF57996	11:43	E_WINTERBERRY_BRIDGE	24.0	47529	30.95	82.9	5.85	7.81	0.30		1.10	1.10
Collection Device		le Sampler; CDI: 11853		Cleaning Protocol:		Flow:		]	Staff Gauge:		pH < 2:	
Comments:	Appears to	be tidal movement; could be	TEMP.	SPEC. COND.	SALINITY	D.O.	•		SAMPLE	STAFF	Sample Type:	SAMP
LAB ID	TIME	STATION	(° C)	(µmhos/cm)	(ppt)	0.0. (% SAT)	D.O. (mg/l)	pH	DEPTH (meters)	GAUGE (feet)	DEPTH (meters)	DEPTH (meters)
Collection Device				Cleaning Protocol:		Flow:			Staff Gauge:		pH < 2:	
Comments:											Sample Type:	
Bottles Per Site Site		r 6/0	Matrix: SW	Named storm eve	ent that impact event?	ed sampling	No					
Sites Acce	ess By:	Truck	Weather:	Li	ght rain. Cloud	y. High in the 7	0s.		Prepared By:	Joshu	a Gravlin	
Sampling SOP Used:		FSQM 03-03	24 HRS Prior	r Weather:	F	ligh in the 80s.	Sunny.		Reviewed By:	Krys	tal Silas	

Program	: MARCO		Run:	I		Sample Collector:	Krystal Silas	Meter / Notes:	Josh Gravlin		Date:	12/18/2019
LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (μmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	рН	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)	рН	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)	рН	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)	рН	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
Collection Device				Cleaning Protocol:		Flow:			Staff Gauge:		pH < 2:	
Comments:			_	•		<u>-</u>			_		Sample Type:	
Bottles Per Site / Site		6 / O	Matrix: SW	Named storm eve	ent that impacte event?	ed sampling	No					
Sites Acce	ess By:	Truck	Weather:	Liç	ght rain. Cloud	y. High in the 70	Os.		Prepared By:	Joshu	a Gravlin	
Sampling SOP Used:		FSQM 03-03	24 HRS Prior	r Weather:	H	ligh in the 80s.	Sunny.		Reviewed By:	Krys	tal Silas	

Program	: MARCO		Run:	I		Sample Collector:	Krystal Silas	Meter / Notes			Date:	12/18/2019
LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	рН	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)	рН	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)	рН	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
Collection Device			Field	d 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)	рН	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
Collection Device				Cleaning Protocol:		Flow:			Staff Gauge:		pH < 2:	
Comments:			_	- · · · · · · · · · · · · · · · · · · ·				•	J J		Sample Type:	
Bottles Per Site		6 / O	Matrix: SW	Named storm eve	ent that impact event?	ed sampling	No					
Sites Acce	ess By:	Truck	Weather:	Liç	ght rain. Cloud	y. High in the 70	Os.		Prepared By:	Joshu	a Gravlin	
Sampling SOP Used:		FSQM 03-03	24 HRS Prior	r Weather:	H	ligh in the 80s.	Sunny.	]	Reviewed By:	Krys	tal Silas	

NELAC Certification: #E45464



## 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 Client Information Name: Rhonda Watkins PRESERVATION CODES Lot# Prs. Vol. Prs. Lot# Prs. Supp. Prs. Date Initials Company Name: Collier County Natural Resources IG 1000mL HDPE/Ice 73522 Address: 2685 South Horseshoe Drive Ste 103, Fl 34104 2C 1L Opaque HDPE/Light-shielded/Ice AF57870 **Phone:** (239) 252-2502 Ext. 6049 CDI 13026 JAG 3S 125ml HDPE/H2SO4/Ice 8 drops RP14084 Fisher 12/18/2019 Fax: (239) 252-6479 4F 60ml Opaque HDPE/Filtered/Ice AF55337 MATRIX CODES Project MARCO CDI 12139 5J 120mL HDPE w/Sodium Thiosulfate/Ice Sample Collector(s): GW Ground Water 6N 250ml HDPE/H2SO4 CDI 13005 16 drops RP14084 Fisher 12/18/2019 JAG SW Surface Water Krystal Silas 14 Whatman Polydisc GW 0.45µm A24365266 Sample Collector Signature: WW Waste Water DW Drinking Water Other. Relinquished By: (Signature) Date/Time 12/18/19 2:41 PM Sample Check-In **Parameters** Sample(s) Intact? Received By: (Signature) orus-ICP-PC, Prep Metals Rec'd in wet ice? Temp °C: Date/Time 12/18/19 2:41 PM PC, CC-Nitrate-N-PC Proper Samp ID? Relinquished By: (Signature) Rec'd within hold rophyll-PC, -Chloro Nitra time? Date/Time urbidity-PC Received By: (Signature) Acid preserved samples pH<2? Logged In? Date/Time **Bottle Codes** Scanned? 5J 1G 2C 3S 4F 6N Calc Sample Depth Matrix # of sample Containers Submited Lab ID# Date Time Field pH Sp. Cond. Location 12/18/2019 46295 WINDMILL SW AF57993 8:32 7.78 0.30 12/18/2019 8:59 #N/A #N/A #N/A WINDMILL SW 1 1 AF57998 SW AF57995 12/18/2019 9:24 7.64 51434 0.30 **HOLLYHOCK** 12/18/2019 9:48 7.62 50413 0.30 HUMMINGBIRD SW AF57994 SW AF57992 12/18/2019 10:17 7.91 51525 0.30 MCILVAINE 1 1 1 12/18/2019 11:15 7.96 49928 0.30 W\_WINTERBERRY\_BRIDGE SW 1 AF57991 12/18/2019 11:43 7.81 47529 0.30 AF57996 E\_WINTERBERRY\_BRIDGE SW 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-M15	FB	FCEB	Sampler	12/18/2019 9:0	04 Incorrect initial entry.	Joshua Gravlin
		FCEB collected from CDI 08334 carboy. Light rain during				
Field Sheet-B15	FCEB collected from CDI 08334 carboy.	sampling event.	Sampler	12/18/2019 9:2	29 Added rain comment.	Joshua Gravlin
Field Sheet-C44	COLLIER_BRIDGE	W_WINTERBERRY_BRIDGE	Sampler	12/18/2019 11:2	25 Incorrect initial entry.	Joshua Gravlin
	Appears to be visible tidal movement; could be the strong					
Field Sheet-B54	wind. Vegetative debris on water surface.	Ba	Sampler	12/18/2019 11:4	49 Incorrect initial entry.	Joshua Gravlin
		Appears to be tidal movement; could be the strong wind.				
		Vegetative debris on water surface. Bats audible under				
Field Sheet-B54	Ва	upstream bridge.	Sampler	12/18/2019 11:4	49 Incorrect initial entry.	Joshua Gravlin

### KorDSS MEASUREMENT DATA FILE EXPORT

FILE CREATED: 12/18/2019 19:19

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)	pН	pH (mV)	ODO (% Sat)	ODO (mg/L)	ODO (% LocalB)
12/18/2019	8:32:04 AM	I windmill 759.9	23.5	44993	46295.3	46425.9	30.06	20	20	7.78	-72.6	97.4	6.96	97.4
12/18/2019	8:38:14 AM	I windmill 759.9	9 24.4	52035	52664.8	52729	34.72	23.3	23.3	7.82	-74.8	88	6.03	88
12/18/2019	9:24:08 AM	1 af57995 760.7	7 24.4	50858.5	51433.9	51492.6	33.81	22.6	22.6	7.64	-64.9	75	5.16	74.9
12/18/2019	9:48:04 AM	1 af57994 760.7	7 24.6	49986.2	50412.7	50456.4	33.05	22	22	7.62	-63.3	77.6	5.35	77.5
12/18/2019	10:17:53 AM	1 af57992 76°	1 24	50550	51524.7	51623.4	33.88	22.8	22.8	7.91	-80	85.6	5.93	85.5
12/18/2019	11:15:35 AM	I w winterberry 760.4	1 23.9	48872.5	49928.3	50035	32.71	21.9	21.9	7.96	-83.1	94.9	6.63	94.8
12/18/2019	11:17:10 AM	I w winterberry 760.4	1 23.9	49417.6	50446.3	50550.3	33.09	22.2	22.2	7.95	-82.5	93.8	6.54	93.8
12/18/2019	11:43:04 AM	1 af57996 760.4	1 24	46641.2	47529.2	47619.2	30.95	20.6	20.6	7.81	-74.4	83	5.85	82.9
12/18/2019	12:58:48 PM	I naples pier 760.1	1 23	50543.2	52558.8	52759	34.66	23.7	23.7	7.98	-84.2	93.8	6.59	93.7

