

APPENDIX O

CHAIN-OF-CUSTODY (COC) FORMS

CHAIN OF CUSTODY RECORD

STANDARD

Page 1 Of 3

CLIENT NAME:						PROJECT:						ANALYSES REQUESTED								Page 1 Of 3 SPECIAL HANDLING			
Wood Environment & Infrastructure Solutions, Inc.						2018 Regional Harbor Monitoring Program														Same Day Rush 150%			
ADDRESS: 9210 Sky Park Ct., Suite 200 San Diego, CA 92123						PHONE: 858-300-4316 FAX: 858-300-4301 EMAIL: chris.stransky@woodplc.com corey.sheredy@woodplc.com														24 Hour Rush 100%			
PROJECT MANAGER Chris Stransky						SAMPLER Tyler Huff, Chris Stransky														48-72 Hour Rush 75%			
ID# (For Lab Use Only)	DATE SAMPLED	TIME SAMPLED	SMPL TYPE	SAMPLE IDENTIFICATION/SITE LOCATION		# OF CONT.	Ammonia-N (SM 4500-NH ₃ D)	Methylene-Blue-Activated Substances (MBAS) (SM 5540 C)	Nitrate-N** (EPA 300.0/SM 4500-NO ₃ E)	Oil & Grease (EPA 1664A)	Dissolved Organic Carbon / Total Organic Carbon (EPA 415.3)	Total Orthophosphate as P** (SM 4500 P E)	Total & Dissolved* Metals (EPA 1640)	Total & Dissolved* Mercury (EPA 245.7)	Polyyclic Aromatic Hydrocarbons (PAHs) (EPA 625)	Total Suspended Solids (TSS) (EPA 2540D)	Charges will apply for weekends/holidays						
	7/10/18	0630	DI	B18-SW-EB	13	X	X	X	X	X	X	X	X	X	X	X	Method of Shipment:						
		0853	seawater	B18-10065	13	X	X	X	X	X	X	X	X	X	X	X	COMMENTS						
		1020	seawater	B18-10066	13	X	X	X	X	X	X	X	X	X	X	X							
		1136	seawater	B18-10067	13	X	X	X	X	X	X	X	X	X	X	X							
		1325	seawater	B18-10068	13	X	X	X	X	X	X	X	X	X	X	X							
RELINQUISHED BY						DATE / TIME		RECEIVED BY						SAMPLE CONDITION:				SAMPLE TYPE CODE:					
RELINQUISHED BY						DATE / TIME		RECEIVED BY						Actual Temperature:				AQ=Aqueous					
RELINQUISHED BY						DATE / TIME		RECEIVED BY						Received On Ice				NA= Non Aqueous					
														Preserved				SL = Sludge					
														Evidence Seals Present				DW = Drinking Water					
														Container Intact				WW = Waste Water					
														Preserved at Lab				RW = Rain Water					
																		GW = Ground Water					
																		SO = Soil					
																		SW = Solid Waste					
																		OL = Oil					
																		OT = Other Matrix					
SPECIAL REQUIREMENTS / BILLING INFORMATION																							

SPECIAL REQUIREMENTS / BILLING INFORMATION

See attached Analyte List for handling/preservation procedures.

* Diss. metals and dissolved mercury were field filtered using 0.45 um bottle top filtration system.

** Nitrate-N/Total Orthophosphate as P was immediately frozen following collection.

NOTE (7/3/2018 edit):
 Seawater samples will also
 be analyzed for TSS.

Table 6-1.
 RHMP Constituents to be Monitored in Seawater
 and Corresponding Analytical Methods

Analyte	Analysis Method
pH	Field Measurement
Specific Conductance	Field Measurement
Dissolved Oxygen	Field Measurement
Temperature	Field Measurement
Salinity	Field Measurement
Transmissivity	Field Measurement
Ammonia-N	SM 4500-NH ₃ D
Methylene-Blue-Activated Substances (MBAS)	SM 5540 C
Nitrate-N	EPA 300.0/SM 4500-NO ₃ E
Oil & Grease	EPA 1664A
Dissolved Organic Carbon (DOC)	EPA 415.3
Total Organic Carbon (TOC)	EPA 415.3
Total Orthophosphate as P	SM 4500 P E
Aluminum (Al) ^a	EPA 1640
Antimony (Sb) ^a	EPA 1640
Arsenic (As) ^a	EPA 1640
Barium (Ba) ^a	EPA 200.8
Beryllium (Be) ^a	EPA 1640
Cadmium (Cd) ^a	EPA 1640
Chromium (Cr) ^a	EPA 1640
Cobalt (Co) ^a	EPA 1640
Copper (Cu) ^a	EPA 1640
Iron (Fe) ^a	EPA 1640
Lead (Pb) ^a	EPA 1640
Manganese (Mn) ^a	EPA 1640
Mercury (Hg) ^a	EPA 245.7
Molybdenum (Mo) ^a	EPA 1640
Nickel (Ni) ^a	EPA 1640
Selenium (Se) ^a	EPA 1640
Silver (Ag) ^a	EPA 1640
Thallium (Tl) ^a	EPA 1640
Tin (Sn) ^a	EPA 1640
Titanium (Ti) ^a	EPA 1640
Vanadium (V) ^a	EPA 1640
Zinc (Zn) ^a	EPA 1640
Polycyclic Aromatic Hydrocarbons (PAHs) ^b	EPA 625

Notes:

+ TSS Total Susp. Solids # 25400
^a. Metals will be analyzed for total and dissolved fractions. Filtering for the dissolved fraction will occur in the field immediately after collection.

^b. Includes Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[e]pyrene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Biphenyl, Chrysene, Dibenzo[a,h]anthracene, Di benzo[thiophene, Fluoranthene, Fluorene, Indeno(1,2,3-c,d)pyrene, Naphthalene, Perylene, Phenanthrene, Pyrene, 2,6-Dimethylnaphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene, 1-Methylphenanthrene, and 2,3,5-Trimethylnaphthalene.

EPA - U.S. Environmental Protection Agency

SM - Standard Methods

Sample Receipt Summary

Client: Wood Environment & Infrastructure Solutions, Inc Date Received: 7/11/2018 Received By: AI Inspected By: RGH

Courier:		Cooler:		Temperature:	
<input checked="" type="checkbox"/> Physis	<input type="checkbox"/> FEDEX	<input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Box	<input type="checkbox"/> BLUE	<input checked="" type="checkbox"/> WET
<input type="checkbox"/> UPS	<input type="checkbox"/> Client	Total #:	5	<input type="checkbox"/> DRY	
Start 6:30	End 11:40	<input type="checkbox"/> Other:		<input type="checkbox"/> None	10.9°C

Sample Integrity Upon Receipt:

1. COC(s) included and completely filled out.....Yes
2. All sample containers arrived intact.....Yes
3. All samples listed on COC(s) are present.....Yes
4. Information on containers consistent with information on COC(s).....Yes
5. Correct containers and volume for all analyses indicated.....Yes
6. All samples received within method holding time.....Yes
7. Correct preservation used for all analyses indicated.....No; see notes below
8. Name of sampler included on COC(s).....Yes

Notes:

See Temperature

Missing the frozen Nitrate & Total Orthophosphate bottles. - per client it was left in the freezer.
Frozen samples were received 7/13/18.

CHAIN OF CUSTODY RECORD

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SPECIAL REQUIREMENTS / BILLING INFORMATION	
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See attached Analyte List for handling/preservation procedures.

STANDARD

SPECIAL HANDLING

SPECIAL REQUIREMENTS / BILLING INFORMATION
See attached Analyte List for handling/preservation procedures.

Table 6-2.
RHMP Constituents to be Monitored in Sediment
and Corresponding Analytical Methods

Analyte	Analysis Method
Total Solids	160.3/SM 2540B ^a
Total Organic Carbon (TOC)	9060
Grain Size	SM2560
Aluminum (Al)	6020/6010B ^b
Antimony (Sb)	6020/6010B ^b
Arsenic (As)	6020/6010B ^b
Barium (Ba)	6020/6010B ^b
Beryllium (Be)	6020/6010B ^b
Cadmium (Cd)	6020/6010B ^b
Chromium (Cr)	6020/6010B ^b
Copper (Cu)	6020/6010B ^b
Iron (Fe)	6020/6010B ^b
Lead (Pb)	6020/6010B ^b
Mercury (Hg)	7471A ^b
Nickel (Ni)	6020/6010B ^b
Selenium (Se)	6020/6010B ^b
Silver (Ag)	6020/6010B ^b
Zinc (Zn)	6020/6010B ^b
Total Nitrogen	9056A
Total Phosphorus	EPA 6020
Ammonia	SM 4500-NH ₃
Acid Volatile Sulfides (AVS)	Plumb, 1981 and TERL
Simultaneous Extracted Metals (SEM)	EPA 200.8
Polycyclic Aromatic Hydrocarbons (PAHs) ^c	8270C/8270D
Chlorinated Pesticides ^d	8270C ^b
Pyrethroid Pesticides ^e	EPA 8270C NCI
Polychlorinated Biphenyl (PCB) Congeners ^f	8270C PCB ^b
Polybrominated Diphenyl Ethers (PBDEs) ^g	8270C NCI

Notes:

- ^a Standard Methods for the Examination of Water and Wastewater, 22nd Ed. Rice et al. 2013.
^b USEPA 1986-1996. SW-846. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, 3rd Edition.
^c Includes Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[e]pyrene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Biphenyl, Chrysene, Dibenz[a,h]anthracene, Dibenzothiophene, Fluoranthene, Fluorene, Indeno(1,2,3-c,d)pyrene, Naphthalene, Perylene, Phenanthrene, Pyrene, 2,6-Dimethylnaphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene, 1-Methylphenanthrene, and 2,3,5-Trimethylnaphthalene.
^d Includes cis-chlordane, trans-chlordane, o,p'-DDT, p,p'-DDT, o,p'-DDD, p,p'-DDD, o,p'-DDE, p,p'-DDE, p,p'-DDMU, aldrin, BHC-alpha, BHC-beta, BHC-gamma, cis-nonachlor, trans-nonachlor, oxychlordane, DCPA (Dacthal), dicofol, dieldrin, toxaphene, endosulfan sulfate, endosulfan-I, endosulfan-II, endrin, endrin aldehyde, endrin ketone, heptachlor, heptachlor epoxide, methoxychlor, mirex, and perthane.
^e Includes Bifenthrin, Cyfluthrin (total), Cypermethrin (total), lambda-Cyhalothrin (total), cis-Permethrin, Trans-Permethrin, Deltamethrin, Esfenvalerate
^f Includes congeners: PCB-3, 5, 8, 15, 18, 27-29, 31, 33, 37, 44, 49, 52, 56, 60, 66, 70, 74, 77, 81, 87, 95, 97, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 137, 138, 141, 149, 151, 153, 156-158, 167-170, 174, 177, 180, 183, 187, 189, 194, 195, 200, 201, 203, 206, and 209.
^g Includes BDE-17, 28, 47, 49, 66, 85, 99, 100, 138, 153, 154, 183, and 209.
GC - Gas chromatography
MS SIM - Mass spectrometry selected ion monitoring
SM - Standard Methods

Sample Receipt Summary

Client: Wood Environment & Infrastructure Solutions, Inc Date Received: 7/11/2018 Received By: AI Inspected By: RGH

Courier:		Cooler:		Temperature:	
<input checked="" type="checkbox"/> Physis	<input type="checkbox"/> FEDEX	<input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Box	<input type="checkbox"/> BLUE	<input checked="" type="checkbox"/> WET
<input type="checkbox"/> UPS	<input type="checkbox"/> Client	Total #:	5	<input type="checkbox"/> DRY	
Start 6:30	End 11:40	<input type="checkbox"/> Other:		<input type="checkbox"/> None	10.9°C

Sample Integrity Upon Receipt:

1. COC(s) included and completely filled out.....Yes
2. All sample containers arrived intact.....Yes
3. All samples listed on COC(s) are present.....Yes
4. Information on containers consistent with information on COC(s).....Yes
5. Correct containers and volume for all analyses indicated.....Yes
6. All samples received within method holding time.....Yes
7. Correct preservation used for all analyses indicated.....No; see notes below
8. Name of sampler included on COC(s).....Yes

Notes:

Picked up at the same time as 1807003-001.
 See Temperature
 Received a 2nd bag of sediment for each sample, says MEI FAWNA. - client asked for it back.
 Received 1 sample B18-10068 cell assay, Alvina Mehinto. - client asked for it back.
 Received all of the archived sediments. - client asked for it back.

