

APPENDIX F

CHAIN-OF-CUSTODY (COC) FORMS

Water Chemistry COC Forms
(Physis Environmental Laboratories)

CHAIN of CUSTODY

COMPANY NAME WSP USA Environment & Infrastructure Inc.		EMAIL chris.stransky@wsp.com		PROJECT NAME / NUMBER 2023 Regional Harbor Monitoring Program		COC PAGE 1 of 3					
PROJECT MANAGER Chris Stransky/Marisa Swiderski		marisa.swiderski@wsp.com		PO # TBD	PHYSIS SOS #	TYPE OF ICE USED ☒ WET ☐ BLUE ☐ DRY					
COMPANY ADDRESS 9177 Sky Park Court San Diego, CA 92123		PHONE (858)775-5547 (C. Stransky) (808)772-8740 (M. Swiderski)		SAMPLED BY John Rudolph, Nick Jernack		SHIPPED VIA ☐ FEDEX ☐ UPS ☐ USPS ☐ Client ☒ Physis ☐ other					
TURNAROUND TIME ☒ STANDARD (15-20 business days) ☐ RUSH business days				REQUESTED ANALYSES PLEASE SEE PHYSIS SOS							
REPORT FORMAT ☒ PHYSIS PDF/EDD ☐ SWAMP EDD ☒ other Bight '23 EDD											
SPECIAL INSTRUCTIONS See attached for analyte lists and methods. DOC, dissolved metals, and dissolved Hg samples were field-filtered through 0.45um filter. Nitrate/orthophosphate and MBAS samples were frozen following collection. Please submit invoices to APInvoice.US@woodplc.com (cc: chris.stransky@wsp.com & marissa.cuevas@wsp.com) and include the following info: (1) Project #: 2215100802.0003.PHYSIS (2) PO #: TBD (3) Org: 3151 (4) GL: 573000				RHMP Standard Seawater Analyte List (see attached Table 1)							
PHYSIS MATRIX CODES SW = seawater FW = freshwater RW = rainwater WW = wastewater DW = drinking water S = sediment T = tissue E = extract O = other (specify)											
SAMPLE ID		SAMPLE DESCRIPTION						SAMPLE date time		physis matrix code	# of bottles
1	B23-12000	seawater	8/3/23					1130	SW	14	X
2	B23-12001	seawater	8/3/23					1545	SW	14	X
3	B23-12002	seawater	8/3/23					0900	SW	14	X
4	B23-12148	seawater	8/3/23					1345	SW	14	X
5	B23-12005	seawater	8/4/23					0840	SW	14	X
6	B23-12150	seawater	8/4/23					1230	SW	14	X
7											
8											
9											
10											
RELINQUISHED BY				RECEIVED BY							
print		signature		company		date & time					
Marisa Swiderski		Marisa Swiderski		WSP		8/4/23 1708					
Riley von Richter		Riley von Richter		WSP		8/7/23 1410					

Table 1. RHMP Standard Analyte List – Seawater

Analyte	Analysis Method	Water Target Reporting Limits ^a	Units
Dissolved Organic Carbon (DOC)	SM 5310 B	0.5	mg/L
Total Organic Carbon (TOC)	SM 5310 B	0.5	mg/L
Total Suspended Solids (TSS)	SM 2540 D	1.0	mg/L
Ammonia as N	SM 4500-NH ₃ D	0.05	mg/L
Nitrate as N	SM 4500-NO ₃ E	0.05	mg/L
Total Orthophosphate as P	SM 4500-P E	0.05	mg/L
Oil and Grease	EPA 1664B	1.0	mg/L
Methylene Blue Active Substances (MBAS)	SM 5540 C	0.05	mg/L
Aluminum (Al) ^b	EPA 1640	6.0	µg/L
Antimony (Sb) ^b	EPA 1640	0.015	µg/L
Arsenic (As) ^b	EPA 1640	0.015	µg/L
Barium (Ba) ^b	EPA 200.8	0.5	µg/L
Beryllium (Be) ^b	EPA 1640	0.01	µg/L
Cadmium (Cd) ^b	EPA 1640	0.005	µg/L
Chromium (Cr) ^b	EPA 1640	0.025	µg/L
Cobalt (Co) ^b	EPA 1640	0.01	µg/L
Copper (Cu) ^b	EPA 1640	0.01	µg/L
Iron (Fe) ^b	EPA 1640	1.0	µg/L
Lead (Pb) ^b	EPA 1640	0.005	µg/L
Manganese (Mn) ^b	EPA 1640	0.02	µg/L
Mercury (Hg) ^b	EPA 245.7	0.02	µg/L
Molybdenum (Mo) ^b	EPA 1640	0.01	µg/L
Nickel (Ni) ^b	EPA 1640	0.005	µg/L
Selenium (Se) ^b	EPA 1640	0.015	µg/L
Silver (Ag) ^b	EPA 1640	0.02	µg/L
Thallium (Tl) ^b	EPA 1640	0.01	µg/L
Tin (Sn) ^b	EPA 1640	0.01	µg/L
Titanium (Ti) ^b	EPA 1640	0.07	µg/L
Vanadium (V) ^b	EPA 1640	0.04	µg/L
Zinc (Zn) ^b	EPA 1640	0.005	µg/L
Polycyclic Aromatic Hydrocarbons (PAHs) ^c	EPA 625.1	5.0	ng/L

Notes:

a. Reporting limits provided by Physis Environmental Laboratories.

b. Metals analysis will consist of both total and dissolved fractions. Samples for the dissolved fraction will be filtered in the field immediately after collection.

c. Includes 1-methylnaphthalene, 1-methylphenanthrene, 2,3,5-trimethylnaphthalene, 2,6-dimethylnaphthalene, 2-methylnaphthalene, 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, and pyrene

µg/L = microgram(s) per liter; EPA = United States Environmental Protection Agency; mg/L = milligram(s) per liter; N = nitrogen; ng/L = nanogram(s) per liter; P = phosphorus; SM = Standard Method

Project Iteration ID: 2307008-001
Client Name: WSP USA
Project Name: 2023 Regional Harbor monitoring
Program Project #
22151008020.0003.PHYSIS PO #
TBD Org 3151 GL 573000
COC Page Number: 3 of 3
Bottle Label Color: Purple

Sample Receipt Summary

Receiving Info

1. Initials Received By: DA
2. Date Received: 8/7/23
3. Time Received: 1410
4. Client Name: WSP
5. Courier Information: (Please circle)

☐ Client	☐ UPS	☐ Area Fast	☐ DRS
☐ FedEx	☐ GSO/GLS	☐ Ontrac	☐ PAMS
☐ PHYSIS Driver:			
i. Start Time: <u>6 hrs</u>		iii. Total Mileage: _____	
ii. End Time: _____		iv. Number of Pickups: _____	
6. Container Information: (Please put the # of containers or circle none)

☒ Cooler	☐ Styrofoam Cooler	☐ Boxes	☐ None
☐ Carboy(s)	☐ Carboy Trash Can(s)	☐ Carboy Cap(s)	☐ Other _____
7. What type of ice was used: (Please circle any that apply)

☒ Wet Ice	☐ Blue Ice	☐ Dry Ice	☐ Water	☐ None
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8. Randomly Selected Samples Temperature (°C): 1.6 Used I/R Thermometer # 1-2