Coller County Pollution Control MARCO\_128419
Use Sport Institutes
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Action D. Broket D.	Activity Start Date Time. Montaving Location ID	Action To	a Santa Colorino Tona	Service Collection Street	inner Ness Marin An	nin here. Torot	section. On Archite Stone	ADMET ANNUA D	Academia Martinos - Com Res	and the American	Cut lines from th	Environment Stand Stands	D. Marrie Article D	Too Stock Stock th	Now Code	er Result Company	Article Company	Special Name - Special Collection Tur	Sample Collection Equipment
AFEPHEF MARCO	12/18/2019 8:32 WNDMLL	Field	Field Testing-Discrete		SW	0.30	3.00 Dissalved Oxygen	1880	FDEP FT1500	ase mgt		EQ_AF57998					Visibly outgoing tide. Vegetative debris on water surface.	Jüravin Külas - Irramediate Grab	Van Dom Burde
AFERMENT MARCO	12/18/2019 BISS WINDSELL	Field	Field Testing-Discrete		SW	2.70	3.00 Dissalved Oxygen	1880	FDEP FT1500	6.03 mgL		EQ_AF17998					Visibly outgoing tide. Vegetative debris on water surface.	Jüravin Külas Intermediate Grab	Van Dom Burde
AFSPRRF MARCO	12/18/2019 9:24 HOLLYHOOK	Field	Field Testing-Discrete		SW	0.30	1.10 Dissalved Oxyges	1880	FDEP FT1500	5.16 mgL		EQ_AF57998					Vegetative debris on water surface. No visible tidal	Jüravlin Külas Direct Grab	Water State
AFSTHREF MARCO AFSTRREF MARCO	12/18/2019 BIRS HUMBINGSIRD 12/18/2019 10:17 MCLVANE	Field	Field Testing-Discrete Field Testing-Discrete	Misc Field Device Misc Field Device	SW SW	0.30	1.10 Dissalved Degen 1.10 Dissalved Oxogen	1880	FDEP FT1500 FDEP FT1500	5.35 mgL 5.93 mgL		ER AFSTRIN					Visibly outgoing tide. Vegetative debris on water surface.	Xirado Militar Princip Grati	Water States
AFSTREEF MARCO	12/18/2018 11.15 W_WINTERSERRY_SRIDGE	Field	Field Testing-Discrete	Msc Field Davice	SW .	0.30	Z42 Dissilved Onces	1880	FDEP FT 1900	5.63 mg).		59,AF57998					Visibly outgoing tide. Vegetative debris on water surface.	Jüravin Külas Intermediate Grab	Van Dom Buttle
AFIRMSF MARCO	12/18/2019 11:17 W WINTERSERRY BRIDGE	East	Field Testing-Discrete	Msc Field Davis	SW .	2.10	Z-62 Dissolved Onges	1880	FDEP FT 1800	sas mas		69 AF1799					Visibly outgoing tide. Vegetative debris on water surface.	Jaronin Kildes - Intermediate Grab	Van Dom Butte
AFSTREE MARCO	12/18/2019 11:K3 E_WINTERSERRY_BRIDGE	East	Field Testing-Discrete		SW .	0.30	1.10 Dissalved Oxygen	1880	FDEP FT 1800	5.85 mgS		59,AF57938					Appears to be sidel movement, could be the strong wind.	Jarovin Kildas Direct Grap	Water Burtle
		-															Vegetative-debris on water surface. Stats audible-under		
AFSPHSF MARCO	12/18/2019 8:32 WINDWILL	Feld	Field Testing-Discrete	Msc Field Device	SW	0.30	3.00 Dissalved Orggen Saturation	WN-011	FDEP FT1500	97.4 %		ER_AF57938					Visibly outgoing tide. Vegetative debris on water surface.	JGravin/KSitas Intermediate Grab	Van Dom Buttle
AFSTHERF MARCO	12/18/2019 8:38 WINDSEL	Field	Field Testing-Discrete	Misc Field Device	SW	2.70	3.00 Dissalved Orggen Saturation	WN-011	FDEP FT1500	88.0 %		ER_AF57938					Visitly outgoing tide. Vegetative debris on water surface.	Jüravin Külas Imerrediate Grab	Van Dom Buttle
AFSPHREF MARCO	12/18/2019 9:24 HOLLYHOOK	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	1.10 Dissalved Oxygen Saturation	WN-011	FDEP FT1500	76.9 %		ER_AF17998					Vegetative debris on water surface. No visible tidal	Jüravin Kültas Direct Grab	Water Surdie
AFSPREEF MARCO AFSPREEF MARCO	12/18/2019 SIGS HAMINGSIRD 12/18/2019 10:17 MCLVANG	Field	Field Testing-Daurate Field Testing-Daurate	Misc Field Davice Misc Field Davice	SW	0.30	1.12 Dissalved Oxygen Saturation 1.12 Dissalved Oxygen Saturation	WN-011 WN-011	FDEP FT1500 FDEP FT1500	77.6 % 80.0 %		ER AFSTER ER AFSTER					Vanantia fabrir on work suffice Eliza Visibly outgoing lide. Vegetative debris on water surface.	Allow for Minister Street Street Allow for Minister Street Street	Water Sortie
ACCOUNT MARCO		Field							EDER ET 1800										Van Poor Britis
	12/18/2019 11:15 W_WINTERSERRY_BRIDGE		Field Testing-Discrete		SW	0.30	2.62 Dissalved Oxygen Saturation	WN-011		94.8 %		EQ_AF17998					Visibly outgoing tide. Vegetarive debris on water surface. I note nisch of track common of exercise site. Since	Jüravin Külas Intermediate Grab	
AFSPREAM MARCO	12/18/2018 11:17 W_WINTERSERRY_BRIDGE	Field	Field Testing-Discrete		SW	2.10	2.62 Dissalved Oxygen Saturation	WN-011	FDEP FT1500	83.8 %		EQ_AF17998					Visibly outgoing tide. Vegetarive debris on water surface. I note nisch of track common of exercise site. Since	Jüravin Külas Intermediate Grab	Van Dom Burde
AFSPRINF MARCO	12/18/2019 11:K3 E_WINTERSERRY_BRIDGE	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	1.12 Dissalved Oxygen Saturation	WN-011	FDEP FT1500	82.9 %		EQ_AF17998					Appears to be tidal movement, could be the strong wind. Vegetative debris on water surface. Bots audible under	Jüravin/Külas Direct Grab	Water State
AFSTHEF MARCO	12/182019 8:32 WNDMEL	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	3.00 pH	1900	FDEP FT1100	7.76 SU		ER_AF57938					Visitely outgoing tide. Vegetative debris on water surface.	JOravin/Kildas - Errermediate Grab	Van Dom Buttle
AFSTHERF MARCO	12/18/2019 RISK WINDSELL	Field	Field Testing-Discrete	Misc Field Device	SW	2.70	3.00 pH	1900	FDEP FT1100	782 90		59,AF57998					Visible outspins tide. Venetative debris on water surface.	Jüravin Külas Intermediate Grab	Van Dom Burde
AFSTREE MARCO	12/18/2019 8:24 HOLLYHOOK	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	1.10 pH	1900	FDEP FT1100	784 90		59,AF57998					Vegetative debris on water surface. No visible tidal	JGravin/KSites Direct Gras	Water Burdle
ACCUMANT MARCO	TOTAL TOTAL AND	East	Field Testing-Discrete	Mac Said Perios	See .	0.30	131 (6)	1900	EDER ET 1100	747 90		SR AESTRON					Vegetable states on white surpline for	Kirado A'Silan Diant Grab	Water Street
AFSTREF MARCO	12/18/2019 10:17 MCEVANE	Field	Field Testing-Discrete	Misc Field Device	Sim	0.30	1.10 pH	1900	FDEP FT1100	791 90		69, AF 17938					Visibly outgoing tide. Vegetative debris on water surface.	Jüravin Külas Diect Grab	Water Burdle
AFSPREF MARCO	12/18/2019 11:15 W_WINTERSERRY_BRIDGE	Field	Field Testing-Discrete	Msc Field Device	SW	0.30	2.62 pH	1900	FDEP FT1100	7.96 SU		EQ_AF57998					Visibly outgoing tide. Vegetative debris on water surface.	Jüravin Külas Internediate Grab	Van Dom Street
AFSTHRIBF MARCO	12/18/2019 11:17 W_WINTERBERRY_BRIDGE	Field	Field Testing-Discrete	Misc Field Device	SW	2.10	2.42 pH	1900	FDEP FT1100	7.96 SU		ER_AF57938					Visibly outgoing tide. Vegetative debris on water surface.	Jüravin Külas Imerrediate Grab	Van Dom Buttle
AFSTHREF MARCO	12/18/2019 11:63 E_WINTERSERRY_BRIDGE	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	1.10 pH	1900	FDEP FT1100	781 90		ER_AF57938					Appears to be side movement, could be the strong wind.  Vecetable debris on water surface. Both audible under	JGravin/KSitas Direct Grab	Water Surde
AFERMENT MARCO	12/18/2019 8:32 WINDOWS	Field	Field Testing-Discrete	Misc Field Davice	SW	0.30	3.01 Salinity	1976	FDEP FT1303	20.00 000								Jūravin Kūlas Imermediate Grab	Van Dom Burde
AFERMENT MARCO	12182019 838 WINDOWLL	Field	Field Testing-Discrete		SW	2.70	3.00 Salvey	1975	FDEP FT1300	36.72 con		ER AFSTER					Visibly outgoing tide. Vegetative debris on water surface.	January Robbs - Energed are Grad	Van Dom Butte
																	Visibly outgoing tide. Vegetative debris on water surface.		
AFEPHREF MARCO	12/18/2019 8/24 HOLLYHOOX	Field	Field Testing-Discrete		SW	0.30	1.10 Salinity	1975	FDEP FT1300	23.81 ppm		EQ_AF17998					Vegetative-debris on water surface. No visible tidal socialment i internio diction sessition accent. No flow	Jüravin/Külas Direct Grab	Water State