CHAIN OF CUSTODY RECORD

STANDARD

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CLIENT NAME: Wood Environment & Infrastructure Solutions, Inc.						PROJECT: 2018 Regional Harbor Monitoring Program						ANALYSES REQUESTED										SPECIAL HANDLING	
ADDRESS: 9210 Sky Park Ct., Suite 200 San Diego, CA 92123						PHONE: 858-300-4316 FAX: 858-300-4301 EMAIL: chris.stransky@woodplc.com corey.sheredy@woodplc.com																Same Day Rush 150% 24 Hour Rush 100% 48-72 Hour Rush 75% 4 - 5 Day Rush 30% Rush Extractions 50% 10 Business Days QA/QC Data Package	
PROJECT MANAGER Chris Stransky						SAMPLER Tyler Huff, Chris Stransky																Charges will apply for weekends/holidays	
ID# (For Lab Use Only)	DATE SAMPLED	TIME SAMPLED	SMPL TYPE	SAMPLE IDENTIFICATION/SITE LOCATION	# OF CONT.	Ammonia-N (SM 4500-NH ₃ D)	Methylene-Blue-Activated Substances (MBAS) (SM 5540 C)	Nitrate-N** (EPA 300.0/SM 4500-NO ₃ E)	Oil & Grease (EPA 1664A)	Dissolved Organic Carbon / Total Organic Carbon (EPA 415.3)	Total Orthophosphate as P** (SM 4500 P E)	Total & Dissolved* Metals (EPA 1640)	Total & Dissolved* Mercury (EPA 245.7)	Polyyclic Aromatic Hydrocarbons (PAHs) (EPA 625)	Total Suspended Solids (TSS) (EPA 2540D)	COMMENTS							
	7/12/2018	13:35	seawater	B18-10015	13	X	X	X	X	X	X	X	X	X	X								
	7/12/2018	12:00	seawater	B18-10016	13	X	X	X	X	X	X	X	X	X	X								
	7/12/2018	15:35	seawater	B18-10438 (overdraw)	13	X	X	X	X	X	X	X	X	X	X								
	7/12/2018	06:45	seawater	B18-10020	13	X	X	X	X	X	X	X	X	X	X								
	7/12/2018	10:45	seawater	B18-10073	13	X	X	X	X	X	X	X	X	X	X								
	7/12/2018	09:35	seawater	B18-10074	13	X	X	X	X	X	X	X	X	X	X								
	7/12/2018	08:10	seawater	B18-10075	13	X	X	X	X	X	X	X	X	X	X								
	7/13/2018	08:10	seawater	B18-10017	13	X	X	X	X	X	X	X	X	X	X								
	7/13/2018	06:30	seawater	B18-10019	13	X	X	X	X	X	X	X	X	X	X								
RELINQUISHED BY <i>Marin Auslein</i>						DATE / TIME 07/13/18 @ 13:58						RECEIVED BY <i>[Signature]</i>						SAMPLE CONDITION:		SAMPLE TYPE CODE:			
RELINQUISHED BY						DATE / TIME						RECEIVED BY						Actual Temperature:		AQ=Aqueous NA= Non Aqueous SL = Sludge			
RELINQUISHED BY						DATE / TIME						RECEIVED BY						Received On Ice Y / N		DW = Drinking Water			
																		Preserved Y / N		WW = Waste Water			
																		Evidence Seals Present Y / N		RW = Rain Water			
																		Container Intact Y / N		GW = Ground Water			
																		Preserved at Lab Y / N		SO = Soil			
																				SW = Solid Waste			
																				OL = Oil			
																				OT = Other Matrix			

SPECIAL REQUIREMENTS / BILLING INFORMATION

See attached Analyte List for handling/preservation procedures.

* Diss. metals and dissolved mercury were field filtered using 0.45 um bottletop filtration system.

** Nitrate-N/Total Orthophosphate as P was immediately frozen following collection.

STANDARD

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SPECIAL REQUIREMENTS / BILLING INFORMATION

See attached Analyte List for handling/preservation procedures.

* Diss. metals and dissolved mercury were field filtered using 0.45 um bottle top filtration system.

** Nitrate-N/Total Orthophosphate as P was immediately frozen following collection.

NOTE (7/3/2018 edit):
Seawater samples will also
be analyzed for TSS.

Table 6-1.
RHMP Constituents to be Monitored in Seawater
and Corresponding Analytical Methods

Analyte	Analysis Method
pH	Field Measurement
Specific Conductance	Field Measurement
Dissolved Oxygen	Field Measurement
Temperature	Field Measurement
Salinity	Field Measurement
Transmissivity	Field Measurement
Ammonia-N	SM 4500-NH ₃ D
Methylene-Blue-Activated Substances (MBAS)	SM 5540 C
Nitrate-N	EPA 300.0/SM 4500-NO ₃ E
Oil & Grease	EPA 1664A
Dissolved Organic Carbon (DOC)	EPA 415.3
Total Organic Carbon (TOC)	EPA 415.3
Total Orthophosphate as P	SM 4500 P E
Aluminum (Al) ^a	EPA 1640
Antimony (Sb) ^a	EPA 1640
Arsenic (As) ^a	EPA 1640
Barium (Ba) ^a	EPA 200.8
Beryllium (Be) ^a	EPA 1640
Cadmium (Cd) ^a	EPA 1640
Chromium (Cr) ^a	EPA 1640
Cobalt (Co) ^a	EPA 1640
Copper (Cu) ^a	EPA 1640
Iron (Fe) ^a	EPA 1640
Lead (Pb) ^a	EPA 1640
Manganese (Mn) ^a	EPA 1640
Mercury (Hg) ^a	EPA 245.7
Molybdenum (Mo) ^a	EPA 1640
Nickel (Ni) ^a	EPA 1640
Selenium (Se) ^a	EPA 1640
Silver (Ag) ^a	EPA 1640
Thallium (Tl) ^a	EPA 1640
Tin (Sn) ^a	EPA 1640
Titanium (Ti) ^a	EPA 1640
Vanadium (V) ^a	EPA 1640
Zinc (Zn) ^a	EPA 1640
Polycyclic Aromatic Hydrocarbons (PAHs) ^b	EPA 625
Total Suspended Solids (TSS)	EPA 2540D

Notes:

- ^a. Metals will be analyzed for total and dissolved fractions. Filtering for the dissolved fraction will occur in the field immediately after collection.
- ^b. Includes Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[e]pyrene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Biphenyl, Chrysene, Dibenz[a,h]anthracene, Di benzo[thiophene, Fluoranthene, Fluorene, Indeno(1,2,3-c,d)pyrene, Naphthalene, Perylene, Phenanthrene, Pyrene, 2,6-Dimethylnaphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene, 1-Methylphenanthrene, and 2,3,5-Trimethylnaphthalene.

EPA - U.S. Environmental Protection Agency
SM - Standard Methods

Sample Receipt Summary

Client: Wood Environment & Infrastructure Solutions, Inc Date Received: 7/13/2018 Received By: RS Inspected By: RGH

Courier:		Cooler:		Temperature:	
<input checked="" type="checkbox"/> Physis	<input type="checkbox"/> FEDEX	<input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Box	<input type="checkbox"/> BLUE	<input checked="" type="checkbox"/> WET
<input type="checkbox"/> UPS	<input type="checkbox"/> Client	Total #:	6	<input type="checkbox"/> DRY	
Start 11:45	End 16:00	<input type="checkbox"/> Other:		<input type="checkbox"/> None	6°C

Sample Integrity Upon Receipt:

1. COC(s) included and completely filled out.....Yes
2. All sample containers arrived intact.....Yes
3. All samples listed on COC(s) are present.....Yes
4. Information on containers consistent with information on COC(s).....Yes
5. Correct containers and volume for all analyses indicated.....Yes
6. All samples received within method holding time.....Yes
7. Correct preservation used for all analyses indicated.....Yes
8. Name of sampler included on COC(s).....Yes

Notes:

1807003-004

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CLIENT NAME: Wood Environment & Infrastructure Solutions, Inc.				PROJECT: 2018 Regional Harbor Monitoring Program		ANALYSES REQUESTED										SPECIAL HANDLING			
ADDRESS: 9210 Sky Park Ct., Suite 200 San Diego, CA 92123				PHONE: 858-300-4316 FAX: 858-300-4301 EMAIL: chris.stransky@woodplc.com corey.sheredy@woodplc.com		SEE ATTACHED LIST OF ANALYTES													<input type="checkbox"/> Same Day Rush 150% <input type="checkbox"/> 24 Hour Rush 100% <input type="checkbox"/> 48-72 Hour Rush 75% <input type="checkbox"/> 4 - 5 Day Rush 30% <input type="checkbox"/> Rush Extractions 50% <input checked="" type="checkbox"/> 10 Business Days <input type="checkbox"/> QA/QC Data Package
PROJECT MANAGER Chris Stransky				SAMPLER Tyler Huff, Chris Stransky															Charges will apply for weekends/holidays
ID# (For lab Use Only)	DATE SAMPLED	TIME SAMPLED	SMPL TYPE	SAMPLE IDENTIFICATION/SITE LOCATION	# OF CONT.														Method of Shipment:
	7/12/2018	14:00	sediment	B18-10015	3		X												COMMENTS
	7/12/2018	12:15	sediment	B18-10016	3		X												
	7/12/2018	15:57	sediment	B18-10438 (overdraw)	3		X												
	7/12/2018	07:15	sediment	B18-10020	3		X												
	7/12/2018	11:08	sediment	B18-10073	3		X												
	7/12/2018	09:52	sediment	B18-10074	3		X												
	7/12/2018	08:30	sediment	B18-10075	3		X												
	7/13/2018	08:30	sediment	B18-10017	3	X													
	7/13/2018	06:55	sediment	B18-10019	3	X													
RELINQUISHED BY <i>Marie Sison</i>				DATE / TIME 07/13/18 13:58		RECEIVED BY <i>RPS</i>				SAMPLE CONDITION: Actual Temperature:				SAMPLE TYPE CODE:					
RELINQUISHED BY				DATE / TIME		RECEIVED BY				Received On Ice Y / N				AQ=Aqueous					
RELINQUISHED BY				DATE / TIME		RECEIVED BY				Preserved Y / N				NA= Non Aqueous					
RELINQUISHED BY				DATE / TIME		RECEIVED BY				Evidence Seals Present Y / N				SL = Sludge					
RELINQUISHED BY				DATE / TIME		RECEIVED BY				Container Intact Y / N				DW = Drinking Water					
RELINQUISHED BY				DATE / TIME		RECEIVED BY				Preserved at Lab Y / N				WW = Waste Water					
RELINQUISHED BY				DATE / TIME		RECEIVED BY								RW = Rain Water					
RELINQUISHED BY				DATE / TIME		RECEIVED BY								GW = Ground Water					
RELINQUISHED BY				DATE / TIME		RECEIVED BY								SO = Soil					
RELINQUISHED BY				DATE / TIME		RECEIVED BY								SW = Solid Waste					
RELINQUISHED BY				DATE / TIME		RECEIVED BY								OL = Oil					
RELINQUISHED BY				DATE / TIME		RECEIVED BY								OT = Other Matrix					

SPECIAL REQUIREMENTS / BILLING INFORMATION

See attached Analyte List for handling/preservation procedures.

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CLIENT NAME: Wood Environment & Infrastructure Solutions, Inc. ADDRESS: 9210 Sky Park Ct., Suite 200 San Diego, CA 92123				PROJECT: 2018 Regional Harbor Monitoring Program PHONE: 858-300-4316 FAX: 858-300-4301 EMAIL: chris.stransky@woodplc.com corey.sheredy@woodplc.com				ANALYSES REQUESTED										SPECIAL HANDLING <input type="checkbox"/> Same Day Rush 150% <input type="checkbox"/> 24 Hour Rush 100% <input type="checkbox"/> 48-72 Hour Rush 75% <input type="checkbox"/> 4 - 5 Day Rush 30% <input checked="" type="checkbox"/> Rush Extractions 50% <input type="checkbox"/> 10 Business Days <input type="checkbox"/> QA/QC Data Package									
PROJECT MANAGER Chris Stransky				SAMPLER Tyler Huff, Chris Stransky				SEE ATTACHED LIST OF ANALYTES										Charges will apply for weekends/holidays									
ID# (For lab Use Only)				DATE SAMPLED		TIME SAMPLED												SMPL TYPE		SAMPLE IDENTIFICATION/SITE LOCATION				# OF CONT.		Method of Shipment:	
																										COMMENTS	
RELINQUISHED BY <i>Mark Davis</i>				DATE / TIME 07/13/18 13:58				RECEIVED BY <i>RHS</i>				SAMPLE CONDITION: Actual Temperature: Received On Ice Y / N Preserved Y / N Evidence Seals Present Y / N Container Intact Y / N Preserved at Lab Y / N				SAMPLE TYPE CODE: AQ=Aqueous NA= Non Aqueous SL = Sludge DW = Drinking Water WW = Waste Water RW = Rain Water GW = Ground Water SO = Soil SW = Solid Waste OL = Oil OT = Other Matrix											
RELINQUISHED BY				DATE / TIME				RECEIVED BY																			
RELINQUISHED BY				DATE / TIME				RECEIVED BY																			

SPECIAL REQUIREMENTS / BILLING INFORMATION

See attached Analyte List for handling/preservation procedures.

Table 6-2.
RHMP Constituents to be Monitored in Sediment
and Corresponding Analytical Methods

Analyte	Analysis Method
Total Solids	160.3/SM 2540B ^a
Total Organic Carbon (TOC)	9060
Grain Size	SM2560
Aluminum (Al)	6020/6010B ^b
Antimony (Sb)	6020/6010B ^b
Arsenic (As)	6020/6010B ^b
Barium (Ba)	6020/6010B ^b
Beryllium (Be)	6020/6010B ^b
Cadmium (Cd)	6020/6010B ^b
Chromium (Cr)	6020/6010B ^b
Copper (Cu)	6020/6010B ^b
Iron (Fe)	6020/6010B ^b
Lead (Pb)	6020/6010B ^b
Mercury (Hg)	7471A ^b
Nickel (Ni)	6020/6010B ^b
Selenium (Se)	6020/6010B ^b
Silver (Ag)	6020/6010B ^b
Zinc (Zn)	6020/6010B ^b
Total Nitrogen	9056A
Total Phosphorus	EPA 6020
Ammonia	SM 4500-NH ₃
Acid Volatile Sulfides (AVS)	Plumb, 1981 and TERL
Simultaneous Extracted Metals (SEM)	EPA 200.8
Polycyclic Aromatic Hydrocarbons (PAHs) ^c	8270C/8270D
Chlorinated Pesticides ^d	8270C ^b
Pyrethroid Pesticides ^e	EPA 8270C NCI
Polychlorinated Biphenyl (PCB) Congeners ^f	8270C PCB ^b
Polybrominated Diphenyl Ethers (PBDEs) ^g	8270C NCI

Notes:

^a Standard Methods for the Examination of Water and Wastewater, 22nd Ed. Rice et al. 2013.

^b USEPA 1986-1996. SW-846. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, 3rd Edition.

^c Includes Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[e]pyrene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Biphenyl, Chrysene, Dibenzo[a,h]anthracene, Dibenzothiophene, Fluoranthene, Fluorene, Indeno(1,2,3-c,d)pyrene, Naphthalene, Perylene, Phenanthrene, Pyrene, 2,6-Dimethylnaphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene, 1-Methylphenanthrene, and 2,3,5-Trimethylnaphthalene.