Inspection Info

1. Initials Inspected By: DA

Sample Integrity Upon Receipt:

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

Notes:

CHAIN of CUSTODY

COMPANY NAME WSP USA Environment & Infrastructure Inc.			EMAIL chris.stransky@wsp.com			PROJECT NAME / NUMBER 2023 Regional Harbor Monitoring Program			COC PAGE 1 of 4		
PROJECT MANAGER Chris Stransky/Marisa Swiderski			marisa.swiderski@wsp.com			PO # TBD		PHYSIS SOS #		TYPE OF ICE USED ☒ WET ☐ BLUE ☐ DRY	
COMPANY ADDRESS 9177 Sky Park Court San Diego, CA 92123			PHONE (858)775-5547 (C. Stransky) (808)772-8740 (M. Swiderski)			SAMPLED BY Marisa Swiderski		SHIPPED VIA ☐ FEDEX ☐ UPS ☐ USPS ☐ Client ☒ Physis ☐ other			
TURNAROUND TIME ☒ STANDARD (15-20 business days) ☐ RUSH business days						REQUESTED ANALYSES PLEASE SEE PHYSIS SOS					
REPORT FORMAT ☒ PHYSIS PDF/EDD ☐ SWAMP EDD ☒ other Bight '23 EDD											
SPECIAL INSTRUCTIONS DOC, dissolved metals, and dissolved Hg samples were field-filtered through 0.45um filter. Nitrate/orthophosphate and MBAS samples were frozen following collection. Please submit invoices to APInvoice.US@woodplc.com (cc: chris.stransky@wsp.com & marissa.cuevas@wsp.com) and include the following info: (1) Project #: 2215100802.0003.PHYSIS (2) PO #: TBD (3) Org: 3151 (4) GL: 573000											
PHYSIS MATRIX CODES SW = seawater FW = freshwater RW = rainwater WW = wastewater DW = drinking water S = sediment T = tissue E = extract O = other (specify)											
SAMPLE ID		SAMPLE DESCRIPTION		SAMPLE date time		physis matrix code		# of bottles			
1	B23-FB	field blank	8/17/23	1340	FW	14	X	X	X	X	X
2	B23-WATER-EB	Niskin equip. blank	8/17/23	0655	FW	14	X	X	X	X	X
3	B23-SED-EB	TVV equip. blank	8/17/23	0740	FW	8		X	X	X	
4											
5											
6											
7											
8											
9											
10											

RELINQUISHED BY				RECEIVED BY			
print	signature	company	date & time	print	signature	company	date & time
Kate Buckley	Kate Buckley	WSP	8/22/2023 1300	Adam Idol	Adam Idol	Physis	8/22/23 1300



1904 E. Wright Circle, Anaheim CA 92806 www.physislabs.com info@physislabs.com CA ELAP #2769 main (714) 602-5320 fax (714) 602-5321

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Analyte	Analysis Method	Water Target Reporting Limits ^a	Units
Dissolved Organic Carbon (DOC)	SM 5310 B	0.5	mg/L
Total Organic Carbon (TOC)	SM 5310 B	0.5	mg/L
Total Suspended Solids (TSS)	SM 2540 D	1.0	mg/L
Ammonia as N	SM 4500-NH ₃ D	0.05	mg/L
Nitrate as N	SM 4500-NO ₃ E	0.05	mg/L
Total Orthophosphate as P	SM 4500-P E	0.05	mg/L
Oil and Grease	EPA 1664B	1.0	mg/L
Methylene Blue Active Substances (MBAS)	SM 5540 C	0.05	mg/L
Aluminum (Al) ^b	EPA 1640	6.0	µg/L
Antimony (Sb) ^b	EPA 1640	0.015	µg/L
Arsenic (As) ^b	EPA 1640	0.015	µg/L
Barium (Ba) ^b	EPA 200.8	0.5	µg/L
Beryllium (Be) ^b	EPA 1640	0.01	µg/L
Cadmium (Cd) ^b	EPA 1640	0.005	µg/L
Chromium (Cr) ^b	EPA 1640	0.025	µg/L
Cobalt (Co) ^b	EPA 1640	0.01	µg/L
Copper (Cu) ^b	EPA 1640	0.01	µg/L
Iron (Fe) ^b	EPA 1640	1.0	µg/L
Lead (Pb) ^b	EPA 1640	0.005	µg/L
Manganese (Mn) ^b	EPA 1640	0.02	µg/L
Mercury (Hg) ^b	EPA 245.7	0.02	µg/L
Molybdenum (Mo) ^b	EPA 1640	0.01	µg/L
Nickel (Ni) ^b	EPA 1640	0.005	µg/L
Selenium (Se) ^b	EPA 1640	0.015	µg/L
Silver (Ag) ^b	EPA 1640	0.02	µg/L
Thallium (Tl) ^b	EPA 1640	0.01	µg/L
Tin (Sn) ^b	EPA 1640	0.01	µg/L
Titanium (Ti) ^b	EPA 1640	0.07	µg/L
Vanadium (V) ^b	EPA 1640	0.04	µg/L
Zinc (Zn) ^b	EPA 1640	0.005	µg/L
Polycyclic Aromatic Hydrocarbons (PAHs) ^c	EPA 625.1	5.0	ng/L

Notes:

a. Reporting limits provided by Physis Environmental Laboratories.

b. Metals analysis will consist of both total and dissolved fractions. Samples for the dissolved fraction will be filtered in the field immediately after collection.

c. Includes 1-methylnaphthalene, 1-methylphenanthrene, 2,3,5-trimethylnaphthalene, 2,6-dimethylnaphthalene, 2-methylnaphthalene, acenaphthene, acenaphthylene, anthracene, benzo[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, and pyrene

µg/L = microgram(s) per liter; EPA = United States Environmental Protection Agency; mg/L = milligram(s) per liter; N = nitrogen; ng/L = nanogram(s) per liter; P = phosphorus; SM = Standard Method

Project Iteration ID: 2307008-004
Client Name: WSP USA
Project Name: 2023 Regional Harbor monitoring
Program Project #
2215100802.0003.PHYSIS PO #
TBD Org 3151 GL 573000
COC Page Number: 4 of 4
Bottle Label Color: Pink w/X

Sample Receipt Summary

Receiving Info

1. Initials Received By: DA
2. Date Received: 8/22/23
3. Time Received: 1300
4. Client Name: WSP
5. Courier Information: (Please circle)
 - Client
 - UPS
 - Area Fast
 - DRS
 - FedEx
 - GSO/GLS
 - Ontrac
 - PAMS
 - PHYSIS Driver:
- i. Start Time: 4.5hrs
 - ii. End Time: _____
 - iii. Total Mileage: _____
 - iv. Number of Pickups: _____
6. Container Information: (Please put the # of containers or circle none)
 - 12 Cooler
 - Styrofoam Cooler
 - Boxes
 - None
 - Carboy(s)
 - Carboy Trash Can(s)
 - Carboy Cap(s)
 - Other _____
7. What type of ice was used: (Please circle any that apply)
 - Wet Ice
 - Blue Ice
 - Dry Ice
 - Water
 - None
8. Randomly Selected Samples Temperature (°C): 4.8
Used I/R Thermometer # 2

Inspection Info

1. Initials Inspected By: DA

Sample Integrity Upon Receipt:

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

Notes:

CHAIN of CUSTODY

COMPANY NAME WSP USA Environment & Infrastructure Inc.		EMAIL chris.stransky@wsp.com		PROJECT NAME / NUMBER 2023 Regional Harbor Monitoring Program		COC PAGE 3 of 5	
PROJECT MANAGER Chris Stransky/Marisa Swiderski		marisa.swiderski@wsp.com		PO # TBD	PHYSIS SOS #	TYPE OF ICE USED ☒ WET ☐ BLUE ☐ DRY	
COMPANY ADDRESS 9177 Sky Park Court San Diego, CA 92123		PHONE (858)775-5547 (C. Stransky) (808)772-8740 (M. Swiderski)		SAMPLED BY Marisa Swiderski		SHIPPED VIA ☐ FEDEX ☐ UPS ☐ USPS ☐ Client ☒ Physis ☐ other	

TURNAROUND TIME
☒ STANDARD (15-20 business days) ☐ RUSH business days

REPORT FORMAT
☒ PHYSIS PDF/EDD ☐ SWAMP EDD ☒ other **Bight '23 EDD**

SPECIAL INSTRUCTIONS
See attached for analyte lists and methods.
DOC, dissolved metals, and dissolved Hg samples were field-filtered through 0.45um filter.
Nitrate/orthophosphate and MBAS samples were frozen following collection.
Please submit invoices to APInvoice.US@woodplc.com
(cc: chris.stransky@wsp.com & marissa.cuevas@wsp.com) and include the following info:
(1) Project #: 2215100802.0003.PHYSIS (2) PO #: TBD (3) Org: 3151 (4) GL: 573000

PHYSIS MATRIX CODES
SW = seawater FW = freshwater RW = rainwater WW = wastewater
DW = drinking water S = sediment T = tissue E = extract O = other (specify)

REQUESTED ANALYSES

PLEASE SEE PHYSIS SOS

SAMPLE ID		SAMPLE DESCRIPTION	SAMPLE date time		physis matrix code	# of bottles	RHMP Standard Seawater Analyte List (see attached Table 1)												comment: partially frozen
1	B23-12014	seawater	8/28/23	0945	SW	14	X												
2	B23-12047	seawater	8/28/23	1505	SW	14	X												
3	B23-12116	seawater	8/28/23	0810	SW	14	X												
4	B23-12121	seawater	8/28/23	1105	SW	14	X												
5	B23-23232	seawater	8/28/23	1135	SW	14	X												
6	B23-12122	seawater	8/28/23	1340	SW	14	X												
7																			
8																			
9																			
10																			

RELINQUISHED BY				RECEIVED BY			
print	signature	company	date & time	print	signature	company	date & time
Tyler Daniel	Tyler Daniel	WSP	8/30/23 1926	Kurt	RBT	PHYSIS	8/30/23

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Dissolved Organic Carbon (DOC)	SM 5310 B	0.5	mg/L
Total Organic Carbon (TOC)	SM 5310 B	0.5	mg/L
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Arsenic (As) ^b	EPA 1640	0.015	µg/L
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Beryllium (Be) ^b	EPA 1640	0.01	µg/L
Cadmium (Cd) ^b	EPA 1640	0.005	µg/L
Chromium (Cr) ^b	EPA 1640	0.025	µg/L
Cobalt (Co) ^b	EPA 1640	0.01	µg/L
Copper (Cu) ^b	EPA 1640	0.01	µg/L
Iron (Fe) ^b	EPA 1640	1.0	µg/L
Lead (Pb) ^b	EPA 1640	0.005	µg/L
Manganese (Mn) ^b	EPA 1640	0.02	µg/L
Mercury (Hg) ^b	EPA 245.7	0.02	µg/L
Molybdenum (Mo) ^b	EPA 1640	0.01	µg/L
Nickel (Ni) ^b	EPA 1640	0.005	µg/L
Selenium (Se) ^b	EPA 1640	0.015	µg/L
Silver (Ag) ^b	EPA 1640	0.02	µg/L
Thallium (Tl) ^b	EPA 1640	0.01	µg/L
Tin (Sn) ^b	EPA 1640	0.01	µg/L
Titanium (Ti) ^b	EPA 1640	0.07	µg/L
Vanadium (V) ^b	EPA 1640	0.04	µg/L
Zinc (Zn) ^b	EPA 1640	0.005	µg/L
Polycyclic Aromatic Hydrocarbons (PAHs) ^c	EPA 625.1	5.0	ng/L

Notes:

a. Reporting limits provided by Physis Environmental Laboratories.

b. Metals analysis will consist of both total and dissolved fractions. Samples for the dissolved fraction will be filtered in the field immediately after collection.

c. Includes 1-methylnaphthalene, 1-methylphenanthrene, 2,3,5-trimethylnaphthalene, 2,6-dimethylnaphthalene, 2-methylnaphthalene, 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, and pyrene

µg/L = microgram(s) per liter; EPA = United States Environmental Protection Agency; mg/L = milligram(s) per liter; N = nitrogen; ng/L = nanogram(s) per liter; P = phosphorus; SM = Standard Method

Project Iteration ID: 2307008-007
Client Name: WSP USA
Project Name: 2023 Regional Harbor monitoring
Program Project #
2215100802.0003.PHYSIS PO #
TBD Org 3151 GL 573000
COC Page Number: 3 of 3
Bottle Label Color: White w/--

Sample Receipt Summary

Receiving Info

1. Initials Received By: RAS
2. Date Received: 8/30/23
3. Time Received: 1526
4. Client Name: WSP
5. Courier Information: (Please circle)
 - Client
 - UPS
 - Area Fast
 - DRS
 - FedEx
 - GSO/GLS
 - Ontrac
 - PAMS
 - PHYSIS Driver: MAN
 - i. Start Time: 1:00 PM
 - ii. End Time: 7:00 PM
 - iii. Total Mileage: 240
 - iv. Number of Pickups: 2
6. Container Information: (Please put the # of containers or circle none)
 - 10 Cooler
 - Styrofoam Cooler
 - Boxes
 - None
 - Carboy(s)
 - Carboy Trash Can(s)
 - Carboy Cap(s)
 - Other
7. What type of ice was used: (Please circle any that apply)
 - Wet Ice
 - Blue Ice
 - Dry Ice
 - Water
 - None
8. Randomly Selected Samples Temperature (°C): 0.3
Used I/R Thermometer # 1-2

Inspection Info

1. Initials Inspected By: RGH

Sample Integrity Upon Receipt:

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

Notes:

CHAIN of CUSTODY

COMPANY NAME WSP USA Environment & Infrastructure Inc.		EMAIL chris.stransky@wsp.com		PROJECT NAME / NUMBER 2023 Regional Harbor Monitoring Program			COC PAGE 1 of 3		
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COMPANY ADDRESS 9177 Sky Park Court San Diego, CA 92123		PHONE (858)775-5547 (C. Stransky) (808)772-8740 (M. Swiderski)		SAMPLED BY Marisa Swiderski		SHIPPED VIA ☐ FEDEX ☐ UPS ☐ USPS ☐ Client ☒ Physis ☐ other			
TURNAROUND TIME ☒ STANDARD (15-20 business days) ☐ RUSH business days				REQUESTED ANALYSES PLEASE SEE PHYSIS SOS					
REPORT FORMAT ☒ PHYSIS PDF/EDD ☐ SWAMP EDD ☒ other Bight '23 EDD									
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PHYSIS MATRIX CODES SW = seawater FW = freshwater RW = rainwater WW = wastewater DW = drinking water S = sediment I = tissue E = extract Q = other (specify)									
SAMPLE ID		SAMPLE DESCRIPTION		SAMPLE date time		physis matrix code	# of bottles		
1	B23-12048	seawater	8/29/23 0740	SW	14	X			
2	B23-12049	seawater	8/29/23 0955	SW	14	X			
3	B23-12050	seawater	8/29/23 0850	SW	14	X			
4	B23-12051	seawater (MS/MSD)	8/29/23 1545	SW	22	X			
5	B23-12053	seawater	8/29/23 1320	SW	14	X			
6	B23-12054	seawater	8/29/23 1135	SW	14	X			
7	B23-12841	seawater	8/29/23 1435	SW	14	X			
8									
9									
10									
RELINQUISHED BY print signature company date & time Tyler Daniel <i>Tyler Daniel</i> WSP 8/31/23 1510				RECEIVED BY print signature company date & time AMAN <i>ASJ</i> PHYSIS 8/13/23 1540					

Table 1. RHMP Standard Analyte List – Seawater

Analyte	Analysis Method	Water Target Reporting Limits ^a	Units
Dissolved Organic Carbon (DOC)	SM 5310 B	0.5	mg/L
Total Organic Carbon (TOC)	SM 5310 B	0.5	mg/L
Total Suspended Solids (TSS)	SM 2540 D	1.0	mg/L
Ammonia as N	SM 4500-NH ₃ D	0.05	mg/L
Nitrate as N	SM 4500-NO ₃ E	0.05	mg/L
Total Orthophosphate as P	SM 4500-P E	0.05	mg/L
Oil and Grease	EPA 1664B	1.0	mg/L
Methylene Blue Active Substances (MBAS)	SM 5540 C	0.05	mg/L
Aluminum (Al) ^b	EPA 1640	6.0	µg/L
Antimony (Sb) ^b	EPA 1640	0.015	µg/L
Arsenic (As) ^b	EPA 1640	0.015	µg/L
Barium (Ba) ^b	EPA 200.8	0.5	µg/L
Beryllium (Be) ^b	EPA 1640	0.01	µg/L
Cadmium (Cd) ^b	EPA 1640	0.005	µg/L
Chromium (Cr) ^b	EPA 1640	0.025	µg/L
Cobalt (Co) ^b	EPA 1640	0.01	µg/L
Copper (Cu) ^b	EPA 1640	0.01	µg/L
Iron (Fe) ^b	EPA 1640	1.0	µg/L
Lead (Pb) ^b	EPA 1640	0.005	µg/L
Manganese (Mn) ^b	EPA 1640	0.02	µg/L
Mercury (Hg) ^b	EPA 245.7	0.02	µg/L
Molybdenum (Mo) ^b	EPA 1640	0.01	µg/L
Nickel (Ni) ^b	EPA 1640	0.005	µg/L
Selenium (Se) ^b	EPA 1640	0.015	µg/L
Silver (Ag) ^b	EPA 1640	0.02	µg/L
Thallium (Tl) ^b	EPA 1640	0.01	µg/L
Tin (Sn) ^b	EPA 1640	0.01	µg/L
Titanium (Ti) ^b	EPA 1640	0.07	µg/L
Vanadium (V) ^b	EPA 1640	0.04	µg/L
Zinc (Zn) ^b	EPA 1640	0.005	µg/L
Polycyclic Aromatic Hydrocarbons (PAHs) ^c	EPA 625.1	5.0	ng/L

Notes:

a. Reporting limits provided by Physis Environmental Laboratories.

b. Metals analysis will consist of both total and dissolved fractions. Samples for the dissolved fraction will be filtered in the field immediately after collection.

c. Includes 1-methylnaphthalene, 1-methylphenanthrene, 2,3,5-trimethylnaphthalene, 2,6-dimethylnaphthalene, 2-methylnaphthalene, 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, and pyrene

µg/L = microgram(s) per liter; EPA = United States Environmental Protection Agency; mg/L = milligram(s) per liter; N = nitrogen; ng/L = nanogram(s) per liter; P = phosphorus; SM = Standard Method

Project Iteration ID: 2307008-010
Client Name: WSP USA
Project Name: 2023 Regional Harbor monitoring
Program Project #
2215100802.0003.PHYSIS PO #
TBD Org 3151 GL 573000
COC Page Number: 3 of 3
Bottle Label Color: Black

Sample Receipt Summary

Receiving Info

1. Initials Received By: AD
2. Date Received: 8/31/23
3. Time Received: 1535
4. Client Name: WSP
5. Courier Information: (Please circle)
 - Client
 - UPS
 - FedEx
 - GSO/GLS
 - Area Fast
 - Ontrac
 - DRS
 - PAMS
 - PHYSIS Driver: MAN
 - i. Start Time: 12:30
 - ii. End Time: 2:00
 - iii. Total Mileage: 240
 - iv. Number of Pickups: 2
6. Container Information: (Please put the # of containers or circle none)
 - 10 Cooler
 - Styrofoam Cooler
 - Boxes
 - None
 - Carboy(s)
 - Carboy Trash Can(s)
 - Carboy Cap(s)
 - Other
7. What type of ice was used: (Please circle any that apply)
 - Wet Ice
 - Blue Ice
 - Dry Ice
 - Water
 - None
8. Randomly Selected Samples Temperature (°C): 4.5
Used I/R Thermometer # 1-2

Inspection Info

1. Initials Inspected By: AD

Sample Integrity Upon Receipt:

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

Notes:

B23-12051 lot 2 field filtered 40mL VOA w/H₂SO₄
was received broken/lost.

CHAIN of CUSTODY

[illegible]

CHAIN of CUSTODY

[illegible]

Table 1. RHMP Standard Analyte List – Seawater

Analyte	Analysis Method	Water Target Reporting Limits ^a	Units
Dissolved Organic Carbon (DOC)	SM 5310 B	0.5	mg/L
Total Organic Carbon (TOC)	SM 5310 B	0.5	mg/L
Total Suspended Solids (TSS)	SM 2540 D	1.0	mg/L
Ammonia as N	SM 4500-NH ₃ D	0.05	mg/L
Nitrate as N	SM 4500-NO ₃ E	0.05	mg/L
Total Orthophosphate as P	SM 4500-P E	0.05	mg/L
Oil and Grease	EPA 1664B	1.0	mg/L
Methylene Blue Active Substances (MBAS)	SM 5540 C	0.05	mg/L
Aluminum (Al) ^b	EPA 1640	6.0	µg/L
Antimony (Sb) ^b	EPA 1640	0.015	µg/L
Arsenic (As) ^b	EPA 1640	0.015	µg/L
Barium (Ba) ^b	EPA 200.8	0.5	µg/L
Beryllium (Be) ^b	EPA 1640	0.01	µg/L
Cadmium (Cd) ^b	EPA 1640	0.005	µg/L
Chromium (Cr) ^b	EPA 1640	0.025	µg/L
Cobalt (Co) ^b	EPA 1640	0.01	µg/L
Copper (Cu) ^b	EPA 1640	0.01	µg/L
Iron (Fe) ^b	EPA 1640	1.0	µg/L
Lead (Pb) ^b	EPA 1640	0.005	µg/L
Manganese (Mn) ^b	EPA 1640	0.02	µg/L
Mercury (Hg) ^b	EPA 245.7	0.02	µg/L
Molybdenum (Mo) ^b	EPA 1640	0.01	µg/L
Nickel (Ni) ^b	EPA 1640	0.005	µg/L
Selenium (Se) ^b	EPA 1640	0.015	µg/L
Silver (Ag) ^b	EPA 1640	0.02	µg/L
Thallium (Tl) ^b	EPA 1640	0.01	µg/L
Tin (Sn) ^b	EPA 1640	0.01	µg/L
Titanium (Ti) ^b	EPA 1640	0.07	µg/L
Vanadium (V) ^b	EPA 1640	0.04	µg/L
Zinc (Zn) ^b	EPA 1640	0.005	µg/L
Polycyclic Aromatic Hydrocarbons (PAHs) ^c	EPA 625.1	5.0	ng/L