AFSTREEF MARCO	12/18/2019 SIGS HUMBINGSIND 12/18/2019 10:17 MCEVANG	Field	Field Testing-Discrete Field Testing-Discrete	Misc Field Device Misc Field Device	SW	0.30	1.10 Salinity 1.10 Salinity	1975	FDEP FT1300 FDEP FT1300	33.06 pph 33.88 pph		ER AFSTRIN					Valuetativa dalatria no sanar auritana. Elinar Visibily outsping tide. Vegetative debris on vater surface.	Kirawina Prince Gran Kirawina Kirian Direct Gran	Water Street
AFSTHEF MARCO	12/18/2019 11:15 W_WINTERSERRY BRIDGE	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	2.42 Salinky	1975	FDEP FT1300	32.71 ppm		ER_AF57938					Visible outsides lide. Venetative debris on water surface.	JOravin/Kildas - Errermediate Grab	Van Dom Buttle
AFSTHERE MARCO	12/18/2018 11:17 W WINTERSERRY BRIDGE	Field	Field Testing-Discrete	Misc Field Davice	SW	2.10	2.41 Salinity	1979	FDEP FT 1300	23.09 con		ER AFSTYRE					Visibly outgoing tide. Vegetative debris on water surface.	JOSEPH PROFITE STATE OF THE PR	Van Dom Buttie
AFSTREE MARCO	12/18/2019 11:K3 E_WINTERSERRY_BRIDGE	Field	Field Testing-Discrete		SW .	0.30	1.12 Salinity	1975	FDEP FT1300	21.95 000		69 AF1799					Appears to be sidel movement, could be the strong wind.	JGravin/Kildas Direct Grab	Water Burtle
																	Vegetative-debris on water surface. Stats audible-under		
AFSPROF MARCO	12/18/2019 8:32 WINDOWS.L	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	3.00 Depth, Sesoni Disk Depth	WMeno	FDEP FT1700	1.20 m		ER_AF17998					Visibly outgoing tide. Vegetative debris on water surface.	Jüravin Külas Intermediate Grab	Van Dom Buttle
AFSPHREF MARCO	12/18/2019 9:24 HOLLYHOOK	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	1.10 Depth, Sesoni Disk Depth	WMeno	FDEP FT1700	1.10 m		ER_AF17998			8		Vegetative-debris on water surface. No visible tidal	Jüravin Kültas Direct Grab	Water Surdie
AFSPREF MARCO AFSPREF MARCO	12/18/2019 9168 HAMINGSIRD 12/18/2019 10:17 MCLVANS	Field	Field Testing-Discrete Field Testing-Discrete	Misc Field Device Misc Field Device	SW	0.30	1.10 Depth, Secchi Disk Depth 1.10 Depth, Secchi Disk Depth	WIN-cro WIN-cro	FDEP FT1700 FDEP FT1700	1.10 m		ER AFSTRIN			8		Visite outsing tide. Vegetaries debris on water surface.	Jüravin Külas Diect Grab Jüravin Külas Diect Grab	Water Burdle Water Burdle
AFERMENT MARCO	12/18/2019 11:15 W WINTERSERRY BRIDGE	Field	Field Testing-Daurete		SW SW	0.30	Z-62 Depth, Seconi Disk Depth	Wilverso	FDEP FT 1700	2.20 m		69 AF5799					Elea	January Colon Control of Control	Van Dom Burde
AFERRAF MARCO	12/18/2019 11:K3 & WINTERSERRY BRDDS	Field	Field Testing-Daurete		SW SW	0.30	1.12 Depth, Secuni Disk Depth	Wilverso	FDEP FT 1700	1.10 m		69 AF5799					Visitity outgoing tide. Vegetative debris on water surface. I work visite of mark common of exercise site. Street	January Color Direct Grap	Water Burde
Annual MACO	12-WATERWAY PRODUCT	reli	Peru recing discrete	ness, mend Device	200	u.ad	1. TO LARGON, AMADIN CHIRA CHIPAN	market d	run ri indi								Appears to be stati movement, could be the strong wind. Vegetative debris on water surface. Bots audible under command bridge. Some	AMPROXIMA DIRECTOR	***************************************
AFSPHSF MARCO	12/182019 8:32 WINDHILL	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	3.00 Specific Conductance	1610	FDEP FT1200	46295 unholon		59,AF57938					Visitely outgoing tide. Vegetative debris on water surface.	Jüravin Külas Internediate Grab	Van Dom Burde
AFSTHERF MARCO	12/18/2019 HISE WINDOWS.L.	Field	Field Testing-Discrete	Misc Field Device	SW	2.70	3.00 Specific Conductance	1610	FDEP FT1200	52865 umbolon		59,AF57998					Visibly outgoing tide. Vegetative debris on water surface.	Jüravin Külas Intermediate Grab	Van Dom Burde
AFSTREE MARCO	12/18/2019 8:24 HOLLYHOOK	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	1.10 Specific Conductance	1610	FDEP FT1200	\$1636 umbolon		59,AF57998					Vegetative debris on water surface. No visible tidal	Jüravin Külas Direct Grab	Water Burdle
AFSPRRE MARCO	12/18/2019 BIRS HAMINGSIRD	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	1.10 Specific Conductance	1610	FDEP FT1200	50013 umbolon		59,AF57998					Vegetative-debris on water surface. Films	Jüravin Külas Diesci Grab	Water Burtle
AFSPHUF MARCO	12/18/2019 10:17 MCLVANE	Field	Field Testing-Discrete		SW	0.30	1.12 Specific Conductance	1610	FDEP FT1200	\$1926 unholon		EQ_AF57998					Visibly outgoing tide. Vegetative debris on water surface.	Jüravlin Külas Direct Grab	Water State
AFSPREF MARCO	12/18/2019 11.15 W_WINTERSERRY_ERROGE	Field	Field Testing-Discrete		SW	0.30	2.43 Specific Conductance	1610	FDEP FT1200	essas unholon		EQ_AF57998					Visibly outgoing tide. Vegetative debris on water surface. I more niero of track comments of exercise site. Eliza-	Jüravin Külas Imemediate Grab	Van Dom Strile
AFSPRESF MARCO	12/16/2019 11:17 W_WINTERBERRY_BRIDGE	Field	Field Testing-Discrete		SW	2.10	2.45 Specific Conductance	1610	FDEP FT1200	50656 unholon		59,AF57938					Visitely outgoing tide. Vegetative debris on water surface. I none place of trans-commence of excepts site. Since	Jüravin Külas Internediate Grab	Van Dom Burde
AFSPRREF MARCO	12/18/2019 11:K3 E_WINTERSERRY_BRIDGE	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	1.10 Specific Conductance	1610	FDEP FT1200	47529 unholon		59,AF57938					Appears to be side/movement, could be the strong wind. Vecetable debris on water surface. Stats audible under	Jüravin Külas Direct Grab	Water Burdle
AFERMENT MARCO	12/18/2019 8:32 WINDOWS.L	Field	Field Testing-Discrete	Misc Field Davice	SW	0.30	3.02 Tenserature Water	2030	EDER ET MAN	23.5 deg C		68_AF57998					Visito outsing the Venezine debris on water surface.	January Colons - Intermediate Grap	Van Dom Burde
ACCOUNTS MARCO	TOTAL COLUMN NAME OF THE PARTY	Field	Field Testing-Discrete		See .	170	200 Temperatur, Water	2020	EDER ET MON			SR ASSTRA					Elem	Construction Internation Con-	Van Door Borde
AFERMENT MARCO	12182019 838 WINDOW	Field	Field Testing-Discrete Field Testing-Discrete		SW	0.30	3.00 Temperature, Water 1.12 Temperature, Water	2030	FDEP FT1400	26.4 deg C 26.4 deg C		69 AF5799					Visibly outgoing tide. Vegetative debris on water surface.  Elina  Vegetative debris on water surface. No visible tidal	Jüravin Külas Eramedate Grab  Kiravin Külas Piner Grab	Van Dom Buttle Week fortle
	12182019 824 HOLLYHOOX								FDEP FT1400			50 AF57998							
AFSPHREF MARCO	12/18/2019 N.CE HAMINGERO 12/18/2019 10:17 MCLVANE	Field	Field Testing-Discrete Field Testing-Discrete	Misc Field Device Misc Field Device	SW	0.30	1.10 Temperature, Water 1.10 Temperature, Water	2030 2030	FDEP FT1400 FDEP FT1400	24.6 deg C 24.0 deg C		ER AFETHE					Vegetative debris on water surface. Flow. Visibly outgoing tide. Vegetative debris on water surface.	Jársvín-Kálas Direct Grab Jársvín-Kálas Direct Grab	Water Burdle Water Burdle
AFSPREE MARCO	12/18/2019 11:15 W_WINTERSERRY_BRIDGE	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	2.43 Temperature, Water	2030	FDEP FT1600	23.9 deg C		59,AF57998					Ele- Visibly outgoing tide. Vegetative debris on water surface.	Jüravin Külas Intermediate Grab	Van Dom Burde
AFSTREEF MARCO	12/18/2019 11:17 W_WINTERSERRY BRIDGE	Field	Field Testing-Discrete	Misc Field Device	SW	2.10	2.43 Temperature, Water	2030	FDEP FT1600	23.9 deg C		59,AF57998					I area niana of treats unumases of search site. Elea- Visibly oursping tide. Vegetative debris on water surface.	Jüravin Külas Insernediate Grab	Van Dom Burde
AFSTREE MARCO	12/18/2019 11:KS E WINTERSERRY BRIDGE	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	1.10 Temperature, Water	2030	FDEP FT1600	24.0 deg C		59,AF57998					Appears to be significant command of assesse site. Since Appears to be significant error could be the strong wind.	JGravin/KSites Direct Gras	Water Burdle
																	Vegetative-debris on water surface. Bots audble-under		
AFSPHR MARCO	12/18/2019 8:59 WRENEL	BLANK	BLANK	SEANK	SW	0.3	SLANK SLANK	BLANK	BLANK	BLANK BLANK	BLANK	EQ_AF57998	BLANK	BLANK	BLANK	BLANK	FCSB collected from CDI 08336 carboy. Light rain-during	Jüravin Külas Irramedate Grab	Van Dom Surtie