^d Includes cis-chlordane, trans-chlordane, o,p'-DDT, p,p'-DDT, o,p'-DDD, p,p'-DDD, o,p'-DDE, p,p'-DDE, p,p'-DDMU, aldrin, BHC-alpha, BHC-beta, BHC-gamma, cis-nonachlor, trans-nonachlor, oxychlordane, DCPA (Dacthal), dicofol, dieldrin, toxaphene, endosulfan sulfate, endosulfan-I, endosulfan-II, endrin, endrin aldehyde, endrin ketone, heptachlor, heptachlor epoxide, methoxychlor, mirex, and perthane.

^e Includes Bifenthrin, Cyfluthrin (total), Cypermethrin (total), lambda-Cyhalothrin (total), cis-Permethrin, Trans-Permethrin, Deltamethrin, Esfenvalerate

^f Includes congeners: PCB-3, 5, 8, 15, 18, 27-29, 31, 33, 37, 44, 49, 52, 56, 60, 66, 70, 74, 77, 81, 87, 95, 97, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 137, 138, 141, 149, 151, 153, 156-158, 167-170, 174, 177, 180, 183, 187, 189, 194, 195, 200, 201, 203, 206, and 209.

^g Includes BDE-17, 28, 47, 49, 66, 85, 99, 100, 138, 153, 154, 183, and 209.

GC - Gas chromatography

MS SIM - Mass spectrometry selected ion monitoring

SM - Standard Methods

Sample Receipt Summary

Client: Wood Environment & Infrastructure Solutions, Inc Date Received: 7/13/2018 Received By: RS Inspected By: RGH

Courier:		Cooler:		Temperature:	
<input checked="" type="checkbox"/> Physis	<input type="checkbox"/> FEDEX	<input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Box	<input type="checkbox"/> BLUE	<input checked="" type="checkbox"/> WET
<input type="checkbox"/> UPS	<input type="checkbox"/> Client	Total #:	6	<input type="checkbox"/> DRY	
Start 11:45	End 16:00	<input type="checkbox"/> Other:		<input type="checkbox"/> None	6°C

Sample Integrity Upon Receipt:

1. COC(s) included and completely filled out.....Yes
2. All sample containers arrived intact.....Yes
3. All samples listed on COC(s) are present.....Yes
4. Information on containers consistent with information on COC(s).....Yes
5. Correct containers and volume for all analyses indicated.....Yes
6. All samples received within method holding time.....Yes
7. Correct preservation used for all analyses indicated.....Yes
8. Name of sampler included on COC(s).....Yes

Notes:

1807003-005

CHAIN OF CUSTODY RECORD

STANDARD

Page 1 Of 2

CLIENT NAME: Wood Environment & Infrastructure Solutions, Inc. ADDRESS: 9210 Sky Park Ct., Suite 200 San Diego, CA 92123				PROJECT: 2018 Regional Harbor Monitoring Program PHONE: 858-300-4316 FAX: 858-300-4301 EMAIL: chris.stransky@woodplc.com corey.sheredy@woodplc.com				ANALYSES REQUESTED										SPECIAL HANDLING	
PROJECT MANAGER Chris Stransky				SAMPLER Tyler Huff, Chris Stransky				Ammonia-N (SM 4500-NH ₃ D)	Methylene-Blue-Activated Substances (MBAS) (SM 5540 C)	Nitrate-N** (EPA 300.0/SM 4500-NO ₃ E)	Oil & Grease (EPA 1664A)	Dissolved Organic Carbon / Total Organic Carbon (EPA 415.3)	Total Orthophosphate as P** (SM 4500 P E)	Total & Dissolved* Metals (EPA 1640)	Total & Dissolved* Mercury (EPA 245.7)	Polycyclic Aromatic Hydrocarbons (PAHs) (EPA 625)	Total Suspended Solids (TSS) (EPA 2540D)	<input type="checkbox"/> Same Day Rush 150% <input type="checkbox"/> 24 Hour Rush 100% <input type="checkbox"/> 48-72 Hour Rush 75% <input type="checkbox"/> 4 - 5 Day Rush 30% <input type="checkbox"/> Rush Extractions 50% <input checked="" type="checkbox"/> 10 Business Days <input type="checkbox"/> QA/QC Data Package	
ID# (For lab Use Only)	DATE SAMPLED	TIME SAMPLED	SMPL TYPE	SAMPLE IDENTIFICATION/SITE LOCATION	# OF CONT.												Charges will apply for weekends/holidays		
	7/16/2018	1140	seawater	B18-10023	21	X	X	X	X	X	X	X	X	X	X	X	Method of Shipment:		
	7/16/2018	1400	seawater	B18-10030	13	X	X	X	X	X	X	X	X	X	X	X	COMMENTS		
	7/16/2018	1000	seawater	B18-10078	13	X	X	X	X	X	X	X	X	X	X	X	extra volume for MS/MSD analysis		
	7/16/2018	0855	seawater	B18-10079	13	X	X	X	X	X	X	X	X	X	X	X			
	7/16/2018	0720	seawater	B18-10117	13	X	X	X	X	X	X	X	X	X	X	X			
	7/17/2018	0800	seawater	B18-10080	13	X	X	X	X	X	X	X	X	X	X	X			
	7/17/2018	0700	seawater	B18-10081	13	X	X	X	X	X	X	X	X	X	X	X			
	7/17/2018	0900	seawater	B18-10082	13	X	X	X	X	X	X	X	X	X	X	X			
	7/17/2018	1000	seawater	B18-10083	13	X	X	X	X	X	X	X	X	X	X	X			
	7/17/2018	1100	seawater	B18-10084	13	X	X	X	X	X	X	X	X	X	X	X			
RELINQUISHED BY <i>C. Sheredy</i>				DATE / TIME 7/18/18 0900		RECEIVED BY <i>[Signature]</i>				7/18/18 0900				SAMPLE CONDITION:		SAMPLE TYPE CODE:			
RELINQUISHED BY				DATE / TIME		RECEIVED BY				Actual Temperature:				Received On Ice Y / N		AQ=Aqueous			
RELINQUISHED BY				DATE / TIME		RECEIVED BY				Preserved Y / N				Evidence Seals Present Y / N		NA= Non Aqueous			
RELINQUISHED BY				DATE / TIME		RECEIVED BY				Container Intact Y / N				Preserved at Lab Y / N		SL = Sludge			
RELINQUISHED BY				DATE / TIME		RECEIVED BY										DW = Drinking Water			
RELINQUISHED BY				DATE / TIME		RECEIVED BY										WW = Waste Water			
RELINQUISHED BY				DATE / TIME		RECEIVED BY										RW = Rain Water			
RELINQUISHED BY				DATE / TIME		RECEIVED BY										GW = Ground Water			
RELINQUISHED BY				DATE / TIME		RECEIVED BY										SO = Soil			
RELINQUISHED BY				DATE / TIME		RECEIVED BY										SW = Solid Waste			
RELINQUISHED BY				DATE / TIME		RECEIVED BY										OL = Oil			
RELINQUISHED BY				DATE / TIME		RECEIVED BY										OT = Other Matrix			

SPECIAL REQUIREMENTS / BILLING INFORMATION

See attached Analyte List for handling/preservation procedures.

* Diss. metals and dissolved mercury were field filtered using 0.45 um bottletop filtration system.

** Nitrate-N/Total Orthophosphate as P was immediately frozen following collection.

NOTE (7/3/2018 edit):
Seawater samples will also
be analyzed for TSS.

Table 6-1.
RHMP Constituents to be Monitored in Seawater
and Corresponding Analytical Methods

Analyte	Analysis Method
pH	Field Measurement
Specific Conductance	Field Measurement
Dissolved Oxygen	Field Measurement
Temperature	Field Measurement
Salinity	Field Measurement
Transmissivity	Field Measurement
Ammonia-N	SM 4500-NH ₃ D
Methylene-Blue-Activated Substances (MBAS)	SM 5540 C
Nitrate-N	EPA 300.0/SM 4500-NO ₃ E
Oil & Grease	EPA 1664A
Dissolved Organic Carbon (DOC)	EPA 415.3
Total Organic Carbon (TOC)	EPA 415.3
Total Orthophosphate as P	SM 4500 P E
Aluminum (Al) ^a	EPA 1640
Antimony (Sb) ^a	EPA 1640
Arsenic (As) ^a	EPA 1640
Barium (Ba) ^a	EPA 200.8
Beryllium (Be) ^a	EPA 1640
Cadmium (Cd) ^a	EPA 1640
Chromium (Cr) ^a	EPA 1640
Cobalt (Co) ^a	EPA 1640
Copper (Cu) ^a	EPA 1640
Iron (Fe) ^a	EPA 1640
Lead (Pb) ^a	EPA 1640
Manganese (Mn) ^a	EPA 1640
Mercury (Hg) ^a	EPA 245.7
Molybdenum (Mo) ^a	EPA 1640
Nickel (Ni) ^a	EPA 1640
Selenium (Se) ^a	EPA 1640
Silver (Ag) ^a	EPA 1640
Thallium (Tl) ^a	EPA 1640
Tin (Sn) ^a	EPA 1640
Titanium (Ti) ^a	EPA 1640
Vanadium (V) ^a	EPA 1640
Zinc (Zn) ^a	EPA 1640
Polycyclic Aromatic Hydrocarbons (PAHs) ^b	EPA 625
Total Suspended Solids (TSS)	EPA 2540D

Notes:

- ^a Metals will be analyzed for total and dissolved fractions. Filtering for the dissolved fraction will occur in the field immediately after collection.
- ^b Includes Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[e]pyrene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Biphenyl, Chrysene, Dibenz[a,h]anthracene, Di benzo[thiophene, Fluoranthene, Fluorene, Indeno[1,2,3-c,d]pyrene, Naphthalene, Perylene, Phenanthrene, Pyrene, 2,6-Dimethylnaphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene, 1-Methylphenanthrene, and 2,3,5-Trimethylnaphthalene.

EPA - U.S. Environmental Protection Agency
SM - Standard Methods

Sample Receipt Summary

Client: Wood Environment & Infrastructure Solutions, Inc Date Received: 7/18/2018 Received By: AI Inspected By: RGH

Courier:		Cooler:		Temperature:	
<input checked="" type="checkbox"/> Physis	<input type="checkbox"/> FEDEX	<input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Box	<input type="checkbox"/> BLUE	<input checked="" type="checkbox"/> WET
<input type="checkbox"/> UPS	<input type="checkbox"/> Client	Total #:	11	<input type="checkbox"/> DRY	
Start 6:00	End 10:45	<input type="checkbox"/> Other:		<input type="checkbox"/> None	5.8°C

Sample Integrity Upon Receipt:

1. COC(s) included and completely filled out.....Yes
2. All sample containers arrived intact.....Yes
3. All samples listed on COC(s) are present.....Yes
4. Information on containers consistent with information on COC(s).....Yes
5. Correct containers and volume for all analyses indicated.....Yes
6. All samples received within method holding time.....Yes
7. Correct preservation used for all analyses indicated.....Yes
8. Name of sampler included on COC(s).....Yes

Notes:

CHAIN OF CUSTODY RECORD

STANDARD

Page 2 Of 2

CLIENT NAME:			PROJECT:			ANALYSES REQUESTED										SPECIAL HANDLING							
Wood Environment & Infrastructure Solutions, Inc.			2018 Regional Harbor Monitoring Program			SEE ATTACHED LIST OF ANALYTES										Same Day Rush 150%							
ADDRESS:			PHONE: 858-300-4316													24 Hour Rush 100%							
9210 Sky Park Ct., Suite 200			FAX: 858-300-4301													48-72 Hour Rush 75%							
San Diego, CA 92123			EMAIL: chris.stransky@woodplc.com													4 - 5 Day Rush 30%							
PROJECT MANAGER			SAMPLER													Rush Extractions 50%							
Chris Stransky			Tyler Huff, Chris Stransky													10 Business Days							
ID#			DATE	TIME	SMPL	SAMPLE IDENTIFICATION/SITE LOCATION				# OF CONT.											QA/QC Data Package		
(For lab Use Only)			SAMPLED	SAMPLED	TYPE																		
7/16/2018			1440	1230	sediment	B18-10023				3	X											Charges will apply for weekends/holidays	
7/16/2018			1400	37	sediment	B18-10030				3	X											Method of Shipment:	
7/16/2018			1000	24	sediment	B18-10078				3	X											COMMENTS	
7/16/2018			0855	124	sediment	B18-10079				3	X											MS/MSD analysis	
07/16/18			0720	34	sediment	B18-10117				3	X												
07/17/18			0800	15	sediment	B18-10080				3	X												
07/17/18			0700	22	sediment	B18-10081				3	X												
07/17/18			0900	20	sediment	B18-10082				3	X												
07/17/18			1000	20	sediment	B18-10083				3	X												
07/17/18			1100	15	sediment	B18-10084				3	X												
RELINQUISHED BY			DATE / TIME			RECEIVED BY			SAMPLE CONDITION:			SAMPLE TYPE CODE:											
[Signature]			7/18/18 0900			[Signature]			Actual Temperature:			AQ=Aqueous											
RELINQUISHED BY			DATE / TIME			RECEIVED BY			Received On Ice			Y / N											
									Preserved			Y / N											
									Evidence Seals Present			Y / N											
									Container Intact			Y / N											
									Preserved at Lab			Y / N											
RELINQUISHED BY			DATE / TIME			RECEIVED BY						DW = Drinking Water											
												WW = Waste Water											
												RW = Rain Water											
												GW = Ground Water											
												SO = Soil											
												SW = Solid Waste											
												OL = Oil											
												OT = Other Matrix											

SPECIAL REQUIREMENTS / BILLING INFORMATION

See attached Analyte List for handling/preservation procedures.