Notes:

- a. Reporting limits provided by Physis Environmental Laboratories.
- b. Metals analysis will consist of both total and dissolved fractions. Samples for the dissolved fraction will be filtered in the field immediately after collection.
- c. Includes 1-methylnaphthalene, 1-methylphenanthrene, 2,3,5-trimethylnaphthalene, 2,6-dimethylnaphthalene, 2-methylnaphthalene, 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, and pyrene
- µg/L = microgram(s) per liter; EPA = United States Environmental Protection Agency; mg/L = milligram(s) per liter; N = nitrogen; ng/L = nanogram(s) per liter; P = phosphorus; SM = Standard Method

Project Iteration ID: 2307008-013
Client Name: WSP USA
Project Name: 2023 Regional Harbor monitoring
Program Project #
2215100802.0003.PHYSIS PO #
TBD Org 3151 GL 573000
COC Page Number: 4 of 4
Bottle Label Color: Light Blue w/dot

Sample Receipt Summary

Receiving Info

1. Initials Received By: RBS
2. Date Received: 9/1/23
3. Time Received: 1535
4. Client Name: WSP
5. Courier Information: (Please circle)

☐ Client	☐ UPS	☐ Area Fast	☐ DRS
☐ FedEx	☐ GSO/GLS	☐ Ontrac	☐ PAMS
☐ PHYSIS Driver: <u>RYAN</u>			
i. Start Time: <u>12PM</u>		iii. Total Mileage: <u>241</u>	
ii. End Time: <u>7PM</u>		iv. Number of Pickups: <u>2</u>	
6. Container Information: (Please put the # of containers or circle none)

☒ 13 Cooler	☐ Styrofoam Cooler	☐ Boxes	☐ None
☐ Carboy(s)	☐ Carboy Trash Can(s)	☐ Carboy Cap(s)	☐ Other _____
7. What type of ice was used: (Please circle any that apply)

☐ Wet Ice	☐ Blue Ice	☐ Dry Ice	☐ Water	☐ None
----------------------------------	-----------------------------------	----------------------------------	--------------------------------	-------------------------------
8. Randomly Selected Samples Temperature (°C): 6.4 Used I/R Thermometer # 1-2

Inspection Info

1. Initials Inspected By: RGH

Sample Integrity Upon Receipt:

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

Notes:

See temp



main (714) 602-5320 fax (714) 602-5321

Table 1. RHMP Standard Analyte List – Seawater

Analyte	Analysis Method	Water Target Reporting Limits ^a	Units
Dissolved Organic Carbon (DOC)	SM 5310 B	0.5	mg/L
Total Organic Carbon (TOC)	SM 5310 B	0.5	mg/L
Total Suspended Solids (TSS)	SM 2540 D	1.0	mg/L
Ammonia as N	SM 4500-NH ₃ D	0.05	mg/L
Nitrate as N	SM 4500-NO ₃ E	0.05	mg/L
Total Orthophosphate as P	SM 4500-P E	0.05	mg/L
Oil and Grease	EPA 1664B	1.0	mg/L
Methylene Blue Active Substances (MBAS)	SM 5540 C	0.05	mg/L
Aluminum (Al) ^b	EPA 1640	6.0	µg/L
Antimony (Sb) ^b	EPA 1640	0.015	µg/L
Arsenic (As) ^b	EPA 1640	0.015	µg/L
Barium (Ba) ^b	EPA 200.8	0.5	µg/L
Beryllium (Be) ^b	EPA 1640	0.01	µg/L
Cadmium (Cd) ^b	EPA 1640	0.005	µg/L
Chromium (Cr) ^b	EPA 1640	0.025	µg/L
Cobalt (Co) ^b	EPA 1640	0.01	µg/L
Copper (Cu) ^b	EPA 1640	0.01	µg/L
Iron (Fe) ^b	EPA 1640	1.0	µg/L
Lead (Pb) ^b	EPA 1640	0.005	µg/L
Manganese (Mn) ^b	EPA 1640	0.02	µg/L
Mercury (Hg) ^b	EPA 245.7	0.02	µg/L
Molybdenum (Mo) ^b	EPA 1640	0.01	µg/L
Nickel (Ni) ^b	EPA 1640	0.005	µg/L
Selenium (Se) ^b	EPA 1640	0.015	µg/L
Silver (Ag) ^b	EPA 1640	0.02	µg/L
Thallium (Tl) ^b	EPA 1640	0.01	µg/L
Tin (Sn) ^b	EPA 1640	0.01	µg/L
Titanium (Ti) ^b	EPA 1640	0.07	µg/L
Vanadium (V) ^b	EPA 1640	0.04	µg/L
Zinc (Zn) ^b	EPA 1640	0.005	µg/L
Polycyclic Aromatic Hydrocarbons (PAHs) ^c	EPA 625.1	5.0	ng/L

Notes:

a. Reporting limits provided by Physis Environmental Laboratories.

b. Metals analysis will consist of both total and dissolved fractions. Samples for the dissolved fraction will be filtered in the field immediately after collection.

c. Includes 1-methylnaphthalene, 1-methylphenanthrene, 2,3,5-trimethylnaphthalene, 2,6-dimethylnaphthalene, 2-methylnaphthalene, 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, and pyrene

µg/L = microgram(s) per liter; EPA = United States Environmental Protection Agency; mg/L = milligram(s) per liter; N = nitrogen; ng/L = nanogram(s) per liter; P = phosphorus; SM = Standard Method

Project Iteration ID: 2307008-016
Client Name: WSP USA
Project Name: 2023 Regional Harbor monitoring
Program Project #
2215100802.0003.PHYSIS PO #
TBD Org 3151 GL 573000

COC Page Number: 3 of 3

Bottle Label Color: Blue w/dot



Sample Receipt Summary

Receiving Info

1. Initials Received By: RBS
2. Date Received: 9/5/23
3. Time Received: 1640
4. Client Name: WSP
5. Courier Information: (Please circle)

☐ Client	☐ UPS	☐ Area Fast	☐ DRS
☐ FedEx	☐ GSO/GLS	☐ Ontrac	☐ PAMS
- ☒ PHYSIS Driver:

i. Start Time: <u>11:30</u>	iii. Total Mileage: <u>240</u>
ii. End Time: <u>7:30</u>	iv. Number of Pickups: <u>1</u>
6. Container Information: (Please put the # of containers or circle none)

☒ 6 Cooler	☐ Styrofoam Cooler	☐ Boxes	☐ None
☐ Carboy(s)	☐ Carboy Trash Can(s)	☐ Carboy Cap(s)	☐ Other
7. What type of ice was used: (Please circle any that apply)

☒ Wet Ice	☐ Blue Ice	☐ Dry Ice	☐ Water	☐ None
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8. Randomly Selected Samples Temperature (°C): 2.3

Used I/R Thermometer # 1-2

Inspection Info

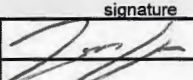
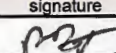
1. Initials Inspected By: RGH

Sample Integrity Upon Receipt:

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

Notes:

PHYSIS
TJ MRA SAZDA PLEHA AUDA AURA
ENVIRONMENTAL LABORATORIES, INC.