# **Field Sampling Report**

Date: Wednesday, December 18, 2019

**Sampler:** Danny Berger **Meter/Notes:** Chris Lienhardt



Certificate No 4262.01

Client: City of Marco Island

**Project:** Marco Island

Run: II

Date/Time:   12/18/19 6:06 AM   Operator:   Josh Gravlin   Project:   MARCO	CCV: Morning		Sonde / Handheld	ProDSS #8	Serial #:	16	A101840
Calibration_8_121319.xlsm   Calibration_8_121319.xlsm	Date/Time:	12/18/19	6:06 AM	Operator:	Josh Gravlin	Project:	MARCO
2000	*** Conductivity ***	_	_			Associated	Calibration File:
*** pH ***  pH (QA Criteria ±.2)  4.00  13177  4.11  Pass  All CCV Results Pass?  10.00  Yes  *** Dissolved Oxygen ***  D.O. (QA Criteria ±3mg/l)  mg/L  %  °C  Pass/Fail  True Value   Barometric Pressults	Standard (µmhos/cm) ± 5%	CD	OI#	Reading	Pass/Fail	Calibration	_8_121319.xlsm
CDI#   Reading   Pass/Fail	2000	116	523	1993	Pass		
CDI#   Reading   Pass/Fail	*** pH ***						
4.00 13177 4.11 Pass  7.00 All CCV Results Pass?  10.00 Yes  *** Dissolved Oxygen ***  D.O. (QA Criteria ±3mg/l) mg/L % °C Pass/Fail True Value Barometric Pressults Pass?		CD	OI#	Reading	Pass/Fail		
10.00	4.00	131	177	4.11	Pass		
D.O. (QA Criteria <u>+</u> 3mg/l) mg/L % °C Pass/Fail True Value Barometric Pressu	7.00					All CCV	Results Pass?
D.O. (QA Criteria <u>+</u> 3mg/l) mg/L % °C Pass/Fail True Value Barometric Pressu	10.00						Yes
	*** Dissolved Oxygen ***						
CCV Readings>         8.55         100.5         23.3 Pass         8.508         758		mg/L	%			True Value Ba	arometric Pressu
	CCV Readings>	8.55	100.5	23.3	Pass	8.508	758
	Notes:						

CCV: Afternoon			Date/Time:	12/18/2019 13:52	Operator:	Chris Lienhardt
*** Conductivity ***						
Standard (µmhos/cm) ± 5%	CD	)l#	Reading	Pass/Fail		
10000	116	326	10087	Pass		
70000	133	303	70861	Pass		
*** pH ***						
pH (QA Criteria +.2)	CD	)l#	Reading	Pass/Fail		
4.00						
7.00	128	861	7.15	Pass	All CC	V Results Pass?
10.00	10.00 13190			Pass	Yes	
*** Dissolved Oxygen ***						
D.O. (QA Criteria +3mg/l)	mg/L	%	°C	Pass/Fail	True Value	Barometric Pressure
CCV Readings>	8.85	101.5	22.2	Pass	8.698	758.8

Notes:

Surface Water Field Workbook Rev 16.2 Effective December 17th, 2019

Program:	MARCO		Run:	II		Sample Collector:	Danny Berger	Meter / Notes	/ Chris Lienhar	rdt	Date:	12/18/2019
LAB ID	TIME	STATION	Temp (°C)	Sp Cond (μS/cm)	Sal (ppt)	ODO (% LocalB)	ODO (mg/L)	рН	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF57984	8:23	OLDE_MARCO	22.8	47372	30.86	96.0	6.92	8.02	0.30		1.60	1.60
AF57984B	8:26	OLDE_MARCO	23.9	52480	34.59	90.9	6.29	8.01	1.30		1.60	1.60
Collection Device	Pole	Sampler; CDI: 10882		Cleaning Protocol:	J	Flow:	Flow.		Staff Gauge:		pH < 2:	YES
Comments:	Tides outgo	oing until 11:59 according to	tidal charts.	Vegetative debris fl	loating on sur	face near site					Sample Type:	SAMP
LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pН	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF57985	8:51	JH_PARK	24.4	51924	34.17	80.4	5.53	7.88	0.30		3.30	1.90
AF57985B	8:54	JH_PARK	24.4	52355	34.49	79.1	5.44	7.89	3.00		3.30	1.90
Collection Device	Pole	Sampler; CDI: 10882		Cleaning Protocol:	J	Flow:	Flow.		Staff Gauge:		pH < 2:	YES
Comments:	Visibly outo	going tide. Vegetative debris	on surface.								Sample Type:	SAMP
LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	рН	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF57986	9:55	HC_CENTER	23.7	47360	30.83	94.8	6.73	7.96	0.30		1.45	1.45
Collection Device	Pole	e Sampler; CDI: 10882		Cleaning Protocol:	J	Flow:	Flow.		Staff Gauge:		pH < 2:	YES
Comments:	Visibly outo	going tide. Grass clipping an	d leaf litter co	overing much of the	e surface of th	e site. Picture	es by CTL.				Sample Type:	SAMP
LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	рН	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF57987	10:27	COLLIER_BRIDGE	23.7	45350	29.38	82.7	5.92	7.88	0.30		1.10	1.10
Collection Device	Pole	Sampler; CDI: 10882		Cleaning Protocol:	J	Flow:	Flow.		Staff Gauge:		pH < 2:	YES
Comments:	Visibly outo	going tide. Feces observed o	n seawall nea	ar site.							Sample Type:	SAMP
Bottles Per Site / Site:	• •	6/0	Matrix: SW	Named storm eve	ent that impactor	ed sampling	No					
Sites Acce	ess By:	Truck	Weather:	Overcast with light	rain early chan	iging to breezy	and cool conditons.		Prepared By:	Christoph	er Lienhardt	3:41:41 PM
Sampling SOP:		FSQM 03-03	24 HRS	Prior Weather:	Sir	milar with late F	PM rains.		Reviewed By:	Danny	Berger	Signed: 12/18/2019 2:21:22 PM