Table 6-2.
RHMP Constituents to be Monitored in Sediment
and Corresponding Analytical Methods

Analyte	Analysis Method
Total Solids	160.3/SM 2540B ^a
Total Organic Carbon (TOC)	9060
Grain Size	SM2560
Aluminum (Al)	6020/6010B ^b
Antimony (Sb)	6020/6010B ^b
Arsenic (As)	6020/6010B ^b
Barium (Ba)	6020/6010B ^b
Beryllium (Be)	6020/6010B ^b
Cadmium (Cd)	6020/6010B ^b
Chromium (Cr)	6020/6010B ^b
Copper (Cu)	6020/6010B ^b
Iron (Fe)	6020/6010B ^b
Lead (Pb)	6020/6010B ^b
Mercury (Hg)	7471A ^b
Nickel (Ni)	6020/6010B ^b
Selenium (Se)	6020/6010B ^b
Silver (Ag)	6020/6010B ^b
Zinc (Zn)	6020/6010B ^b
Total Nitrogen	9056A
Total Phosphorus	EPA 6020
Ammonia	SM 4500-NH ₃
Acid Volatile Sulfides (AVS)	Plumb, 1981 and TERL
Simultaneous Extracted Metals (SEM)	EPA 200.8
Polycyclic Aromatic Hydrocarbons (PAHs) ^c	8270C/8270D
Chlorinated Pesticides ^d	8270C ^b
Pyrethroid Pesticides ^e	EPA 8270C NCI
Polychlorinated Biphenyl (PCB) Congeners ^f	8270C PCB ^b
Polybrominated Diphenyl Ethers (PBDEs) ^g	8270C NCI

Notes:

^a Standard Methods for the Examination of Water and Wastewater, 22nd Ed. Rice et al. 2013.

^b USEPA 1986-1996. SW-846. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, 3rd Edition.

^c Includes Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[e]pyrene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Biphenyl, Chrysene, Dibenz[a,h]anthracene, Dibenzothiophene, Fluoranthene, Fluorene, Indeno(1,2,3-c,d)pyrene, Naphthalene, Perylene, Phenanthrene, Pyrene, 2,6-Dimethylnaphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene, 1-Methylphenanthrene, and 2,3,5-Trimethylnaphthalene.

^d Includes cis-chlordane, trans-chlordane, o,p'-DDT, p,p'-DDT, o,p'-DDD, p,p'-DDD, o,p'-DDE, p,p'-DDE, p,p'-DDMU, aldrin, BHC-alpha, BHC-beta, BHC-gamma, cis-nonachlor, trans-nonachlor, oxychlordane, DCPA (Dacthal), dicofol, dieldrin, toxaphene, endosulfan sulfate, endosulfan-I, endosulfan-II, endrin, endrin aldehyde, endrin ketone, heptachlor, heptachlor epoxide, methoxychlor, mirex, and perthane.

^e Includes Bifenthrin, Cyfluthrin (total), Cypermethrin (total), lambda-Cyhalothrin (total), cis-Permethrin, Trans-Permethrin, Deltamethrin, Esfenvalerate

^f Includes congeners: PCB-3, 5, 8, 15, 18, 27-29, 31, 33, 37, 44, 49, 52, 56, 60, 66, 70, 74, 77, 81, 87, 95, 97, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 137, 138, 141, 149, 151, 153, 156-158, 167-170, 174, 177, 180, 183, 187, 189, 194, 195, 200, 201, 203, 206, and 209.

^g Includes BDE-17, 28, 47, 49, 66, 85, 99, 100, 138, 153, 154, 183, and 209.

GC - Gas chromatography

MS SIM - Mass spectrometry selected ion monitoring

SM - Standard Methods

Sample Receipt Summary

Client: Wood Environment & Infrastructure Solutions, Inc Date Received: 7/18/2018 Received By: AI Inspected By: RGH

Courier:		Cooler:		Temperature:	
<input checked="" type="checkbox"/> Physis	<input type="checkbox"/> FEDEX	<input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Box	<input type="checkbox"/> BLUE	<input checked="" type="checkbox"/> WET
<input type="checkbox"/> UPS	<input type="checkbox"/> Client	Total #:	11	<input type="checkbox"/> DRY	
Start 6:00	End 10:45	<input type="checkbox"/> Other:		<input type="checkbox"/> None	5.8°C

Sample Integrity Upon Receipt:

1. COC(s) included and completely filled out.....Yes
2. All sample containers arrived intact.....Yes
3. All samples listed on COC(s) are present.....Yes
4. Information on containers consistent with information on COC(s).....Yes
5. Correct containers and volume for all analyses indicated.....Yes
6. All samples received within method holding time.....Yes
7. Correct preservation used for all analyses indicated.....Yes
8. Name of sampler included on COC(s).....Yes

Notes:

CHAIN OF CUSTODY RECORD

STANDARD

Page 2 Of 4

CLIENT NAME: Wood Environment & Infrastructure Solutions, Inc. ADDRESS: 9210 Sky Park Ct., Suite 200 San Diego, CA 92123 PROJECT MANAGER Chris Stransky, Corey Sheredy				PROJECT: 2018 Regional Harbor Monitoring Program PHONE: 858-300-4316 FAX: 858-300-4301 EMAIL: chris.stransky@woodplc.com corey.sheredy@woodplc.com SAMPLER Tyler Huff, Chris Stransky				ANALYSES REQUESTED <table border="1" style="width:100%; border-collapse: collapse; font-size: 0.8em;"> <tr> <td>Ammonia-N (SM 4500-NH₃ D)</td> <td>Methylene-Blue-Activated Substances (MBAS) (SM 5540 C) 4</td> <td>Nitrate-N** (EPA 300.0 SM 4500-NO₃ E)</td> <td>Oil & Grease (EPA 1664A)</td> <td>Dissolved Organic Carbon / Total Organic Carbon (EPA 415.3)</td> <td>Total Orthophosphate as P** (SM 4500 P E)</td> <td>Total & Dissolved* Metals (EPA 1640)</td> <td>Total & Dissolved* Mercury (EPA 245.7)</td> <td>Polycyclic Aromatic Hydrocarbons (PAHs) (EPA 825)</td> <td>Total Suspended Solids (TSS) (EPA 2540D)</td> </tr> <tr> <td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td> </tr> </table>										Ammonia-N (SM 4500-NH ₃ D)	Methylene-Blue-Activated Substances (MBAS) (SM 5540 C) 4	Nitrate-N** (EPA 300.0 SM 4500-NO ₃ E)	Oil & Grease (EPA 1664A)	Dissolved Organic Carbon / Total Organic Carbon (EPA 415.3)	Total Orthophosphate as P** (SM 4500 P E)	Total & Dissolved* Metals (EPA 1640)	Total & Dissolved* Mercury (EPA 245.7)	Polycyclic Aromatic Hydrocarbons (PAHs) (EPA 825)	Total Suspended Solids (TSS) (EPA 2540D)	X	X	X	X	X	X	X	X	X	X	SPECIAL HANDLING <div style="display: flex; align-items: flex-start;"> <div style="margin-right: 10px;"> <input type="checkbox"/> Same Day Rush 150% <input type="checkbox"/> 24 Hour Rush 100% <input type="checkbox"/> 48-72 Hour Rush 75% <input type="checkbox"/> 4 - 5 Day Rush 30% <input type="checkbox"/> Rush Extractions 50% <input type="checkbox"/> 10 Business Days <input type="checkbox"/> QA/QC Data Package </div> <div> <input type="checkbox"/> Charges will apply for weekends/holidays <input type="checkbox"/> Method of Shipment: </div> </div>	
Ammonia-N (SM 4500-NH ₃ D)	Methylene-Blue-Activated Substances (MBAS) (SM 5540 C) 4	Nitrate-N** (EPA 300.0 SM 4500-NO ₃ E)	Oil & Grease (EPA 1664A)	Dissolved Organic Carbon / Total Organic Carbon (EPA 415.3)	Total Orthophosphate as P** (SM 4500 P E)	Total & Dissolved* Metals (EPA 1640)	Total & Dissolved* Mercury (EPA 245.7)	Polycyclic Aromatic Hydrocarbons (PAHs) (EPA 825)	Total Suspended Solids (TSS) (EPA 2540D)																														
X	X	X	X	X	X	X	X	X	X																														
ID# (For Lab Use Only)	DATE SAMPLED	TIME SAMPLED	SMPL TYPE	SAMPLE IDENTIFICATION/SITE LOCATION	# OF CONT.													COMMENTS 																					
	7/20/2018	1025	seawater	B18-10031 ✓	13	X	X	X	X	X	X	X	X	X	X	X																							
	7/20/2018	1350	seawater	B18-10032 ✓	13	X	X	X	X	X	X	X	X	X	X	X																							
	7/20/2018	0715	seawater	B18-10119 ✓	13	X	X	X	X	X	X	X	X	X	X	X																							
	7/20/2018	0820	seawater	B18-10121 ✓	13	X	X	X	X	X	X	X	X	X	X	X																							
	7/20/2018	0930	seawater	B18-10123 ✓	13	X	X	X	X	X	X	X	X	X	X	X																							
	7/20/2018	1115	seawater	B18-10178 ✓	13	X	X	X	X	X	X	X	X	X	X	X																							

RELINQUISHED BY	DATE / TIME	RECEIVED BY	SAMPLE CONDITION:	SAMPLE TYPE CODE:
	7/20/18 1945		Actual Temperature:	AQ=Aqueous
RELINQUISHED BY	DATE / TIME	RECEIVED BY	Received On Ice	SL = Sludge
			Preserved	DW = Drinking Water
			Evidence Seals Present	WW = Waste Water
			Container Intact	RW = Rain Water
			Preserved at Lab	GW = Ground Water
RELINQUISHED BY	DATE / TIME	RECEIVED BY		SO = Soil
				SW = Solid Waste
				OL = Oil
				OT = Other Matrix

SPECIAL REQUIREMENTS / BILLING INFORMATION

See attached Analyte List for handling/preservation procedures.

* Diss. metals and dissolved mercury were field filtered using 0.45 um bottletop filtration system.

** Nitrate-N/Total Orthophosphate as P was immediately frozen following collection.

Sample Receipt Summary

Client: Wood Environment & Infrastructure Solutions, Inc Date Received: 7/20/2018 Received By: RS Inspected By: RGH

Courier:		Cooler:		Temperature:	
<input checked="" type="checkbox"/> Physis	<input type="checkbox"/> FEDEX	<input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Box	<input type="checkbox"/> BLUE	<input checked="" type="checkbox"/> WET
<input type="checkbox"/> UPS	<input type="checkbox"/> Client	Total #:	15	<input type="checkbox"/> DRY	
Start 12:00	End 16:45	<input type="checkbox"/> Other:		<input type="checkbox"/> None	4.8°C

Sample Integrity Upon Receipt:

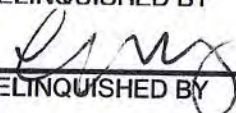

1. COC(s) included and completely filled out.....Yes
2. All sample containers arrived intact.....Yes
3. All samples listed on COC(s) are present.....Yes
4. Information on containers consistent with information on COC(s).....Yes
5. Correct containers and volume for all analyses indicated.....Yes
6. All samples received within method holding time.....Yes
7. Correct preservation used for all analyses indicated.....Yes
8. Name of sampler included on COC(s).....Yes

Notes:

CHAIN OF CUSTODY RECORD

STANDARD

Page 3 Of 4

CLIENT NAME: Wood Environment & Infrastructure Solutions, Inc.				PROJECT: 2018 Regional Harbor Monitoring Program				ANALYSES REQUESTED												SPECIAL HANDLING			
ADDRESS: 9210 Sky Park Ct., Suite 200 San Diego, CA 92123				PHONE: 858-300-4316 FAX: 858-300-4301 EMAIL: chris.stransky@woodplc.com corey.sheredy@woodplc.com				SEE ATTACHED LIST OF ANALYTES													<input type="checkbox"/> Same Day Rush 150% <input type="checkbox"/> 24 Hour Rush 100% <input type="checkbox"/> 48-72 Hour Rush 75% <input type="checkbox"/> 4 - 5 Day Rush 30% <input type="checkbox"/> Rush Extractions 50% <input checked="" type="checkbox"/> 10 Business Days <input type="checkbox"/> QA/QC Data Package		
PROJECT MANAGER Chris Stransky, Corey Sheredy				SAMPLER Tyler Huff, Chris Stransky																	Charges will apply for weekends/holidays		
ID# (For lab Use Only)	DATE SAMPLED	TIME SAMPLED	SMPL TYPE	SAMPLE IDENTIFICATION/SITE LOCATION			# OF CONT.														Method of Shipment:		
	7/18/2018	0815	sediment	B18-10022			3		X													COMMENTS	
	7/18/2018	0920	sediment	B18-10076			3		X													MS/MSD analysis	
	7/18/2018	0720	sediment	B18-10077			3		X														
	7/18/2018	1030	sediment	B18-10112			3		X														
	7/18/2018	1130	sediment	B18-10113			3		X														
	7/19/2018	1255	sediment	B18-10024			3		X														
	7/19/2018	1120	sediment	B18-10029			3		X														
	7/19/2018	1030	sediment	B18-10114			3	X															
	7/19/2018	0720	sediment	B18-10115			3	X															
	7/19/2018	0855	sediment	B18-10116			3	X															
	7/19/2018	0945	sediment	B18-20116			3	X															
RELINQUISHED BY 				DATE / TIME 7/20/18 1445				RECEIVED BY 				SAMPLE CONDITION: Actual Temperature: Received On Ice Preserved Evidence Seals Present Container Intact Preserved at Lab				SAMPLE TYPE CODE: AQ=Aqueous NA= Non Aqueous SL = Sludge DW = Drinking Water WW = Waste Water RW = Rain Water GW = Ground Water SO = Soil SW = Solid Waste OL = Oil OT = Other Matrix							
RELINQUISHED BY				DATE / TIME				RECEIVED BY															
RELINQUISHED BY				DATE / TIME				RECEIVED BY															

SPECIAL REQUIREMENTS / BILLING INFORMATION

See attached Analyte List for handling/preservation procedures.