COMPANY NAME WSP USA Environment & Infrastructure Inc.			EMAIL chris.stransky@wsp.com			PROJECT NAME / NUMBER 2023 Regional Harbor Monitoring Program			COC PAGE 1 of 5						
PROJECT MANAGER Chris Stransky/Marisa Swiderski			marisa.swiderski@wsp.com			PO # TBD		PHYSIS SOS #		TYPE OF ICE USED ☒ WET ☐ BLUE ☐ DRY					
COMPANY ADDRESS 9177 Sky Park Court San Diego, CA 92123			PHONE (858)775-5547 (C. Stransky) (808)772-8740 (M. Swiderski)			SAMPLED BY Marisa Swiderski		SHIPPED VIA ☐ FEDEX ☐ UPS ☐ USPS ☐ Client ☒ Physis ☐ other							
TURNAROUND TIME ☒ STANDARD (15-20 business days) ☐ RUSH business days						REQUESTED ANALYSES PLEASE SEE PHYSIS SOS									
REPORT FORMAT ☒ PHYSIS PDF/EDD ☐ SWAMP EDD ☒ other Bight '23 EDD															
SPECIAL INSTRUCTIONS See attached for analyte lists and methods. DOC, dissolved metals, and dissolved Hg samples were field-filtered through 0.45um filter. Nitrate/orthophosphate and MBAS samples were frozen following collection. Please submit invoices to APInvoice.US@woodplc.com (cc: chris.stransky@wsp.com & marissa.cuevas@wsp.com) and include the following info: (1) Project #: 2215100802.0003.PHYSIS (2) PO #: TBD (3) Org: 3151 (4) GL: 573000															
PHYSIS MATRIX CODES SW = seawater FW = freshwater RW = rainwater WW = wastewater DW = drinking water S = sediment T = tissue E = extract O = other (specify)															
SAMPLE ID		SAMPLE DESCRIPTION		SAMPLE date time		physis matrix code	# of bottles	RHMP Standard Seawater Analyte List (see attached Table 1)							
1	B23-12099	seawater	9/5/23	1450	SW	14	X								
2	B23-12103	seawater	9/5/23	1400	SW	14	X								
3	B23-12107	seawater	9/5/23	1250	SW	14	X								
4	B23-12109	seawater (MS/MSD)	9/5/23	0810	SW	22	X								
5	B23-12110	seawater	9/5/23	0955	SW	14	X								
6	B23-12155	seawater	9/5/23	1105	SW	14	X								
7	B23-12093	seawater	9/6/23	1325	SW	14	X								
8	B23-12095	seawater	9/6/23	1130	SW	14	X								
9	B23-12096	seawater	9/6/23	1020	SW	14	X								
10	B23-12097	seawater	9/6/23	0905	SW	14	X								
RELINQUISHED BY						RECEIVED BY									
print		signature		company		date & time		print		signature		company		date & time	
Jacob Fletcher				WSP		9/7/23 1355		MAR				9/7/23		135	

CHAIN of CUSTODY

COMPANY NAME WSP USA Environment & Infrastructure Inc.		EMAIL chris.stransky@wsp.com		PROJECT NAME / NUMBER 2023 Regional Harbor Monitoring Program			COC PAGE 2 of 5	
PROJECT MANAGER Chris Stransky/Marisa Swiderski		marisa.swiderski@wsp.com		PO # TBD	PHYSIS SOS #	TYPE OF ICE USED ☒ WET ☐ BLUE ☐ DRY		
COMPANY ADDRESS 9177 Sky Park Court San Diego, CA 92123		PHONE (858)775-5547 (C. Stransky) (808)772-8740 (M. Swiderski)		SAMPLED BY Marisa Swiderski		SHIPPED VIA ☐ FEDEX ☐ UPS ☐ USPS ☐ Client ☒ Physis ☐ other		
TURNAROUND TIME ☒ STANDARD (15-20 business days) ☐ RUSH business days				REQUESTED ANALYSES PLEASE SEE PHYSIS SOS				
REPORT FORMAT ☒ PHYSIS PDF/EDD ☐ SWAMP EDD ☒ other Bight '23 EDD								
SPECIAL INSTRUCTIONS See attached for analyte lists and methods. DOC, dissolved metals, and dissolved Hg samples were field-filtered through 0.45um filter. Nitrate/orthophosphate and MBAS samples were frozen following collection. Please submit invoices to APlnvoice.US@woodplc.com (cc: chris.stransky@wsp.com & marissa.cuevas@wsp.com) and include the following info: (1) Project #: 2215100802.0003.PHYSIS (2) PO #: TBD (3) Org: 3151 (4) GL: 573000				RHMP Standard Seawater Analyte List (see attached Table 1)				
PHYSIS MATRIX CODES <u>SW</u> = seawater <u>FW</u> = freshwater <u>RW</u> = rainwater <u>WW</u> = wastewater <u>DW</u> = drinking water <u>S</u> = sediment <u>I</u> = tissue <u>E</u> = extract <u>O</u> = other (specify)								
SAMPLE ID		SAMPLE DESCRIPTION		SAMPLE date time		physis matrix code	# of bottles	
1	B23-12098	seawater	9/5/23 1545	SW	14	X		
2	B23-12102	seawater	9/6/23 0805	SW	14	X		
3	B23-12003	seawater	9/6/23 1455	SW	14	X		
4	B23-12091	seawater	9/6/23 1605	SW	14	X		
5								
6								
7								
8								
9								
10								

RELINQUISHED BY				RECEIVED BY			
print	signature	company	date & time	print	signature	company	date & time
Jacob Fletcher		WSP	9/7/23 1355	MAN		PHYSIS	9/7/23 1355