Program	: MARCO		Run:	Ш		Sample Collector:	Danny Berger	Meter Notes	/ Chris Lienhar :	dt	Date:	12/18/2019
LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	рН	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF57999	10:39	COLLIER_BRIDGE										
Collection Device		Sample Container		Cleaning Protocol:		Flow:			Staff Gauge:		pH < 2:	YES
Comments:	FB taken f	rom CDI 13269.	<del>-</del>		•				-		Sample Type:	FB
LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	рН	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF57988	11:08	KENDALL	24.5	51555	33.89	70.9	4.88	7.83	0.30		0.60	0.60
Collection Device	Po	le Sampler; CDI: 10882		Cleaning Protocol:	J	Flow:	Flow.		Staff Gauge:		pH < 2:	YES
Comments:	Visibly ou	tgoing tide. Construction bar	ge passed du	ring sampling.		•		•	_		Sample Type:	SAMP
LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	рН	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF57989	11:40	BARFIELD_BRIDGE	24.0	52452	34.57	94.6	6.53	8.01	0.30		1.40	1.10
Collection Device	Po	le Sampler; CDI: 10882		Cleaning Protocol:	J	Flow:	Flow.		Staff Gauge:		pH < 2:	YES
Comments:	Difficult to	determine tidal flow due to	– high winds. Ti	idal chart shows οι	utgoing until 1	1:59.		•	_		Sample Type:	SAMP
LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	рН	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF57990	12:04	LANDMARK	24.3	52717	34.76	100.3	6.89	8.08	0.30		1.20	1.20
Collection Device	Ро	le Sampler; CDI: 10882		Cleaning Protocol:	J	Flow:	Flow.		Staff Gauge:		pH < 2:	YES
Comments:	Tide appea	ars to be slack.									Sample Type:	SAMP
Bottles Per Site / Site		6 / 0	Matrix: SW	Named storm ev	ent that impact event?	ed sampling	No					
Sites Acce	ess By:	Truck	Weather:	Overcast with light	rain early char	nging to breezy	and cool conditons.		Prepared By:	Christoph	ner Lienhardt	
Sampling SOP Used:		FSQM 03-03	24 HRS Prior	r Weather:	Si	milar with late F	PM rains.		Reviewed By:	Dann	y Berger	

Program	: MARCO		Run:	Ш		Sample Collector:	Danny Berger	Meter Notes	/ S: Chris Lienhard	dt	Date:	12/18/2019
LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (μmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	рН	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
AF57997	12:33	SWALLOW	23.6	45751	29.67	88.5	6.33	8.01	0.30		1.30	1.10
Collection Device	Po	ole Sampler; CDI: 10882		Cleaning Protocol:	J	Flow:	No flow.		Staff Gauge:		pH < 2:	YES
Comments:	Tide appe	ars to be slack.									Sample Type:	SAMP
LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	рН	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)	pН	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)	рН	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 Site		er 6 / 0	Matrix: SW	Named storm eve	ent that impact event?	ed sampling	No					
Sites Acce		Truck	Weather:	Overcast with light	rain early char	nging to breezy	and cool conditons.		Prepared By:	Christoph	ner Lienhardt	
Sampling SOP Used:		FSQM 03-03	24 HRS Prio	r Weather:	Si	milar with late F	PM rains.		Reviewed By:	Dann	y Berger	

Program	n: MARCO		Run:	II		Sample   Collector:	Danny Berger	Meter Notes	/ Chris Lienhard	dt	Date:	12/18/2019
LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (μmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	pН	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
Collection Device				Cleaning Protocol:		Flow:			Staff Gauge:		pH < 2:	
Comments:	-		<del>.</del>			_			_		Sample Type:	
LAB ID	TIME	STATION	TEMP. (° C)	SPEC. COND. (µmhos/cm)	SALINITY (ppt)	D.O. (% SAT)	D.O. (mg/l)	рН	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)	pН	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
Collection Device			Field	d 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)	рН	SAMPLE DEPTH (meters)	STAFF GAUGE (feet)	WATER DEPTH (meters)	SECCHI DEPTH (meters)
Collection Device				Cleaning Protocol:		Flow:			Staff Gauge:		pH < 2:	
Comments:				Ü		•			9		Sample Type:	
Bottles Per Site Site		er 6 / 0	Matrix: SW	Named storm eve	ent that impact	ed sampling	No					
Sites Acc	ess By:	Truck	Weather:	Overcast with light	rain early char	nging to breezy a	and cool conditons.		Prepared By:	Christoph	er Lienhardt	
Sampling SOP Used:		FSQM 03-03	24 HRS Prior	r Weather:	Sii	milar with late P	M rains.		Reviewed By:	Dann	y Berger	

NELAC Certification: #E45464



## 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

Client Information Name: Rhonda Watkins PRESERVATION CODES Lot# Prs. Vol. Prs. Lot# Prs. Supp. Prs. Date Initials Company Name: Collier County Natural Resources IG 1000mL HDPE/Ice 73522 Address: 2685 South Horseshoe Drive Ste 103, Fl 34104 2C 1L Opaque HDPE/Light-shielded/Ice AF57870 **Phone:** (239) 252-2502 Ext. 6049 CDI13026 CTL, DMB 3S 125ml HDPE/H2SO4/Ice 8 Drops RP14085 Fisher 12/18/2019 Fax: (239) 252-6479 4F 60ml Opaque HDPE/Filtered/Ice AF55337 MATRIX CODES Project MARCO CDI12139 5J 120mL HDPE w/Sodium Thiosulfate/Ice Sample Collector(s): GW Ground Water 6N 250ml HDPE/H2SO4 CDI13005 16 Drops RP14085 Fisher 12/18/2019 CTL, DMB SW Surface Water Danny Berger 14 Whatman Polydisc GW 0.45µm A24365266 Sample Collector Signature: WW Waste Water DW Drinking Water Other. Relinquished By: (Signature) Date/Time 12/18/19 2:25 PM Sample Check-In **Parameters** Sample(s) Intact? Received By: (Signature) orus-ICP-PC, Prep Metals Rec'd in wet ice? Temp °C: Date/Time 12/18/19 2:25 PM PC, CC-Nitrate-N-PC Proper Samp ID? Relinquished By: (Signature) Rec'd within hold rophyll-PC, -Chloro Nitra time? Date/Time urbidity-PC Received By: (Signature) Acid preserved samples pH<2? Logged In? Date/Time **Bottle Codes** Scanned? 5J 1G 2C 3S 4F 6N Calc Sample Depth Location Matrix # of sample Containers Submited Lab ID# Date Time Field pH Sp. Cond. 12/18/2019 47372 OLDE MARCO SW AF57984 8:23 8.02 0.30 12/18/2019 8:51 7.88 51924 0.30 JH\_PARK SW 1 1 AF57985 HC\_CENTER SW 12/18/2019 9:55 7.96 47360 0.30 AF57986 12/18/2019 10:27 7.88 45350 0.30 COLLIER BRIDGE SW AF57987 COLLIER\_BRIDGE SW AF57999 12/18/2019 10:39 #N/A #N/A #N/A 1 1 1 12/18/2019 11:08 7.83 51555 0.30 KENDALL SW 1 1 1 AF57988 12/18/2019 11:40 8.01 52452 0.30 BARFIELD\_BRIDGE SW AF57989 12/18/2019 12:04 8.08 52717 0.30 LANDMARK SW AF57990 11 12/18/2019 12:33 8.01 45751 0.30 **SWALLOW** SW AF57997 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-B5	0.35555556	0.349305556 Sampler	12/18/2019 8:31 Incorrect initial entry.	Christopher Lienhardt
Field Sheet-M5	1.6	1/1/1900 14:24 Sampler	12/18/2019 8:31 No reason given by user.	Christopher Lienhardt
Field Sheet-M5	1/1/1900 14:24	1.6 Sampler	12/18/2019 8:31 No reason given by user.	Christopher Lienhardt