STANDARD

Page 4 Of 4[illegible]

Sample Receipt Summary

Client: Wood Environment & Infrastructure Solutions, Inc Date Received: 7/20/2018 Received By: RS Inspected By: RGH

Courier:		Cooler:		Temperature:	
<input checked="" type="checkbox"/> Physis	<input type="checkbox"/> FEDEX	<input type="checkbox"/> UPS	<input type="checkbox"/> Client	<input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Box
Start 12:00 End 16:45		Total #: 15		<input type="checkbox"/> BLUE <input checked="" type="checkbox"/> WET <input type="checkbox"/> DRY	
<input type="checkbox"/> Other:		<input type="checkbox"/> Other :		<input type="checkbox"/> None 4.8°C	

Sample Integrity Upon Receipt:

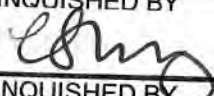

1. COC(s) included and completely filled out.....Yes
2. All sample containers arrived intact.....Yes
3. All samples listed on COC(s) are present.....Yes
4. Information on containers consistent with information on COC(s).....Yes
5. Correct containers and volume for all analyses indicated.....Yes
6. All samples received within method holding time.....Yes
7. Correct preservation used for all analyses indicated.....Yes
8. Name of sampler included on COC(s).....Yes

Notes:

CHAIN OF CUSTODY RECORD

STANDARD

Page 1 Of 4

CLIENT NAME: Wood Environment & Infrastructure Solutions, Inc.				PROJECT: 2018 Regional Harbor Monitoring Program				ANALYSES REQUESTED										SPECIAL HANDLING	
ADDRESS: 9210 Sky Park Ct., Suite 200 San Diego, CA 92123				PHONE: 858-300-4316 FAX: 858-300-4301 EMAIL: chris.stransky@woodplc.com corey.sheredy@woodplc.com				<input type="checkbox"/> Ammonia-N (SM 4500-NH ₄ D) <input type="checkbox"/> Methylene-Blue-Activated Substances (MBAS) (SM 5540 C) <input type="checkbox"/> Nitrate-N** (EPA 300.0 SM 4500-NO ₃ E) <input type="checkbox"/> Oil & Grease (EPA 1664A) <input type="checkbox"/> Dissolved Organic Carbon / Total Organic Carbon (EPA 415.3) <input type="checkbox"/> Total Orthophosphate as P** (SM 4500 P E) <input type="checkbox"/> Total & Dissolved* Metals (EPA 1640) <input type="checkbox"/> Total & Dissolved* Mercury (EPA 245.7) <input type="checkbox"/> Polycyclic Aromatic Hydrocarbons (PAHs) (EPA 625) <input type="checkbox"/> Total Suspended Solids (TSS) (EPA 2540D)										<input type="checkbox"/> Same Day Rush 150% <input type="checkbox"/> 24 Hour Rush 100% <input type="checkbox"/> 48-72 Hour Rush 75% <input type="checkbox"/> 4 - 5 Day Rush 30% <input type="checkbox"/> Rush Extractions 50% <input checked="" type="checkbox"/> 10 Business Days <input type="checkbox"/> QA/QC Data Package	
PROJECT MANAGER Chris Stransky, Corey Sheredy				SAMPLER Tyler Huff, Chris Stransky														Charges will apply for weekends/holidays	
ID# (For Lab Use Only)	DATE SAMPLED	TIME SAMPLED	SMPL TYPE	SAMPLE IDENTIFICATION/SITE LOCATION	# OF CONT.											Method of Shipment:			
	7/26/2018	0915	seawater	B18-10124	13	X	X	X	X	X	X	X	X	X	X	X	COMMENTS		
	7/26/2018	1230	seawater	B18-10126	13	X	X	X	X	X	X	X	X	X	X	X			
	7/26/2018	1025	seawater	B18-10127	13	X	X	X	X	X	X	X	X	X	X	X			
	7/26/2018	1330	seawater	B18-10132	13	X	X	X	X	X	X	X	X	X	X	X			
	7/26/2018	0725	seawater	B18-10133	21	X	X	X	X	X	X	X	X	X	X	X			
	7/26/2018	1040	seawater	B18-20133	13	X	X	X	X	X	X	X	X	X	X	X			
	7/27/2018	0800	seawater	B18-10136	13	X	X	X	X	X	X	X	X	X	X	X			
	7/27/2018	0705	seawater	B18-10137	13	X	X	X	X	X	X	X	X	X	X	X			
	7/27/2018	0850	seawater	B18-10139	13	X	X	X	X	X	X	X	X	X	X	X			
	7/27/2018	0950	seawater	B18-10140	13	X	X	X	X	X	X	X	X	X	X	X			
	7/27/2018	1225	seawater	B18-10141	13	X	X	X	X	X	X	X	X	X	X	X	extra volume for MS/MSD analysis		
RELINQUISHED BY 				DATE / TIME 7/27/18 1612		RECEIVED BY 				SAMPLE CONDITION: Actual Temperature: Received On Ice Preserved Evidence Seals Present Container Intact Preserved at Lab				SAMPLE TYPE CODE: AQ=Aqueous NA= Non Aqueous SL = Sludge DW = Drinking Water WW = Waste Water RW = Rain Water GW = Ground Water SO = Soil SW = Solid Waste OL = Oil OT = Other Matrix					
RELINQUISHED BY				DATE / TIME		RECEIVED BY													
RELINQUISHED BY				DATE / TIME		RECEIVED BY													

SPECIAL REQUIREMENTS / BILLING INFORMATION

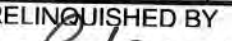

See attached Analyte List for handling/preservation procedures.

* Diss. metals and dissolved mercury were field filtered using 0.45 um bottletop filtration system.

** Nitrate-N/Total Orthophosphate as P was immediately frozen following collection.

STANDARD

[illegible]

RELINQUISHED BY 	DATE / TIME 7/27/18 1612	RECEIVED BY 	SAMPLE CONDITION: Actual Temperature: Received On Ice Y / N Preserved Y / N Evidence Seals Present Y / N Container Intact Y / N Preserved at Lab Y / N	SAMPLE TYPE CODE: AQ=Aqueous NA= Non Aqueous SL = Sludge DW = Drinking Water WW = Waste Water RW = Rain Water GW = Ground Water SO = Soil SW = Solid Waste OL = Oil OT = Other Matrix
RELINQUISHED BY	DATE / TIME	RECEIVED BY		
RELINQUISHED BY	DATE / TIME	RECEIVED BY		
SPECIAL REQUIREMENTS / BILLING INFORMATION				

SPECIAL REQUIREMENTS / BILLING INFORMATION

See attached Analyte List for handling/preservation procedures.

* Diss. metals and dissolved mercury were field filtered using 0.45 um bottle top filtration system.

** Nitrate-N/Total Orthophosphate as P was immediately frozen following collection.

Sample Receipt Summary

Client: Wood Environment & Infrastructure Solutions, Inc Date Received: 7/27/2018 Received By: RS Inspected By: RGH

Courier:		Cooler:		Temperature:	
<input checked="" type="checkbox"/> Physis	<input type="checkbox"/> FEDEX	<input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Box	<input type="checkbox"/> BLUE	<input type="checkbox"/> WET
<input type="checkbox"/> UPS	<input type="checkbox"/> Client	Total #:	10	<input type="checkbox"/> DRY	
Start 14:00	End 18:30	<input type="checkbox"/> Other:		<input type="checkbox"/> None	11.4°C

Sample Integrity Upon Receipt:

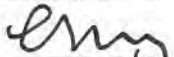

1. COC(s) included and completely filled out.....Yes
2. All sample containers arrived intact.....Yes
3. All samples listed on COC(s) are present.....Yes
4. Information on containers consistent with information on COC(s).....Yes
5. Correct containers and volume for all analyses indicated.....Yes
6. All samples received within method holding time.....Yes
7. Correct preservation used for all analyses indicated.....No; see notes below
8. Name of sampler included on COC(s).....Yes

Notes:

See Temperature

STANDARD

Page 3 Of 4

CLIENT NAME: Wood Environment & Infrastructure Solutions, Inc.				PROJECT: 2018 Regional Harbor Monitoring Program				ANALYSES REQUESTED												SPECIAL HANDLING							
ADDRESS: 9210 Sky Park Ct., Suite 200 San Diego, CA 92123				PHONE: 858-300-4316 FAX: 858-300-4301 EMAIL: chris.stransky@woodplc.com corey.sheredy@woodplc.com				SEE ATTACHED LIST OF ANALYTES												<input type="checkbox"/> Same Day Rush 150% <input type="checkbox"/> 24 Hour Rush 100% <input type="checkbox"/> 48-72 Hour Rush 75% <input type="checkbox"/> 4 - 5 Day Rush 30% <input type="checkbox"/> Rush Extractions 50% <input checked="" type="checkbox"/> 10 Business Days <input type="checkbox"/> QA/QC Data Package							
PROJECT MANAGER Chris Stransky, Corey Sheredy				SAMPLER Tyler Huff, Chris Stransky																Charges will apply for weekends/holidays							
																				Method of Shipment:							
ID# (For lab Use Only)				DATE SAMPLED		TIME SAMPLED		SMPL TYPE		SAMPLE IDENTIFICATION/SITE LOCATION				# OF CONT.		COMMENTS											
				7/26/2018		0930		sediment		B18-10124				3		X											
				7/26/2018		1245		sediment		B18-10126				3		X											
				7/26/2018		1055		sediment		B18-10127				3		X											
				7/26/2018		1345		sediment		B18-10132				3		X											
				7/26/2018		0800		sediment		B18-10133				3		X											
				7/26/2018		1130		sediment		B18-20133				3		X											
				7/27/2018		0810		sediment		B18-10136				3		X											
				7/27/2018		0725		sediment		B18-10137				3		X											
				7/27/2018		0905		sediment		B18-10139				3		X											
				7/27/2018		1010		sediment		B18-10140				3		X											
				7/27/2018		1240		sediment		B18-10141				3		X											
RELINQUISHED BY 				DATE / TIME 7/27/18 1612				RECEIVED BY 				SAMPLE CONDITION: Actual Temperature: Received On Ice Preserved Evidence Seals Present Container Intact Preserved at Lab				SAMPLE TYPE CODE: AQ=Aqueous NA= Non Aqueous SL = Sludge DW = Drinking Water WW = Waste Water RW = Rain Water GW = Ground Water SO = Soil SW = Solid Waste OL = Oil OT = Other Matrix											
RELINQUISHED BY				DATE / TIME				RECEIVED BY																			
RELINQUISHED BY				DATE / TIME				RECEIVED BY																			

SPECIAL REQUIREMENTS / BILLING INFORMATION

See attached Analyte List for handling/preservation procedures.

Sample Receipt Summary

Client: Wood Environment & Infrastructure Solutions, Inc Date Received: 7/27/2018 Received By: RS Inspected By: RGH

Courier:		Cooler:		Temperature:	
<input checked="" type="checkbox"/> Physis	<input type="checkbox"/> FEDEX	<input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Box	<input type="checkbox"/> BLUE	<input checked="" type="checkbox"/> WET
<input type="checkbox"/> UPS	<input type="checkbox"/> Client	Total #:	10	<input type="checkbox"/> DRY	
Start 14:00	End 18:30	<input type="checkbox"/> Other:		<input type="checkbox"/> None	11.4°C

Sample Integrity Upon Receipt:

1. COC(s) included and completely filled out.....Yes
2. All sample containers arrived intact.....Yes
3. All samples listed on COC(s) are present.....Yes
4. Information on containers consistent with information on COC(s).....Yes
5. Correct containers and volume for all analyses indicated.....Yes
6. All samples received within method holding time.....Yes
7. Correct preservation used for all analyses indicated.....No; see notes below
8. Name of sampler included on COC(s).....Yes

Notes:

See Temperature

NOTE (7/3/2018 edit):
 Seawater samples will also
 be analyzed for TSS.

Table 6-1.
RHMP Constituents to be Monitored in Seawater
and Corresponding Analytical Methods

Analyte	Analysis Method
pH	Field Measurement
Specific Conductance	Field Measurement
Dissolved Oxygen	Field Measurement
Temperature	Field Measurement
Salinity	Field Measurement
Transmissivity	Field Measurement
Ammonia-N	SM 4500-NH ₃ D
Methylene-Blue-Activated Substances (MBAS)	SM 5540 C
Nitrate-N	EPA 300.0/SM 4500-NO ₃ E
Oil & Grease	EPA 1664A
Dissolved Organic Carbon (DOC)	EPA 415.3
Total Organic Carbon (TOC)	EPA 415.3
Total Orthophosphate as P	SM 4500 P E
Aluminum (Al) ^a	EPA 1640
Antimony (Sb) ^a	EPA 1640
Arsenic (As) ^a	EPA 1640
Barium (Ba) ^a	EPA 200.8
Beryllium (Be) ^a	EPA 1640
Cadmium (Cd) ^a	EPA 1640
Chromium (Cr) ^a	EPA 1640
Cobalt (Co) ^a	EPA 1640
Copper (Cu) ^a	EPA 1640
Iron (Fe) ^a	EPA 1640
Lead (Pb) ^a	EPA 1640
Manganese (Mn) ^a	EPA 1640
Mercury (Hg) ^a	EPA 245.7
Molybdenum (Mo) ^a	EPA 1640
Nickel (Ni) ^a	EPA 1640
Selenium (Se) ^a	EPA 1640
Silver (Ag) ^a	EPA 1640
Thallium (Tl) ^a	EPA 1640
Tin (Sn) ^a	EPA 1640
Titanium (Ti) ^a	EPA 1640
Vanadium (V) ^a	EPA 1640
Zinc (Zn) ^a	EPA 1640
Polycyclic Aromatic Hydrocarbons (PAHs) ^b	EPA 625
Total Suspended Solids (TSS)	EPA 2540D

Notes:

- ^a Metals will be analyzed for total and dissolved fractions. Filtering for the dissolved fraction will occur in the field immediately after collection.
- ^b Includes Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[e]pyrene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Biphenyl, Chrysene, Dibenzo[a,h]anthracene, Di benzo[thiophene, Fluoranthene, Fluorene, Indeno(1,2,3-c,d)pyrene, Naphthalene, Perylene, Phenanthrene, Pyrene, 2,6-Dimethylnaphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene, 1-Methylphenanthrene, and 2,3,5-Trimethylnaphthalene.