Table 1. RHMP Standard Analyte List – Seawater

Analyte	Analysis Method	Water Target Reporting Limits ^a	Units
Dissolved Organic Carbon (DOC)	SM 5310 B	0.5	mg/L
Total Organic Carbon (TOC)	SM 5310 B	0.5	mg/L
Total Suspended Solids (TSS)	SM 2540 D	1.0	mg/L
Ammonia as N	SM 4500-NH ₃ D	0.05	mg/L
Nitrate as N	SM 4500-NO ₃ E	0.05	mg/L
Total Orthophosphate as P	SM 4500-P E	0.05	mg/L
Oil and Grease	EPA 1664B	1.0	mg/L
Methylene Blue Active Substances (MBAS)	SM 5540 C	0.05	mg/L
Aluminum (Al) ^b	EPA 1640	6.0	µg/L
Antimony (Sb) ^b	EPA 1640	0.015	µg/L
Arsenic (As) ^b	EPA 1640	0.015	µg/L
Barium (Ba) ^b	EPA 200.8	0.5	µg/L
Beryllium (Be) ^b	EPA 1640	0.01	µg/L
Cadmium (Cd) ^b	EPA 1640	0.005	µg/L
Chromium (Cr) ^b	EPA 1640	0.025	µg/L
Cobalt (Co) ^b	EPA 1640	0.01	µg/L
Copper (Cu) ^b	EPA 1640	0.01	µg/L
Iron (Fe) ^b	EPA 1640	1.0	µg/L
Lead (Pb) ^b	EPA 1640	0.005	µg/L
Manganese (Mn) ^b	EPA 1640	0.02	µg/L
Mercury (Hg) ^b	EPA 245.7	0.02	µg/L
Molybdenum (Mo) ^b	EPA 1640	0.01	µg/L
Nickel (Ni) ^b	EPA 1640	0.005	µg/L
Selenium (Se) ^b	EPA 1640	0.015	µg/L
Silver (Ag) ^b	EPA 1640	0.02	µg/L
Thallium (Tl) ^b	EPA 1640	0.01	µg/L
Tin (Sn) ^b	EPA 1640	0.01	µg/L
Titanium (Ti) ^b	EPA 1640	0.07	µg/L
Vanadium (V) ^b	EPA 1640	0.04	µg/L
Zinc (Zn) ^b	EPA 1640	0.005	µg/L
Polycyclic Aromatic Hydrocarbons (PAHs) ^c	EPA 625.1	5.0	ng/L

Notes:

- a. Reporting limits provided by Physis Environmental Laboratories.
- b. Metals analysis will consist of both total and dissolved fractions. Samples for the dissolved fraction will be filtered in the field immediately after collection.
- c. Includes 1-methylnaphthalene, 1-methylphenanthrene, 2,3,5-trimethylnaphthalene, 2,6-dimethylnaphthalene, 2-methylnaphthalene, 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, and pyrene

µg/L = microgram(s) per liter; EPA = United States Environmental Protection Agency; mg/L = milligram(s) per liter; N = nitrogen; ng/L = nanogram(s) per liter; P = phosphorus; SM = Standard Method

Project Iteration ID: 2307008-019
Client Name: WSP USA
Project Name: 2023 Regional Harbor monitoring
Program Project #
2215100802.0003.PHYSIS PO #
TBD Org 3151 GL 573000
COC Page Number: 4 of 4
Bottle Label Color: Yellow w/dot

Sample Receipt Summary

Receiving Info

1. Initials Received By: [Signature]
2. Date Received: 9/7/23
3. Time Received: 1335
4. Client Name: WSP
5. Courier Information: (Please circle)
 - Client
 - FedEx
 - PHYSIS Driver: RMAN
 - UPS
 - GSO/GLS
 - Area Fast
 - Ontrac
 - DRS
 - PAMS
- i. Start Time: 11:00 AM
- ii. End Time: 5:00 PM
- iii. Total Mileage: 240
- iv. Number of Pickups: 1
6. Container Information: (Please put the # of containers or circle none)
 - 1 Cooler
 - ___ Styrofoam Cooler
 - ___ Boxes
 - ___ Carboy(s)
 - ___ Carboy Trash Can(s)
 - ___ Carboy Cap(s)
 - None
 - Other
7. What type of ice was used: (Please circle any that apply)
 - Wet Ice
 - Blue Ice
 - Dry Ice
 - Water
 - None
8. Randomly Selected Samples Temperature (°C): 4.1

Used I/R Thermometer # 1-2

Inspection Info

1. Initials Inspected By: [Signature]

Sample Integrity Upon Receipt:

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

Notes:

CHAIN of CUSTODY

COMPANY NAME WSP USA Environment & Infrastructure Inc.			EMAIL <u>chris.stransky@wsp.com</u>		PROJECT NAME / NUMBER 2023 Regional Harbor Monitoring Program			COC PAGE 1 of 6	
PROJECT MANAGER Chris Stransky/Marisa Swiderski			marisa.swiderski@wsp.com		PO # TBD		PHYSIS SOS #		TYPE OF ICE USED ☒ WET ☐ BLUE ☐ DRY
COMPANY ADDRESS 9177 Sky Park Court San Diego, CA 92123			PHONE (858)775-5547 (C. Stransky) (808)772-8740 (M. Swiderski)		SAMPLED BY Marisa Swiderski			SHIPPED VIA ☐ FEDEX ☐ UPS ☐ USPS ☐ Client ☒ Physis ☐ other	
TURNAROUND TIME ☒ STANDARD (15-20 business days) ☐ RUSH business days					REQUESTED ANALYSES PLEASE SEE PHYSIS SOS				
REPORT FORMAT ☒ PHYSIS PDF/EDD ☐ SWAMP EDD ☒ other Bight '23 EDD									
SPECIAL INSTRUCTIONS See attached for analyte lists and methods. DOC, dissolved metals, and dissolved Hg samples were field-filtered through 0.45um filter. Nitrate/orthophosphate and MBAS samples were frozen following collection. Please submit invoices to APInvoice.US@woodplc.com (cc: chris.stransky@wsp.com & marissa.cuevas@wsp.com) and include the following info: (1) Project #: 2215100802.0003.PHYSIS (2) PO #: TBD (3) Org: 3151 (4) GL: 573000									
PHYSIS MATRIX CODES <u>SW</u> = seawater <u>FW</u> = freshwater <u>RW</u> = rainwater <u>WW</u> = wastewater <u>DW</u> = drinking water <u>S</u> = sediment <u>T</u> = tissue <u>E</u> = extract <u>O</u> = other (specify)									
SAMPLE ID		SAMPLE DESCRIPTION		SAMPLE date time		physis matrix code	# of bottles	RHMP Standard Seawater Analyte List (see attached Table 1)	
1	B23-12089	seawater	9/7/23	1005	SW	14	X		
2	B23-12090	seawater	9/7/23	0815	SW	14	X		
3	B23-12004	seawater	9/7/23	1150	SW	14	X		
4	B23-12045	seawater (MS/MSD)	9/7/23	1525	SW	22	X		
5	B23-12046	seawater	9/7/23	1350	SW	14	X		
6	B23-12006	seawater	9/8/23	1335	SW	14	X		
7	B23-23117	seawater	9/8/23	1345	SW	14	X		
8	B23-12007	seawater	9/8/23	1145	SW	14	X		
9	B23-12008	seawater	9/8/23	1045	SW	14	X		
10	B23-12151	seawater	9/8/23	0930	SW	14	X		
RELINQUISHED BY									
print		signature		company		date & time		print	
Marisa Swiderski		Marisa Swiderski		WSP		9/11/23 1435		RMAN	