### KorDSS MEASUREMENT DATA FILE EXPORT

FILE CREATED: 12/18/2019 17:53

DATE		TIME	SITE	Barometer (mmHg)	Temp (°C)	Sp Cond (µS/cm)	TDS (mg/L)	Sal (ppt)	pН	pH (mV)	ODO (% Sat)	ODO (mg/L)	ODO (% LocalB)
	12/18/2019	8:23:29	AM af57984	760.1	22.8	47371.8	30792	30.86	8.02	-66.5	96	6.92	96
	12/18/2019	8:26:29	AM af57984	760.1	23.9	52479.8	34112	34.59	8.01	-66.1	90.9	6.29	90.9
	12/18/2019	8:51:39	AM af57985	760.4	24.4	51923.6	33750	34.17	7.88	-58.7	80.4	5.53	80.4
	12/18/2019	8:54:07	AM af57985	760.5	24.4	52355	34031	34.49	7.89	-59.4	79.2	5.44	79.1
	12/18/2019	9:25:41	AM south marco	761.1	23.5	52351.5	34029	34.5	8.08	-70	100.1	6.98	99.9
	12/18/2019	9:55:00	AM af57986	760.9	23.7	47359.6	30784	30.83	7.96	-63.5	94.9	6.73	94.8
	12/18/2019	10:27:47	AM af57987	761.1	23.7	45350	29477	29.38	7.88	-58.6	82.8	5.92	82.7
	12/18/2019	11:08:32	AM af57988	760.9	24.5	51554.6	33511	33.89	7.83	-55.7	71	4.88	70.9
	12/18/2019	11:40:33	AM af57989	760.7	24	52451.5	34093	34.57	8.01	-66	94.6	6.53	94.6
	12/18/2019	12:04:34	PM af57990	760.4	24.3	52717.1	34266	34.76	8.08	-70.2	100.4	6.89	100.3
	12/18/2019	12:33:21	PM af57997	760.3	23.6	45750.7	29738	29.67	8.01	-66	88.5	6.33	88.5