EPA - U.S. Environmental Protection Agency
 SM - Standard Methods

Sample Receipt Summary

Client: Wood Environment & Infrastructure Solutions, Inc Date Received: 7/31/2018 Received By: BB Inspected By: RGH

Courier:		Cooler:		Temperature:	
<input checked="" type="checkbox"/> Physis	<input type="checkbox"/> FEDEX	<input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Box	<input type="checkbox"/> BLUE	<input checked="" type="checkbox"/> WET
<input type="checkbox"/> UPS	<input type="checkbox"/> Client	Total #:	7	<input type="checkbox"/> DRY	
Start 7:00	End 11:00	<input type="checkbox"/> Other:		<input type="checkbox"/> None	5.9°C

Sample Integrity Upon Receipt:

1. COC(s) included and completely filled out.....Yes
2. All sample containers arrived intact.....Yes
3. All samples listed on COC(s) are present.....Yes
4. Information on containers consistent with information on COC(s).....Yes
5. Correct containers and volume for all analyses indicated.....Yes
6. All samples received within method holding time.....Yes
7. Correct preservation used for all analyses indicated.....Yes
8. Name of sampler included on COC(s).....Yes

Notes:

CHAIN OF CUSTODY RECORD

STANDARD

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SPECIAL REQUIREMENTS / BILLING INFORMATION

See attached Analyte List for handling/preservation procedures.

Table 6-2.
RHMP Constituents to be Monitored in Sediment
and Corresponding Analytical Methods

Analyte	Analysis Method
Total Solids	160.3/SM 2540B ^a
Total Organic Carbon (TOC)	9060
Grain Size	SM2560
Aluminum (Al)	6020/6010B ^b
Antimony (Sb)	6020/6010B ^b
Arsenic (As)	6020/6010B ^b
Barium (Ba)	6020/6010B ^b
Beryllium (Be)	6020/6010B ^b
Cadmium (Cd)	6020/6010B ^b
Chromium (Cr)	6020/6010B ^b
Copper (Cu)	6020/6010B ^b
Iron (Fe)	6020/6010B ^b
Lead (Pb)	6020/6010B ^b
Mercury (Hg)	7471A ^b
Nickel (Ni)	6020/6010B ^b
Selenium (Se)	6020/6010B ^b
Silver (Ag)	6020/6010B ^b
Zinc (Zn)	6020/6010B ^b
Total Nitrogen	9056A
Total Phosphorus	EPA 6020
Ammonia	SM 4500-NH ₃
Acid Volatile Sulfides (AVS)	Plumb, 1981 and TERL
Simultaneous Extracted Metals (SEM)	EPA 200.8
Polycyclic Aromatic Hydrocarbons (PAHs) ^c	8270C/8270D
Chlorinated Pesticides ^d	8270C ^b
Pyrethroid Pesticides ^e	EPA 8270C NCI
Polychlorinated Biphenyl (PCB) Congeners ^f	8270C PCB ^b
Polybrominated Diphenyl Ethers (PBDEs) ^g	8270C NCI

Notes:

^a. Standard Methods for the Examination of Water and Wastewater, 22nd Ed. Rice et al. 2013.

^b. USEPA 1986-1996. SW-846. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, 3rd Edition.

^c. Includes Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[e]pyrene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Biphenyl, Chrysene, Dibenzo[a,h]anthracene, Dibenzothiophene, Fluoranthene, Fluorene, Indeno(1,2,3-c,d)pyrene, Naphthalene, Perylene, Phenanthrene, Pyrene, 2,6-Dimethylnaphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene, 1-Methylphenanthrene, and 2,3,5-Trimethylnaphthalene.

^d. Includes cis-chlordane, trans-chlordane, o,p'-DDT, p,p'-DDT, o,p'-DDD, p,p'-DDD, o,p'-DDE, p,p'-DDE, p,p'-DDMU, aldrin, BHC-alpha, BHC-beta, BHC-gamma, cis-nonachlor, trans-nonachlor, oxychlordane, DCPA (Dacthal), dicofol, dieldrin, toxaphene, endosulfan sulfate, endosulfan-I, endosulfan-II, endrin, endrin aldehyde, endrin ketone, heptachlor, heptachlor epoxide, methoxychlor, mirex, and perthane.

^e. Includes Bifenthrin, Cyfluthrin (total), Cypermethrin (total), lambda-Cyhalothrin (total), cis-Permethrin, Trans-Permethrin, Deltamethrin, Esfenvalerate

^f. Includes congeners: PCB-3, 5, 8, 15, 18, 27-29, 31, 33, 37, 44, 49, 52, 56, 60, 66, 70, 74, 77, 81, 87, 95, 97, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 137, 138, 141, 149, 151, 153, 156-158, 167-170, 174, 177, 180, 183, 187, 189, 194, 195, 200, 201, 203, 206, and 209.

^g. Includes BDE-17, 28, 47, 49, 66, 85, 99, 100, 138, 153, 154, 183, and 209.

GC - Gas chromatography

MS SIM - Mass spectrometry selected ion monitoring

SM - Standard Methods

Sample Receipt Summary

Client: Wood Environment & Infrastructure Solutions, Inc Date Received: 7/31/2018 Received By: BB Inspected By: RGH

Courier:		Cooler:		Temperature:	
<input checked="" type="checkbox"/> Physis	<input type="checkbox"/> FEDEX	<input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Box	<input type="checkbox"/> BLUE	<input checked="" type="checkbox"/> WET
<input type="checkbox"/> UPS	<input type="checkbox"/> Client	Total #:	7	<input type="checkbox"/> DRY	
Start 7:00	End 11:00	<input type="checkbox"/> Other:		<input type="checkbox"/> None	5.9°C

Sample Integrity Upon Receipt:

1. COC(s) included and completely filled out.....Yes
2. All sample containers arrived intact.....Yes
3. All samples listed on COC(s) are present.....Yes
4. Information on containers consistent with information on COC(s).....Yes
5. Correct containers and volume for all analyses indicated.....Yes
6. All samples received within method holding time.....Yes
7. Correct preservation used for all analyses indicated.....Yes
8. Name of sampler included on COC(s).....Yes

Notes:

STANDARD

CLIENT NAME:				PROJECT:			ANALYSES REQUESTED										SPECIAL HANDLING:	
Wood Environment & Infrastructure Solutions, Inc.				2018 Regional Harbor Monitoring Program			Ammonia-N (SM 4500-NH ₃ D)	Methylene-Blue-Activated Substances (MBAS) (SM 5540 C)	Nitrate-N** (EPA 300.0/SM 4500-NO ₃ E)	Oil & Grease (EPA 1664A)	Dissolved Organic Carbon / Total Organic Carbon (EPA 415.3)	Total Orthophosphate as P** (SM 4500 P E)	Total & Dissolved* Metals (EPA 1640)	Total & Dissolved* Mercury (EPA 245.7)	Polycyclic Aromatic Hydrocarbons (PAHs) (EPA 625)	Total Suspended Solids (TSS) (EPA 2540D)	☐ Same Day Rush 150%	
ADDRESS:				PHONE: 858-300-4316													☐ 24 Hour Rush 100%	
9210 Sky Park Ct., Suite 200 San Diego, CA 92123				FAX: 858-300-4301													☐ 48-72 Hour Rush 75%	
PROJECT MANAGER				SAMPLER													☐ 4 - 5 Day Rush 30%	
Chris Stransky, Corey Sheredy				Tyler Huff, Chris Stransky													☐ Rush Extractions 50%	
ID# (For lab Use Only)	DATE SAMPLED	TIME SAMPLED	SMPL TYPE	SAMPLE IDENTIFICATION/SITE LOCATION	# OF CONT.												☐ 10 Business Days	
	7/31/2018	1020	seawater	B18-10037	13	X	X	X	X	X	X	X	X	X	X	X	☐ QA/QC Data Package	
	7/31/2018	1110	seawater	B18-10038	13	X	X	X	X	X	X	X	X	X	X	X	☐ Charges will apply for weekends/holidays	
	7/31/2018	1235	seawater	B18-10041	13	X	X	X	X	X	X	X	X	X	X	X	☐ Method of Shipment:	
	7/31/2018	0930	seawater	B18-10179	13	X	X	X	X	X	X	X	X	X	X	X	☐ COMMENTS	
	7/31/2018	0830	seawater	B18-10180	13	X	X	X	X	X	X	X	X	X	X	X		
	7/31/2018	0740	seawater	B18-10181	13	X	X	X	X	X	X	X	X	X	X	X		
	8/1/2018	1205	seawater	B18-10042	13	X	X	X	X	X	X	X	X	X	X	X		
	8/1/2018	0740	seawater	B18-10085	13	X	X	X	X	X	X	X	X	X	X	X		
	8/1/2018	0830	seawater	B18-10086	13	X	X	X	X	X	X	X	X	X	X	X		
	8/1/2018	1030	seawater	B18-10087	13	X	X	X	X	X	X	X	X	X	X	X		
	8/1/2018	0912	seawater	B18-10088	13	X	X	X	X	X	X	X	X	X	X	X		
RELINQUISHED BY				DATE / TIME		RECEIVED BY				SAMPLE CONDITION:				SAMPLE TYPE CODE:				
Sheredy				8/2/2018 0718		Adam C. [Signature] 8/2/18				Actual Temperature:				AQ=Aqueous				
RELINQUISHED BY				DATE / TIME		RECEIVED BY				Received On Ice				Y / N				
										Preserved				Y / N				
										Evidence Seals Present				Y / N				
										Container Intact				Y / N				
										Preserved at Lab				Y / N				
RELINQUISHED BY				DATE / TIME		RECEIVED BY								SO = Soil				
														SW = Solid Waste				
														OL = Oil				
														OT = Other Matrix				
SPECIAL REQUIREMENTS / BILLING INFORMATION																		
See attached Analyte List for handling/preservation procedures.																		
* Diss. metals and dissolved mercury were field filtered using 0.45 um bottle top filtration system.																		
** Nitrate-N/Total Orthophosphate as P was immediately frozen following collection.																		
11 COOLERS TOTAL																		

NOTE (7/3/2018 edit):
 Seawater samples will also
 be analyzed for TSS.

Table 6-1.
RHMP Constituents to be Monitored in Seawater
and Corresponding Analytical Methods

Analyte	Analysis Method
pH	Field Measurement
Specific Conductance	Field Measurement
Dissolved Oxygen	Field Measurement
Temperature	Field Measurement
Salinity	Field Measurement
Transmissivity	Field Measurement
Ammonia-N	SM 4500-NH ₃ D
Methylene-Blue-Activated Substances (MBAS)	SM 5540 C
Nitrate-N	EPA 300.0/SM 4500-NO ₃ E
Oil & Grease	EPA 1664A
Dissolved Organic Carbon (DOC)	EPA 415.3
Total Organic Carbon (TOC)	EPA 415.3
Total Orthophosphate as P	SM 4500 P E
Aluminum (Al) ^a	EPA 1640
Antimony (Sb) ^a	EPA 1640
Arsenic (As) ^a	EPA 1640
Barium (Ba) ^a	EPA 200.8
Beryllium (Be) ^a	EPA 1640
Cadmium (Cd) ^a	EPA 1640
Chromium (Cr) ^a	EPA 1640
Cobalt (Co) ^a	EPA 1640
Copper (Cu) ^a	EPA 1640
Iron (Fe) ^a	EPA 1640
Lead (Pb) ^a	EPA 1640
Manganese (Mn) ^a	EPA 1640
Mercury (Hg) ^a	EPA 245.7
Molybdenum (Mo) ^a	EPA 1640
Nickel (Ni) ^a	EPA 1640
Selenium (Se) ^a	EPA 1640
Silver (Ag) ^a	EPA 1640
Thallium (Tl) ^a	EPA 1640
Tin (Sn) ^a	EPA 1640
Titanium (Ti) ^a	EPA 1640
Vanadium (V) ^a	EPA 1640
Zinc (Zn) ^a	EPA 1640
Polycyclic Aromatic Hydrocarbons (PAHs) ^b	EPA 625
Total Suspended Solids (TSS)	EPA 2540D

Notes:

- ^a. Metals will be analyzed for total and dissolved fractions. Filtering for the dissolved fraction will occur in the field immediately after collection.
- ^b. Includes Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[e]pyrene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Biphenyl, Chrysene, Dibenzo[a,h]anthracene, Di benzo[thiophene, Fluoranthene, Fluorene, Indeno(1,2,3-c,d)pyrene, Naphthalene, Perylene, Phenanthrene, Pyrene, 2,6-Dimethylnaphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene, 1-Methylphenanthrene, and 2,3,5-Trimethylnaphthalene.