Coller County Pollution Control
Eas Equal Manage ( ) 2 2019
Eas Equal Minister

HALF BOARD A	12/18/2019 823 OLDS MARCO	Artista Tu	Feld Testing-Discrete	Mac Field Device	Name Marie Arti	in New York	March (m) Con Academ Name	ADMET ANNUA D	ENERGY THAN	4.92 mgL	Fig. AFSTROM	Environment State State Ch.	Marrie Artists D	to Black Book Pt	Washington B	besit Company	Tides outgoing until 1158 according to tidal charts.	Supplier Name	Sample Collection Type	Sample Collection Equipment
STREET MARCO	12/18/2019 8/26 OLDS MARCO	Field	Field Testing-Discrete		SW	1.30	1.60 Dissilved Oxygen	1880	FDEP FT 1800	4.29 mgs	FR AFSTON						Vanarative fairles finales on europe a sear she films Tides outgoing until 1159 according to tidal charts.	CLierbards/Dilerper	Direct Grain	Water Buttle
DOME MARCO	10182019824 GLEENWALD	Face	Field Testing-Discrete	Mac Field Davins	See .	0.30	131 Descriptions	1880	EDER ET 1800	439 mgc	FB 4557999						Tribes outgoing until 11.58 according to fold charts.  Value of the Control of th	Clientant/Dhaner		Where Broths
IPHISF MARCO IPHISF MARCO	12/18/2019 8/31 34 PARK 12/18/2019 8/35 34 PARK 12/18/2019 8/35 34 C CENTER	Field Field	Field Testing-Discrete Field Testing-Discrete	Misc Field Device	SW SW	3.00	3.30 Dissilved Cages 3.30 Dissilved Cages 1.45 Dissilved Cages	1880	FDEP FT1100 FDEP FT1100	5.64 mgL 6.72 mgL	FR_AF57999 FR_AF57999						Visite conscion title Measuring Astronomenture Street Visite conscion title Greek clipping and test little covering	CLienhards/Dilenser CLienhards/Dilenser	Direct Grap	Water Buttle Water Buttle
LYBBAY MAKED	12182019 935 HC_CENTER	Pand	Field Testing-Charleto	Misc Posts Device	200	0.30	1.45 Dissured Dagger	1880	FEMPFT1800	6.73 mgs.	FR_AF5799						much of the surface of the site. Pictures by CTL. Flow.	CLernards Deerger	Dred Gras	Visiter Bullie
SPREET MARCO	12/18/2019 10:27 COLLER_SRIDGE	Field	Field Testing-Discrete	Misc Field Davice	SW	0.30	1.10 Dissalved Oxygen	1880	FDEP FT1500	5.92 mg/L	FR_AF52999						Visitry outgoing tide. Feces observed on seawalt near site.	CLienhards/Dikerger	Direct Grado	Water Buttle
STREET MARCO	12/18/2019 11:08 KENDALL	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	0.60 Dissalved Dagges	1880	FDEP FT1500	4.88 mgL	FR_AFS7999						Visibly outgoing tide. Construction barge passed during	CLienhards/Dikerger	Direct Grade	Water Buttle
STREET MARCO	12/18/2019 11:00 BARFELD_BRIDGE	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	1.63 Dissalved Daggers	1880	FDEP FT1500	6.53 mgL	FR_AF57999						Difficult to determine tidal flow due to high winds. Tidal chart.			Water Buttle
IPHOF MARCO	1218/2019 12:04 LANDWARK	Field	Field Testing-Discrete	Misc Field Davice	SW	0.30	1.22 Dissolved Oppoer	1880	FDEP FT1100	5.89 mg).	FR AFSTREE						Title anneates to be story. Ellow	de la companya de la	from the to	When Some
SPHINF MARCO	12/18/2019 12:33 SWALLOW 12/18/2019 823 OLDS MARCO	Field	Field Testing-Discrete Field Testing-Discrete	Misc Field Davice Misc Field Davice	SW SW	0.30	1.90 Dissalved Oxygen 1.80 Dissalved Oxygen Saturation	1880 WN-011	FDEP FT1500 FDEP FT1500	6.33 mg/L 96.0 %	FR AFSTREE						Tides outcoins until 11.00 according to tidal charts.	CLierbards@Berger CLierbards@Berger	Direct Grade	Water Suttle Water Suttle
PHISE WARD	12/18/2019 8:26 OLDS_MARCO	Field	Field Testing-Discrete	Misc Field Davice	SW	1.30	1.60 Dissolved Degen Saturation	W84011	FDEP FT1100	90.8 %	FR AFSTON						Vanantina dalois fination on surface near site. Since Titles consoles until 1156 according to title charts	CLierbards@Berger	Disease Grade	Water Buttle
SPHISE MARCO	12/18/2019 8:31 JH PARK	Free	Field Testing-Discrete	Mac Field Davis	-	0.30	3.30 Dissolved Oxygen Saturation	WNess	FDEP FT 1800	804 %	FR AFSTER						Vanishi umanina dalah Manasanina makana nasaraha. Vanishi umanina telah Manasanina dalah no sudana Sina	(N instrumentations)		March State
PRINT MARCO	12/18/2019 8:54 JH PARK 12/18/2019 8:55 HC CENTER	Field	Field Testing-Discrete Field Testing-Discrete	Misc Field Device Misc Field Device	Sow Sow	3.00	3.30 Dissolved Orggen Saturation 1.45 Dissolved Orggen Saturation	WN-011	FDEP FT 1800 FDEP FT 1800	76.7 S	FB, AF57939 FB, AF57939						Visite committee Measuring dates on surface films Visite outsigns tide. Grass clipping and leaf little covering	CLienhards/DBerger CLienhards/DBerger		Water Buttle Water Buttle
THE MALI	12182019 935 HC_CENTER	Pand	Field Testing-Charleto	Misc Posts Device	200	0.30	1.45 Dissured Oxygen Saturation	W84011	FEMPFT1800	84.8 %	FR_AF5799						much of the surface of the site. Pictures by CTL. Flow.	CLernards Deerger	Died Gias	Visiter Bullie
PREFF MARCO	12/18/2019 10:27 COLLER_BRIDGE	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	1.12 Dissalved Degres Saturation	WN-011	FDEP FT1500	82.7 %	FR_AFS7999						Visibly outgoing tide. Feces observed on seawall near site.	CLienhards/Dikerger	Direct Grade	Water Buttle
PHISF MARCO	12/18/2019 11:08 KENDALL	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	0.60 Dissalved Daygen Saturation	WN-011	FDEP FT1500	70.9 %	FR_AF57999						Visitely outgoing tide. Construction barge passed during	CLienhards/Dilenger	Direct Grade	Water Buttle
PHHF MARCO	12/18/2019 11:00 BARFIELD BRIDGE	Field	Field Testing-Discrete	Misc Field Davice	SW	0.30	1.62 Dissalved Owner Saturation		FDEP FT1100	26.6 %	FR AFSTON						Difficult to determine tidal flow due to high winds. Tidal chart			Water Buttle
see Marco	TOTAL POTENTIAL LANGUAGE	East	East Terrino-Norma	Mac Said Pavins	SW.	0.30	1.91 Dissolved Cooper Solventon	WMART	EDER ETTER	100.1 %	CO ACCTOM						Total anneality to the other Editor	C inchant/Dhamer	Disease Grade	Water Borris
MINE MARCO MINE MARCO	12/18/2019 12/33 SWALLOW 12/18/2019 823 OLDS MARCO	Field Field	Field Testing-Discrete Field Testing-Discrete	Misc Field Device Misc Field Device	SW SW	0.30	1.30 Dissolved Clayges Saturation 1.30 Dissolved Clayges Saturation 1.60 pH	WN-011 WN-011	FDEP FT1100 FDEP FT1100	88.5 % 8.02 SU	FR_AF57999 FR_AF57999						Tide occase to be story. No fine Tides outgoing until 11:59 according to tidel charts.	CLienhards/Dilenser CLienhards/Dilenser		Water Buttle Water Buttle
MARF MARCO	12/18/2019 8/23 OLDS_MARCO	Field		Mac Field Device	SW	1.90		1900	FORP FT 1100	8.00 SU	FR AFSTON									Water Buttle
			Field Testing-Discrete		SW		1.80 pH	1900									Tides outgoing until 11.59 according to tidal charts. Vacantine dated fination on motion near site. Since	CLierbards/Dikerger		
MARCO MARCO	12/18/2019 8:51 JH PARK 12/18/2019 8:54 JH PARK	Field	Field Testing-Discrete Field Testing-Discrete	Misc Field Device Misc Field Device	SW	3.00	3.30 pH 3.30 pH	1900	FDEP FT1100 FDEP FT1100	7.88 SU 7.89 SU	FR_AF57998 FR_AF57998						Maillio currentes falle Manamerica diabete con surface. Eleme Maillio currentes falle Manamerica diabete con surface. Eleme	CLierbards@Berger	Direct Grop	Wheer Buttle
1986F MARCO	12/18/2019 BSS HC_CENTER	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	1.45 pH	1900	FDEP FT1100	7.96 SU	FB_AF57999						Visibly outgoing tide. Grass clipping and leaf litter covering much of the surface of the size. Pictures by CTL. Flow.	CLierbards/Dikerger	Direct Grade	Water Buttle
ere warro	12/18/2019 10:27 COLLER_BRIDGE	Field	Field Testing-Discrete	Mac Said Pavins	SW	0.30	1.10 pH	1900	FDEP FT1100	788.90	CO ACCTOR							CLientants/Dikerger	Direct Grade	Water Buttle
MMF MARCO	12/18/2019 11:09 KENDALL	Field	Field Testing-Discrete		SW	0.30	0.60 pH	1900	FDEP FT1100	783 80	FR AFSTON							CLierbards/Dilenser		Water Buttle
188F MARCO	12/18/2019 11:08 KENDALL 12/18/2019 11:00 BARFELD BRIDGE	Field	Field Testing-Chazaste	Misc Field Device	SW	0.30	1.42 pH	1900	FDEP FT1100	7.83 SU 8.01 SU	FR AFSTON						Visibly outgoing tide. Construction trange passed during standard blow.  Difficult to determine tidal flow due to high winds. Tidal chart.			Water Buttle
					200	0.30		1900												
MOF MARCO MITF MARCO	12/18/2019 12:24 LANDMARK 12/18/2019 12:33 SWALLOW	Field	Field Testing-Discrete Field Testing-Discrete	Misc Field Davice Misc Field Davice	SW SW	0.30	130 pH 130 pH	1900	FDEP FT1100 FDEP FT1100	8.08 SU 8.01 SU	FR_AFS7998 FR_AFS7999						Tide accepts to the stand. Elling. Tide accepts to the stand. Mr Blow.	CLienthands/Dilenter		Wheel Bullie
MF MARCO	12/18/2019 8:23 OLDE_MARCO	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	1.60 Salinity	1975	FDEP FT1300	35.86 ppn	FB_AF57998						Tides outgoing until 1159 according to tide charts. Venezation habits feration on surface case site. Elem	CLierhards/Dikerger		Water Buttle
MARCO	12/18/2019 8:26 OLDE_MARCO	Field	Field Testing-Discrete	Misc Field Device	SW	1.30	1.60 Salinity	1975	FDEP FT1300	34.50 ppn	FB_AF57998						Tides outgoing until 11:59 according to tidal charts.	CLierhards/Dikerger	Direct Grade	Water Buttle
MSF MARCO	12/18/2019 8:51 JH, PARK 12/18/2019 8:54 JH PARK	Field	Field Testing-Discrete Field Testing-Discrete	Misc Field Davice Misc Field Payors	SW	0.30	3.32 Salinity	1975	FDEP FT1300 EDEP ET1300	34.17 ppn	FR_AFSTREE						Visible comming this Managerian datable on southern Elem- Visible comming this Managerian datable on southern Elem-	CLierbard/Diseaser	Private Grade	Whose Britis
198F MARCO	12/182019 935 HC CENTER	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	1.45 Saliney	1975	FDEP FT1300	20.83 ppn	FB_AF57999							CLierhards/Dilerger		Water Buttle
																	much of the surface of the site. Pictures by CTL. Flow			
SELL MARCO	13/18/2019 10:27 COLLER_BRIDGE	Field	Field Testing-Discrete		SW	0.30	1.10 Statinity	1975	FDEP FT1300	28.38 ppn	FB_AF57999						Visibly outgoing tide. Feces observed on seawall near site.			Water Buttle
NAME NAMED	13/18/2019 11 DR KENDALL	Field	Field Testing-Discrete		SW	0.30	0.60 Salinity	1975	FDEP FT1300	33.89 pph	FB_AF57999						Visitry outgoing tide. Construction-barge passed during	CLierbards/Dikerger		Water Buttle
189F MARCO	12/18/2019 11:00 BARFELD_BRIDGE	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	1.65 Salinity	1975	FDEP FT1300	SEST ppn	FB_AF57998						Difficult to determine tidal flow due to high winds. Tidal chart	CLientants/Dikerger	Direct Grade	Water Buttle
990F MARCO 990F MARCO	13/18/2019 12:04 LANDMARK 13/18/2019 12:33 SWALLOW	Field	Field Testing-Discrete Field Testing-Discrete	Misc Field Davice Misc Field Davice	SW SW	0.30	1.35 Salinity 1.91 Salinity	1975	FDEP FT1300 EDEP ET1300	34.76 ppn 29.67 ppn	FR_AFS7998 FR_AFS7999						Tide accepts to the stand. Elling. Tide accepts to the stand. Mr Blow.	CLierbard/Diseaser	Please Grain Please Grain	Water Burtle Water Buttle
THREE MARCO	12/18/2019 8:23 OLDS_MARCO	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	1.60 Depth, Secchi Disk Depth	WINGTO	FDEP FT1700	1.60 m	FB_AF\$7999				s .		Tides outgoing until 11:59 according to tidal sharts.	CLientants/Dikesper	Direct Grade	Water Buttle
MARCO MARCO	12182019 851 JH, PARK	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	3.32 Depth, Secchi Disk Depth	WNone	FDEP FT1700 FDEP FT1700	1.90 m	FB_AF57999						Visite consists the Unimitie debit on surface film	CLienhards/Dilenser	Direct Grade	Water Buttle Water Buttle
BBF MARCO	12/18/2019 BISS HC_CENTER	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	1.45 Depth, Secchi Disk Depth	WN-010	FDEP FT1700	5.46 m	FR_AFS7999				8		Visibly outgoing tide. Grass clipping and leaf litter covering much of the surface of the site. Pictures by CTL. Flow.	CLierbards/Dileeger	Direct Grade	Water Buttle
METE MARCO	12/18/2019 10:27 COLLER_BRIDGE	Field	Field Testing-Discrete	Misc Field Davice	SW	0.30	1.12 Depth. Secon Disk Depth	WINGER	FDEP FT1700	1.10 m	FR AFSTRON						Visibly outgoing tide. Feces observed on seawall near site.	CLientants/Dilenser	Direct Grop	Water Buttle
me mann	13/20/2018 11:00 WENDAU	East	East Tarriso /Norman	Mac Said Pavins	900	0.30	DET DAVID SAVOIDIA DAVID	WMARR	EDER ETTIM	440.0	CO ACCTOR						Visitely outgoing tide. Construction barge passed during	CLierbards/Diberper		Water Borris
MRF MARCO	12/18/2019 11:00 BARFIELD BRIDGE	Field	Field Testing-Discrete	Misc Field Davice	SW	0.30	1.62 Depth. Septh Disk Depth	Wilhers	FDEP FT 1700	110 m	FR AFSTON						Entered to determine tidal flow due to high winds. Tidal chart			Water Buttle
MOF MARCO	12/18/2019 12:04 LANDMARK	Field	Field Testing-Discrete	Mac Field Davis	SW	0.30	122 Depth, Securi Disk Depth	WMANA	EDER ET 1700	120 m	FR AFSTON						Difficult to determine tidal flow due to high winds. Tidal chart Tida annears to be allow Eliza	/ intermediates		*****
MINE MARCO MINE MARCO	12/18/2019 12/33 SWALLOW 12/18/2019 823 OLDS MARCO	Field Field	Field Testing-Discrete Field Testing-Discrete	Misc Field Device Misc Field Device	5W	0.30		WIN-cro WIN-cro	FDEP FT1700 FDEP FT1200	1.10 m 1.10 m 67372 umboun	FR_AF57999 FR_AF57999						Tide someons to be starte. No fine			Water Buttle Water Buttle
					SW	0.30	1.60 Specific Conductance										Tides outgoing until 11:59 according to tidal charts.  Understall a flat for the control on surface case size. Elements	CLientants/Dilenger		
MAF MACO	12/18/2019 8:26 OLDS_MARCO	Field	Field Testing-Discrete	Msc Field Device	SW	1.30	1.60 Specific Conductance	1610	FDEP FT1200	52680 umbolon	FR_AFS7999						Tides outgoing until 11:59 according to tidal charts. Vacantation habits frontes on surface near site. Since	CLierbards/Dileeger		Water Buttle
HISF MARCO	12/18/2019 8:51 JH, PARK 12/18/2019 8:54 JH PARK	Field	Field Testing-Discrete Field Testing-Discrete	Misc Field Davice Misc Field Davice	SW SW	0.30	3.30 Specific Conductance 3.30 Specific Conductance	1610	FDEP FT1200 FDEP FT1200	51924 umbolon 52255 umbolon	FR AFSTREE						Militar commiss tida. Manageria dabris on sudana Eliza. Militar commiss tida. Manageria dabris on sudana Eliza.	CLienthands/Dilenter	Direct Grade Direct Grade	Water Bostle
BUF MARCO	12/18/2019 BSS HC_CENTER	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	1.45 Specific Conductance	1610	FDEP FT1200	67960 unholon	FR_AFS7999						Visibly outgoing tide. Grass clipping and leaf litter covering much of the surface of the site. Pictures by CTL. Flow.	CLierhards/Dileeger	Direct Grade	Water Buttle
ere warro	1378/2013 10:17 COLLEG SERVICE	East	East Terrino Discours	Mary Control Brown	ew.	0.90	1.11 Specific Conductors	1610	EDER ETTIM	error unbeing	CO ACCTOR						Visibly outspins tide. Feces observed on seased near site.		from the fi	Water Britis
BIF MARCO	12/18/2019 10:27 COLLBIK_MICEOIS 12/18/2019 11:08 KENDALL	Fact	Field Testing-Chazaste		SW	0.30	1.13 Specific Conductance 0.83 Specific Conductance		FDEP FT1200		FR AFSTON							CLierbards@erger		Water Buttle
								1610		\$1555 unholon							enterior flow			
MRF MARCO	12/18/2019 11:40 BARFELD_BRIDGE	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	1.62 Specific Conductance	1610	FDEP FT1200	52652 umbolon	FB_AF57999						Difficult to determine side flow due to high winds. Tidal chart above contains and 11 feb. Since			Water Buttle
NOF MARCO NIF MARCO NIF MARCO	12/18/2019 12:04 LANDMARK 12/18/2019 12:33 SWALLOW	Field	Field Testing-Discrete Field Testing-Discrete	Misc Field Davice Misc Field Davice	SW	0.30	1.35 Specific Conductance 1.35 Specific Conductance	1610	FDEP FT1200 FDEP FT1200	52717 umbolon 45751 umbolon	FB_AFS7999 FB_AFS7999						Title someon to be about \$1000 Title someon to be about \$60 flow	Pi industriblemer Pi industriblemer	Disect Group	Wheel Sortie Wheel Sortie
	12/18/2019 8:23 OLDE_MARCO	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	1.60 Temperature, Water	2030	FDEP FT1600	22.8 deg C	FB_AF57999						Tides outgoing until 1159 according to tidal charts.	CLierhards/Dikerger	Direct Grade	Water Buttle
MRF MACO	13/18/2019 8:26 OLDS_MARCO	Field	Field Testing-Discrete	Misc Field Device	SW	1.30	1.60 Temperature, Water	2030	FDEP FT1600	23.9 deg C	FR_AFS7999						Tides outgoing until 1159 according to tidal charts.	CLierhards/Dileeger		Water Buttle
BSF MARCO	12/18/2019 8:51 JH PARK	Field	Field Testing-Stacrate Field Testing-Stacrate	Mac Field Device Mac Field Payors	SW	0.30	3.32 Temperature, Water 3.31 Temperature, Water	2030	FDEP FT1600 FDEP FT1600	26.4 deg C 26.4 deg C	FR_AF57998						Ministra comming this Managerian database consultana Silvan Ministra comming this Managerian database on surface Silvan	C inchantification	Prince Grain	When Sortin
MISSF MARCO	12/18/2019 8:54 JH, PARK 12/18/2019 8:55 HC_CENTER	Field	Field Testing-Discrete Field Testing-Discrete	Misc Field Device Misc Field Device	SW	0.30	3.32 Temperature, Water 1.45 Temperature, Water	2030	FDEP FT1600 FDEP FT1600	24.4 deg C 23.7 deg C	FB_AF57998 FB_AF57998						Markly committee firms of tening and leaf little covering	CLierbards/DBerger CLierbards/DBerger		Water Buttle Water Buttle
																	much of the surface of the site. Pictures by CTL. Flow			
MIF MARCO	13/18/2019 10:27 COLLER_SRIDGE	Field	Field Testing-Discrete		SW	0.30	1.10 Temperature, Water	2030	FDEP FT1600	23.7 deg C	FR_AFS7999						Visibly outgoing tide. Feces observed an seawall near site.			Water Buttle
188F MARCO	12/18/2019 11:08 KENDALL	Field	Field Testing-Discrete	Misc Field Device	SW	0.30	0.60 Temperature, Water	2030	FDEP FT1600	24.5 deg C	FB_AF57999						Visibly outgoing tide. Construction barge passed during	CLierhards/Dikerger	Direct Grade	Water Buttle
neer MARCO	12/18/2019 11:00 BARFELD_BRIDGE	Field	Field Testing-Discrete	Misc Field Davice	SW	0.30	1.42 Temperature, Water	2030	FDEP FT1600	24.0 deg C	FR_AF52999						Difficult to determine tidal flow-due to high winds. Tidal chart	CLienhards/Dikerger	Direct Grado	Water Buttle
PRIOF MARCO	12/18/2019 12:04 LANDMARK	Field	Field Testing-Discrete		SW	0.30	1.20 Temperature, Water	2030	FDEP FT1600	24.3 deg C	FB_AF57999						Title anneate to be stock. Elica.	/ intermediane	Please filmin	When Britis
DOMEST MARCO	12/18/2018 12:33 SWALLOW 12/18/2018 10:39 COLLER SRIDGE	FLANK BLANK	Field Testing-Discrete for ANY	Misc Field Device or any	Sow	0.30	SLANK SLANK	BLANK	FDEP FT1600 BLANK	SLANK SLANK	FR AFSTERN	BLANK	BLANK B	LANK	BLANK 6	ir anar	Title access to be about the fire	CLierbard Diverser	Direct Groot	Water Buttle



Description: Lawn debris at HC\_CENTER.