EPA - U.S. Environmental Protection Agency
 SM - Standard Methods

Sample Receipt Summary

Client: Wood Environment & Infrastructure Solutions, Inc Date Received: 8/2/2018 Received By: AI Inspected By: RGH

Courier:		Cooler:		Temperature:	
<input checked="" type="checkbox"/> Physis	<input type="checkbox"/> FEDEX	<input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Box	<input type="checkbox"/> BLUE	<input checked="" type="checkbox"/> WET
<input type="checkbox"/> UPS	<input type="checkbox"/> Client	Total #:	11	<input type="checkbox"/> DRY	
Start 6:00	End 11:15	<input type="checkbox"/> Other:		<input type="checkbox"/> None	1.1°C

Sample Integrity Upon Receipt:

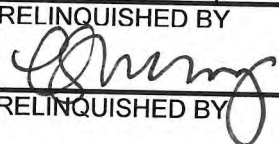
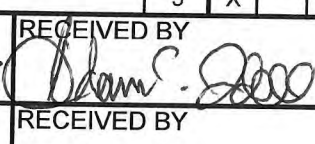
1. COC(s) included and completely filled out.....Yes
2. All sample containers arrived intact.....Yes
3. All samples listed on COC(s) are present.....Yes
4. Information on containers consistent with information on COC(s).....Yes
5. Correct containers and volume for all analyses indicated.....Yes
6. All samples received within method holding time.....Yes
7. Correct preservation used for all analyses indicated.....Yes
8. Name of sampler included on COC(s).....Yes

Notes:

CHAIN OF CUSTODY RECORD

STANDARD

Page 2 Of 2

CLIENT NAME: Wood Environment & Infrastructure Solutions, Inc.				PROJECT: 2018 Regional Harbor Monitoring Program		ANALYSES REQUESTED										SPECIAL HANDLING			
ADDRESS: 9210 Sky Park Ct., Suite 200 San Diego, CA 92123				PHONE: 858-300-4316 FAX: 858-300-4301 EMAIL: chris.stransky@woodplc.com corey.sheredy@woodplc.com		SEE ATTACHED LIST OF ANALYTES													<input type="checkbox"/> Same Day Rush 150% <input type="checkbox"/> 24 Hour Rush 100% <input type="checkbox"/> 48-72 Hour Rush 75% <input type="checkbox"/> 4 - 5 Day Rush 30% <input type="checkbox"/> Rush Extractions 50% <input checked="" type="checkbox"/> 10 Business Days <input type="checkbox"/> QA/QC Data Package
PROJECT MANAGER Chris Stransky, Corey Sheredy				SAMPLER Tyler Huff, Chris Stransky															Charges will apply for weekends/holidays
ID# (For lab Use Only)	DATE SAMPLED	TIME SAMPLED	SMPL TYPE	SAMPLE IDENTIFICATION/SITE LOCATION	# OF CONT.														Method of Shipment:
	7/31/2018	1035	sediment	B18-10037 *	3		X												COMMENTS
	7/31/2018	1125	sediment	B18-10038 *	3		X												
	7/31/2018	1250	sediment	B18-10041 *	3		X												
	7/31/2018	0945	sediment	B18-10179 *	3		X												
	7/31/2018	0845	sediment	B18-10180 *	3		X												
	7/31/2018	0753	sediment	B18-10181 *	3		X												
	8/1/2018	1215	sediment	B18-10042 *	3		X												
	8/1/2018	0755	sediment	B18-10085 *	3	X													
	8/1/2018	0843	sediment	B18-10086 *	3	X													
	8/1/2018	1043	sediment	B18-10087 *	3	X													
	8/1/2018	0925	sediment	B18-10088 *	3	X													
RELINQUISHED BY 				DATE / TIME 8/2/2018 0918		RECEIVED BY 		SAMPLE CONDITION:										SAMPLE TYPE CODE:	
RELINQUISHED BY				DATE / TIME		RECEIVED BY		Actual Temperature: Received On Ice Y / N Preserved Y / N Evidence Seals Present Y / N Container Intact Y / N Preserved at Lab Y / N										AQ=Aqueous NA= Non Aqueous SL = Sludge DW = Drinking Water WW = Waste Water RW = Rain Water GW = Ground Water SO = Soil SW = Solid Waste OL = Oil OT = Other Matrix	
RELINQUISHED BY				DATE / TIME		RECEIVED BY													

SPECIAL REQUIREMENTS / BILLING INFORMATION

See attached Analyte List for handling/preservation procedures.

Table 6-2.
RHMP Constituents to be Monitored in Sediment
and Corresponding Analytical Methods

Analyte	Analysis Method
Total Solids	160.3/SM 2540B ^a
Total Organic Carbon (TOC)	9060
Grain Size	SM2560
Aluminum (Al)	6020/6010B ^b
Antimony (Sb)	6020/6010B ^b
Arsenic (As)	6020/6010B ^b
Barium (Ba)	6020/6010B ^b
Beryllium (Be)	6020/6010B ^b
Cadmium (Cd)	6020/6010B ^b
Chromium (Cr)	6020/6010B ^b
Copper (Cu)	6020/6010B ^b
Iron (Fe)	6020/6010B ^b
Lead (Pb)	6020/6010B ^b
Mercury (Hg)	7471A ^b
Nickel (Ni)	6020/6010B ^b
Selenium (Se)	6020/6010B ^b
Silver (Ag)	6020/6010B ^b
Zinc (Zn)	6020/6010B ^b
Total Nitrogen	9056A
Total Phosphorus	EPA 6020
Ammonia	SM 4500-NH ₃
Acid Volatile Sulfides (AVS)	Plumb, 1981 and TERL
Simultaneous Extracted Metals (SEM)	EPA 200.8
Polycyclic Aromatic Hydrocarbons (PAHs) ^c	8270C/8270D
Chlorinated Pesticides ^d	8270C ^b
Pyrethroid Pesticides ^e	EPA 8270C NCI
Polychlorinated Biphenyl (PCB) Congeners ^f	8270C PCB ^b
Polybrominated Diphenyl Ethers (PBDEs) ^g	8270C NCI

Notes:

- ^a. Standard Methods for the Examination of Water and Wastewater, 22nd Ed. Rice et al. 2013.
- ^b. USEPA 1986-1996. SW-846. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, 3rd Edition.
- ^c. Includes Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[e]pyrene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Biphenyl, Chrysene, Dibenz[a,h]anthracene, Dibenzothiophene, Fluoranthene, Fluorene, Indeno[1,2,3-c,d]pyrene, Naphthalene, Perylene, Phenanthrene, Pyrene, 2,6-Dimethylnaphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene, 1-Methylphenanthrene, and 2,3,5-Trimethylnaphthalene.
- ^d. Includes cis-chlordane, trans-chlordane, o,p'-DDT, p,p'-DDT, o,p'-DDD, p,p'-DDD, o,p'-DDE, p,p'-DDE, p,p'-DDMU, aldrin, BHC-alpha, BHC-beta, BHC-gamma, cis-nonachlor, trans-nonachlor, oxychlordane, DCPA (Dacthal), dicofol, dieldrin, toxaphene, endosulfan sulfate, endosulfan-I, endosulfan-II, endrin, endrin aldehyde, endrin ketone, heptachlor, heptachlor epoxide, methoxychlor, mirex, and perthane.
- ^e. Includes Bifenthrin, Cyfluthrin (total), Cypermethrin (total), lambda-Cyhalothrin (total), cis-Permethrin, Trans-Permethrin, Deltamethrin, Esfenvalerate
- ^f. Includes congeners: PCB-3, 5, 8, 15, 18, 27-29, 31, 33, 37, 44, 49, 52, 56, 60, 66, 70, 74, 77, 81, 87, 95, 97, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 137, 138, 141, 149, 151, 153, 156-158, 167-170, 174, 177, 180, 183, 187, 189, 194, 195, 200, 201, 203, 206, and 209.
- ^g. Includes BDE-17, 28, 47, 49, 66, 85, 99, 100, 138, 153, 154, 183, and 209.
- GC - Gas chromatography
 MS SIM - Mass spectrometry selected ion monitoring
 SM - Standard Methods

Sample Receipt Summary

Client: Wood Environment & Infrastructure Solutions, Inc Date Received: 8/2/2018 Received By: AI Inspected By: RGH

Courier:		Cooler:		Temperature:	
<input checked="" type="checkbox"/> Physis	<input type="checkbox"/> FEDEX	<input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Box	<input type="checkbox"/> BLUE	<input checked="" type="checkbox"/> WET
<input type="checkbox"/> UPS	<input type="checkbox"/> Client	Total #:	11	<input type="checkbox"/> DRY	
Start 6:00	End 11:15	<input type="checkbox"/> Other:		<input type="checkbox"/> None	1.1°C

Sample Integrity Upon Receipt:

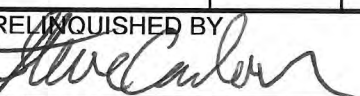
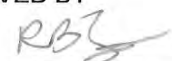
1. COC(s) included and completely filled out.....Yes
2. All sample containers arrived intact.....Yes
3. All samples listed on COC(s) are present.....Yes
4. Information on containers consistent with information on COC(s).....Yes
5. Correct containers and volume for all analyses indicated.....Yes
6. All samples received within method holding time.....Yes
7. Correct preservation used for all analyses indicated.....Yes
8. Name of sampler included on COC(s).....Yes

Notes:

CHAIN OF CUSTODY RECORD

STANDARD

Page 1 Of 2

CLIENT NAME:				PROJECT:				ANALYSES REQUESTED										SPECIAL HANDLING							
Wood Environment & Infrastructure Solutions, Inc.				2018 Regional Harbor Monitoring Program				<div>Ammonia-N (SM 4500-NH₃ D)</div> <div>Methylene-Blue-Activated Substances (MBAS) (SM 5540 C)</div> <div>Nitrate-N** (EPA 300.0/SM 4500-NO₃ E)</div> <div>Oil & Grease (EPA 1664A)</div> <div>Dissolved Organic Carbon / Total Organic Carbon (EPA 415.3)</div> <div>Total Orthophosphate as P* (SM 4500 P E)</div> <div>Total & Dissolved* Metals (EPA 1640)</div> <div>Total & Dissolved* Mercury (EPA 245.7)</div> <div>Polycyclic Aromatic Hydrocarbons (PAHs) (EPA 625)</div> <div>Total Suspended Solids (TSS) (EPA 2540D)</div>										<div><input type="checkbox"/> Same Day Rush 150%</div> <div><input type="checkbox"/> 24 Hour Rush 100%</div> <div><input type="checkbox"/> 48-72 Hour Rush 75%</div> <div><input type="checkbox"/> 4 - 5 Day Rush 30%</div> <div><input type="checkbox"/> Rush Extractions 50%</div> <div><input checked="" type="checkbox"/> 10 Business Days</div> <div><input type="checkbox"/> QA/QC Data Package</div>							
ADDRESS:				PHONE: 858-300-4316														Charges will apply for weekends/holidays				Method of Shipment:			
9210 Sky Park Ct., Suite 200				FAX: 858-300-4301																					
San Diego, CA 92123				EMAIL: chris.stransky@woodplc.com																					
PROJECT MANAGER				SAMPLER																					
Chris Stransky, Corey Sheredy				Tyler Huff, Chris Stransky																					
ID# (For lab Use Only)	DATE SAMPLED	TIME SAMPLED	SMPL TYPE	SAMPLE IDENTIFICATION/SITE LOCATION		# OF CONT.																			
	8/14/2018	1330	seawater	B18-10040		13	X	X	X	X	X	X	X	X	X	X	X								
	8/14/2018	0945	seawater	B18-10043		13	X	X	X	X	X	X	X	X	X	X	X								
	8/14/2018	1200	seawater	B18-10044		13	X	X	X	X	X	X	X	X	X	X	X								
	8/14/2018	1015	seawater	B18-20043		13	X	X	X	X	X	X	X	X	X	X	X								
RELINQUISHED BY				DATE / TIME		RECEIVED BY				SAMPLE CONDITION:				SAMPLE TYPE CODE:											
				8/15/18 1410						Actual Temperature:				AQ=Aqueous NA= Non Aqueous SL = Sludge											
RELINQUISHED BY				DATE / TIME		RECEIVED BY				Received On Ice				Y / N											
										Preserved				Y / N											
										Evidence Seals Present				Y / N											
										Container Intact				Y / N											
RELINQUISHED BY				DATE / TIME		RECEIVED BY				Preserved at Lab				Y / N											
SPECIAL REQUIREMENTS / BILLING INFORMATION																									
See attached Analyte List for handling/preservation procedures.																									
* Diss. metals and dissolved mercury were field filtered using 0.45 um bottletop filtration system.																									
** Nitrate-N/Total Orthophosphate as P was immediately frozen following collection.																									

Sample Receipt Summary

Client: Wood Environment & Infrastructure Solutions, Inc Date Received: 8/15/2018 Received By: RS Inspected By: RGH

Courier:		Cooler:		Temperature:	
<input checked="" type="checkbox"/> Physis	<input type="checkbox"/> FEDEX	<input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Box	<input type="checkbox"/> BLUE	<input checked="" type="checkbox"/> WET
<input type="checkbox"/> UPS	<input type="checkbox"/> Client	Total #:	4	<input type="checkbox"/> DRY	
Start 12:00	End 16:15	<input type="checkbox"/> Other:		<input type="checkbox"/> None	6.7°C

Sample Integrity Upon Receipt:

1. COC(s) included and completely filled out.....Yes
2. All sample containers arrived intact.....No; see notes below
3. All samples listed on COC(s) are present.....Yes
4. Information on containers consistent with information on COC(s).....Yes
5. Correct containers and volume for all analyses indicated.....Yes
6. All samples received within method holding time.....Yes
7. Correct preservation used for all analyses indicated.....No; see notes below
8. Name of sampler included on COC(s).....Yes

Notes:

See Temperature

Sample ID(s) B18-10040 the TOC Bottle was received empty except for H₃PO₄. We took some sample from the 1L Ambers to fill the empty bottle.

CHAIN OF CUSTODY RECORD

STANDARD

Page 2 Of 2[illegible]

Sample Receipt Summary

Client: Wood Environment & Infrastructure Solutions, Inc Date Received: 8/15/2018 Received By: RS Inspected By: RGH

Courier:		Cooler:		Temperature:	
<input checked="" type="checkbox"/> Physis	<input type="checkbox"/> FEDEX	<input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Box	<input type="checkbox"/> BLUE	<input checked="" type="checkbox"/> WET
<input type="checkbox"/> UPS	<input type="checkbox"/> Client	Total #:	4	<input type="checkbox"/> DRY	
Start 12:00	End 16:15	<input type="checkbox"/> Other:		<input type="checkbox"/> None	6.7°C

Sample Integrity Upon Receipt:

1. COC(s) included and completely filled out.....Yes
2. All sample containers arrived intact.....Yes
3. All samples listed on COC(s) are present.....Yes
4. Information on containers consistent with information on COC(s).....Yes
5. Correct containers and volume for all analyses indicated.....Yes
6. All samples received within method holding time.....Yes
7. Correct preservation used for all analyses indicated.....No; see notes below
8. Name of sampler included on COC(s).....Yes

Notes:
See Temperature

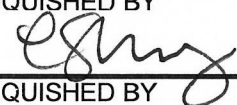
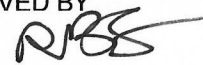
1 COOLER TOTAL (incl. ~~Batiqueto~~ SD cnty lagoons)

1807003-017

CHAIN OF CUSTODY RECORD

STANDARD

Page 1 Of 2

CLIENT NAME: Wood Environment & Infrastructure Solutions, Inc. ADDRESS: 9210 Sky Park Ct., Suite 200 San Diego, CA 92123				PROJECT: 2018 Regional Harbor Monitoring Program PHONE: 858-300-4316 FAX: 858-300-4301 EMAIL: chris.stransky@woodplc.com corey.sheredy@woodplc.com				ANALYSES REQUESTED										SPECIAL HANDLING	
PROJECT MANAGER Chris Stransky, Corey Sheredy				SAMPLER Tyler Huff, Chris Stransky				<input type="checkbox"/> Ammonia-N (SM 4500-NH ₃ D) <input type="checkbox"/> Methylene-Blue-Activated Substances (MBAS) (SM 5540 C) <input type="checkbox"/> Nitrate-N** (EPA 300.0/SM 4500-NO ₃ E) <input type="checkbox"/> Oil & Grease (EPA 1664A) <input type="checkbox"/> Dissolved Organic Carbon / Total Organic Carbon (EPA 415.3) <input type="checkbox"/> Total Orthophosphate as P** (SM 4500 P E) <input type="checkbox"/> Total & Dissolved* Metals (EPA 1640) <input type="checkbox"/> Total & Dissolved* Mercury (EPA 245.7) <input type="checkbox"/> Polycyclic Aromatic Hydrocarbons (PAHs) (EPA 825) <input type="checkbox"/> Total Suspended Solids (TSS) (EPA 2540D)	<input type="checkbox"/> Same Day Rush 150% <input type="checkbox"/> 24 Hour Rush 100% <input type="checkbox"/> 48-72 Hour Rush 75% <input type="checkbox"/> 4 - 5 Day Rush 30% <input checked="" type="checkbox"/> Rush Extractions 50% <input type="checkbox"/> 10 Business Days <input type="checkbox"/> QA/QC Data Package										
Charges will apply for weekends/holidays																			
Method of Shipment:																			
COMMENTS																			
ID# (For lab Use Only)	DATE SAMPLED	TIME SAMPLED	SMPL TYPE	SAMPLE IDENTIFICATION/SITE LOCATION	# OF CONT.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
	9/12/2018	1215	seawater	B18-10200	13														
RELINQUISHED BY 				DATE / TIME 9/13/2018 1430		RECEIVED BY 				SAMPLE CONDITION:				SAMPLE TYPE CODE:					
RELINQUISHED BY				DATE / TIME		RECEIVED BY				Actual Temperature: Received On Ice Y / N Preserved Y / N Evidence Seals Present Y / N Container Intact Y / N Preserved at Lab Y / N				AQ=Aqueous NA= Non Aqueous SL = Sludge DW = Drinking Water WW = Waste Water RW = Rain Water GW = Ground Water SO = Soil SW = Solid Waste OL = Oil OT = Other Matrix					
RELINQUISHED BY				DATE / TIME		RECEIVED BY													
SPECIAL REQUIREMENTS / BILLING INFORMATION																			
See attached Analyte List for handling/preservation procedures.																			
* Diss. metals and dissolved mercury were field filtered using 0.45 um bottletop filtration system.																			
** Nitrate-N/Total Orthophosphate as P was immediately frozen following collection.																			
COOLER COUNT: 1 COOLER (has 1 water bottle bag and 1 sediment bag of 2 jars and 1 ziplock)																			

NOTE (7/3/2018 edit):
Seawater samples will also
be analyzed for TSS.

Table 6-1.
RHMP Constituents to be Monitored in Seawater
and Corresponding Analytical Methods

Analyte	Analysis Method
pH	Field Measurement
Specific Conductance	Field Measurement
Dissolved Oxygen	Field Measurement
Temperature	Field Measurement
Salinity	Field Measurement
Transmissivity	Field Measurement
Ammonia-N	SM 4500-NH ₃ D
Methylene-Blue-Activated Substances (MBAS)	SM 5540 C
Nitrate-N	EPA 300.0/SM 4500-NO ₃ E
Oil & Grease	EPA 1664A
Dissolved Organic Carbon (DOC)	EPA 415.3
Total Organic Carbon (TOC)	EPA 415.3
Total Orthophosphate as P	SM 4500 P E
Aluminum (Al) ^a	EPA 1640
Antimony (Sb) ^a	EPA 1640
Arsenic (As) ^a	EPA 1640
Barium (Ba) ^a	EPA 200.8
Beryllium (Be) ^a	EPA 1640
Cadmium (Cd) ^a	EPA 1640
Chromium (Cr) ^a	EPA 1640
Cobalt (Co) ^a	EPA 1640
Copper (Cu) ^a	EPA 1640
Iron (Fe) ^a	EPA 1640
Lead (Pb) ^a	EPA 1640
Manganese (Mn) ^a	EPA 1640
Mercury (Hg) ^a	EPA 245.7
Molybdenum (Mo) ^a	EPA 1640
Nickel (Ni) ^a	EPA 1640
Selenium (Se) ^a	EPA 1640
Silver (Ag) ^a	EPA 1640
Thallium (Tl) ^a	EPA 1640
Tin (Sn) ^a	EPA 1640
Titanium (Ti) ^a	EPA 1640
Vanadium (V) ^a	EPA 1640
Zinc (Zn) ^a	EPA 1640
Polycyclic Aromatic Hydrocarbons (PAHs) ^b	EPA 625
Total Suspended Solids (TSS)	EPA 2540D

Notes:

- ^a. Metals will be analyzed for total and dissolved fractions. Filtering for the dissolved fraction will occur in the field immediately after collection.
- ^b. Includes Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[e]pyrene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Biphenyl, Chrysene, Dibenz[a,h]anthracene, Di benzothiophene, Fluoranthene, Fluorene, Indeno(1,2,3-c,d)pyrene, Naphthalene, Perylene, Phenanthrene, Pyrene, 2,6-Dimethylnaphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene, 1-Methylphenanthrene, and 2,3,5-Trimethylnaphthalene.

EPA - U.S. Environmental Protection Agency
SM - Standard Methods

Sample Receipt Summary

Client: Wood Environment & Infrastructure Solutions, Inc Date Received: 9/13/2018 Received By: RS Inspected By: RGH

Courier:		Cooler:		Temperature:	
<input checked="" type="checkbox"/> Physis	<input type="checkbox"/> FEDEX	<input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Box	<input type="checkbox"/> BLUE	<input checked="" type="checkbox"/> WET
<input type="checkbox"/> UPS	<input type="checkbox"/> Client	Total #:	2	<input type="checkbox"/> DRY	
Start 12:00	End 18:00	<input type="checkbox"/> Other:		<input type="checkbox"/> None	6°C

Sample Integrity Upon Receipt:

1. COC(s) included and completely filled out.....Yes
2. All sample containers arrived intact.....Yes
3. All samples listed on COC(s) are present.....Yes
4. Information on containers consistent with information on COC(s).....Yes
5. Correct containers and volume for all analyses indicated.....Yes
6. All samples received within method holding time.....Yes
7. Correct preservation used for all analyses indicated.....Yes
8. Name of sampler included on COC(s).....Yes

Notes:

CHAIN OF CUSTODY RECORD

STANDARD

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SPECIAL REQUIREMENTS / BILLING INFORMATION

See attached Analyte List for handling/preservation procedures.

COOLER COUNT: 1 COOLER (has 1 water bottle bag and 1 sediment bag of 2 jars and 1 ziplock)

Table 6-2.
RHMP Constituents to be Monitored in Sediment
and Corresponding Analytical Methods

Analyte	Analysis Method
Total Solids	160.3/SM 2540B ^a
Total Organic Carbon (TOC)	9060
Grain Size	SM2560
Aluminum (Al)	6020/6010B ^b
Antimony (Sb)	6020/6010B ^b
Arsenic (As)	6020/6010B ^b
Barium (Ba)	6020/6010B ^b
Beryllium (Be)	6020/6010B ^b
Cadmium (Cd)	6020/6010B ^b
Chromium (Cr)	6020/6010B ^b
Copper (Cu)	6020/6010B ^b
Iron (Fe)	6020/6010B ^b
Lead (Pb)	6020/6010B ^b
Mercury (Hg)	7471A ^b
Nickel (Ni)	6020/6010B ^b
Selenium (Se)	6020/6010B ^b
Silver (Ag)	6020/6010B ^b
Zinc (Zn)	6020/6010B ^b
Total Nitrogen	9056A
Total Phosphorus	EPA 6020
Ammonia	SM 4500-NH ₃
Acid Volatile Sulfides (AVS)	Plumb, 1981 and TERL
Simultaneous Extracted Metals (SEM)	EPA 200.8
Polycyclic Aromatic Hydrocarbons (PAHs) ^c	8270C/8270D
Chlorinated Pesticides ^d	8270C ^b
Pyrethroid Pesticides ^e	EPA 8270C NCI
Polychlorinated Biphenyl (PCB) Congeners ^f	8270C PCB ^b
Polybrominated Diphenyl Ethers (PBDEs) ^g	8270C NCI

Notes:

^a Standard Methods for the Examination of Water and Wastewater, 22nd Ed. Rice et al. 2013.

^b USEPA 1986-1996. SW-846. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, 3rd Edition.

^c Includes Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[e]pyrene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Biphenyl, Chrysene, Dibenz[a,h]anthracene, Dibenzothiophene, Fluoranthene, Fluorene, Indeno(1,2,3-c,d)pyrene, Naphthalene, Perylene, Phenanthrene, Pyrene, 2,6-Dimethylnaphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene, 1-Methylphenanthrene, and 2,3,5-Trimethylnaphthalene.

^d Includes cis-chlordane, trans-chlordane, o,p'-DDT, p,p'-DDT, o,p'-DDD, p,p'-DDD, o,p'-DDE, p,p'-DDE, p,p'-DDMU, aldrin, BHC-alpha, BHC-beta, BHC-gamma, cis-nonachlor, trans-nonachlor, oxychlordane, DCPA (Dacthal), dicofol, dieldrin, toxaphene, endosulfan sulfate, endosulfan-I, endosulfan-II, endrin, endrin aldehyde, endrin ketone, heptachlor, heptachlor epoxide, methoxychlor, mirex, and perthane.

^e Includes Bifenthrin, Cyfluthrin (total), Cypermethrin (total), lambda-Cyhalothrin (total), cis-Permethrin, Trans-Permethrin, Deltamethrin, Esfenvalerate

^f Includes congeners: PCB-3, 5, 8, 15, 18, 27-29, 31, 33, 37, 44, 49, 52, 56, 60, 66, 70, 74, 77, 81, 87, 95, 97, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 137, 138, 141, 149, 151, 153, 156-158, 167-170, 174, 177, 180, 183, 187, 189, 194, 195, 200, 201, 203, 206, and 209.

^g Includes BDE-17, 28, 47, 49, 66, 85, 99, 100, 138, 153, 154, 183, and 209.

GC - Gas chromatography

MS SIM - Mass spectrometry selected ion monitoring

SM - Standard Methods

Sample Receipt Summary

Client: Wood Environment & Infrastructure Solutions, Inc Date Received: 9/13/2018 Received By: RS Inspected By: RGH

Courier:		Cooler:		Temperature:	
<input checked="" type="checkbox"/> Physis	<input type="checkbox"/> FEDEX	<input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Box	<input type="checkbox"/> BLUE	<input checked="" type="checkbox"/> WET
<input type="checkbox"/> UPS	<input type="checkbox"/> Client	Total #:	2	<input type="checkbox"/> DRY	
Start 12:00	End 18:00	<input type="checkbox"/> Other:		<input type="checkbox"/> None	6°C

Sample Integrity Upon Receipt:

1. COC(s) included and completely filled out.....Yes
2. All sample containers arrived intact.....Yes
3. All samples listed on COC(s) are present.....Yes
4. Information on containers consistent with information on COC(s).....Yes
5. Correct containers and volume for all analyses indicated.....Yes
6. All samples received within method holding time.....Yes
7. Correct preservation used for all analyses indicated.....Yes
8. Name of sampler included on COC(s).....Yes

Notes:

Sample Receipt Summary

Client: Wood Environment & Infrastructure Solutions, Inc Date Received: 7/11/2018 Received By: AI Inspected By: RGH

Courier:		Cooler:		Temperature:	
<input checked="" type="checkbox"/> Physis	<input type="checkbox"/> FEDEX	<input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Box	<input type="checkbox"/> BLUE	<input checked="" type="checkbox"/> WET
<input type="checkbox"/> UPS	<input type="checkbox"/> Client	Total #:	5	<input type="checkbox"/> DRY	
Start 6:30	End 11:40	<input type="checkbox"/> Other:		<input type="checkbox"/> None	10.9°C

Sample Integrity Upon Receipt:

1. COC(s) included and completely filled out.....Yes
2. All sample containers arrived intact.....Yes
3. All samples listed on COC(s) are present.....Yes
4. Information on containers consistent with information on COC(s).....Yes
5. Correct containers and volume for all analyses indicated.....Yes
6. All samples received within method holding time.....Yes
7. Correct preservation used for all analyses indicated.....No; see notes below
8. Name of sampler included on COC(s).....Yes

Notes:

Picked up at the same time as 1807003-001.

See Temperature

Received a 2nd bag of sediment for each sample, says MEI FAWNA. - client asked for it back.

Received 1 sample B18-10068 cell assay, Alvin Mehinto. - client asked for it back.

Received all of the archived sediments. - client asked for it back.