CHAIN of CUSTODY

COMPANY NAME WSP USA Environment & Infrastructure Inc.		EMAIL <u>chris.stransky@wsp.com</u>		PROJECT NAME / NUMBER 2023 Regional Harbor Monitoring Program		COC PAGE 2 of 6	
PROJECT MANAGER Chris Stransky/Marisa Swiderski		marisa.swiderski@wsp.com		PO # TBD	PHYSIS SOS #	TYPE OF ICE USED ☒ WET ☐ BLUE ☐ DRY	
COMPANY ADDRESS 9177 Sky Park Court San Diego, CA 92123		PHONE (858)775-5547 (C. Stransky) (808)772-8740 (M. Swiderski)		SAMPLED BY Marisa Swiderski		SHIPPED VIA ☐ FEDEX ☐ UPS ☐ USPS ☐ Client ☒ Physis ☐ other	
TURNAROUND TIME ☒ STANDARD (15-20 business days) ☐ RUSH business days				REQUESTED ANALYSES PLEASE SEE PHYSIS SOS			
REPORT FORMAT ☒ PHYSIS PDF/EDD ☐ SWAMP EDD ☒ other Bight '23 EDD							
SPECIAL INSTRUCTIONS See attached for analyte lists and methods. DOC, dissolved metals, and dissolved Hg samples were field-filtered through 0.45um filter. Nitrate/orthophosphate and MBAS samples were frozen following collection. Please submit invoices to APlInvoice.US@woodplc.com (cc: chris.stransky@wsp.com & marissa.cuevas@wsp.com) and include the following info: (1) Project #: 2215100802.0003.PHYSIS (2) PO #: TBD (3) Org: 3151 (4) GL: 573000				RHMP Standard Seawater Analyte List (see attached Table 1)			
PHYSIS MATRIX CODES <u>SW</u> = seawater <u>FW</u> = freshwater <u>RW</u> = rainwater <u>WW</u> = wastewater <u>DW</u> = drinking water <u>S</u> = sediment <u>T</u> = tissue <u>E</u> = extract <u>O</u> = other (specify)							
SAMPLE ID		SAMPLE DESCRIPTION		SAMPLE date time		physis matrix code	# of bottles
1	B23-12152	seawater	9/8/23	0810	SW	14	X
2							
3							
4							
5							
6							
7							
8							
9							
10							

RELINQUISHED BY				RECEIVED BY			
print	signature	company	date & time	print	signature	company	date & time
Marisa Swiderski	<i>Marisa Swiderski</i>	WSP	9/11/23 1435	RYAN	<i>[Signature]</i>	PHYSIS	9/11/23 1435

Table 1. RHMP Standard Analyte List – Seawater

Analyte	Analysis Method	Water Target Reporting Limits ^a	Units
Dissolved Organic Carbon (DOC)	SM 5310 B	0.5	mg/L
Total Organic Carbon (TOC)	SM 5310 B	0.5	mg/L
Total Suspended Solids (TSS)	SM 2540 D	1.0	mg/L
Ammonia as N	SM 4500-NH ₃ D	0.05	mg/L
Nitrate as N	SM 4500-NO ₃ E	0.05	mg/L
Total Orthophosphate as P	SM 4500-P E	0.05	mg/L
Oil and Grease	EPA 1664B	1.0	mg/L
Methylene Blue Active Substances (MBAS)	SM 5540 C	0.05	mg/L
Aluminum (Al) ^b	EPA 1640	6.0	µg/L
Antimony (Sb) ^b	EPA 1640	0.015	µg/L
Arsenic (As) ^b	EPA 1640	0.015	µg/L
Barium (Ba) ^b	EPA 200.8	0.5	µg/L
Beryllium (Be) ^b	EPA 1640	0.01	µg/L
Cadmium (Cd) ^b	EPA 1640	0.005	µg/L
Chromium (Cr) ^b	EPA 1640	0.025	µg/L
Cobalt (Co) ^b	EPA 1640	0.01	µg/L
Copper (Cu) ^b	EPA 1640	0.01	µg/L
Iron (Fe) ^b	EPA 1640	1.0	µg/L
Lead (Pb) ^b	EPA 1640	0.005	µg/L
Manganese (Mn) ^b	EPA 1640	0.02	µg/L
Mercury (Hg) ^b	EPA 245.7	0.02	µg/L
Molybdenum (Mo) ^b	EPA 1640	0.01	µg/L
Nickel (Ni) ^b	EPA 1640	0.005	µg/L
Selenium (Se) ^b	EPA 1640	0.015	µg/L
Silver (Ag) ^b	EPA 1640	0.02	µg/L
Thallium (Tl) ^b	EPA 1640	0.01	µg/L
Tin (Sn) ^b	EPA 1640	0.01	µg/L
Titanium (Ti) ^b	EPA 1640	0.07	µg/L
Vanadium (V) ^b	EPA 1640	0.04	µg/L
Zinc (Zn) ^b	EPA 1640	0.005	µg/L
Polycyclic Aromatic Hydrocarbons (PAHs) ^c	EPA 625.1	5.0	ng/L

Notes:

a. Reporting limits provided by Physis Environmental Laboratories.

b. Metals analysis will consist of both total and dissolved fractions. Samples for the dissolved fraction will be filtered in the field immediately after collection.

c. Includes 1-methylnaphthalene, 1-methylphenanthrene, 2,3,5-trimethylnaphthalene, 2,6-dimethylnaphthalene, 2-methylnaphthalene, 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, and pyrene

µg/L = microgram(s) per liter; EPA = United States Environmental Protection Agency; mg/L = milligram(s) per liter; N = nitrogen; ng/L = nanogram(s) per liter; P = phosphorus; SM = Standard Method

Project Iteration ID: 2307008-022
Client Name: WSP USA
Project Name: 2023 Regional Harbor monitoring
Program Project #
2215100802.0003.PHYSIS PO #
TBD Org 3151 GL 573000
COC Page Number: 4 of 4
Bottle Label Color: Purple w/X

Sample Receipt Summary

Receiving Info

1. Initials Received By: Ag
2. Date Received: 9/11/23
3. Time Received: 16:30
4. Client Name: WSP
5. Courier Information: (Please circle)
 - Client
 - UPS
 - FedEx
 - PHYSIS Driver: man
 - Area Fast
 - Ontrac
 - DRS
 - PAMS
- i. Start Time: 12:00
- ii. End Time: 5:30
- iii. Total Mileage: 240
- iv. Number of Pickups: 1
6. Container Information: (Please put the # of containers or circle none)
 - 3 Cooler
 - Styrofoam Cooler
 - Boxes
 - None
 - Carboy(s)
 - Carboy Trash Can(s)
 - Carboy Cap(s)
 - Other
7. What type of ice was used: (Please circle any that apply)
 - Wet Ice
 - Blue Ice
 - Dry Ice
 - Water
 - None
8. Randomly Selected Samples Temperature (°C): 0.2
- Used I/R Thermometer # 1

Inspection Info

1. Initials Inspected By: RGH

Sample Integrity Upon Receipt:

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

Notes:



main (714) 602-5320 fax (714) 602-5321

Table 1. RHMP Standard Analyte List – Seawater

Analyte	Analysis Method	Water Target Reporting Limits ^a	Units
Dissolved Organic Carbon (DOC)	SM 5310 B	0.5	mg/L
Total Organic Carbon (TOC)	SM 5310 B	0.5	mg/L
Total Suspended Solids (TSS)	SM 2540 D	1.0	mg/L
Ammonia as N	SM 4500-NH ₃ D	0.05	mg/L
Nitrate as N	SM 4500-NO ₃ E	0.05	mg/L
Total Orthophosphate as P	SM 4500-P E	0.05	mg/L
Oil and Grease	EPA 1664B	1.0	mg/L
Methylene Blue Active Substances (MBAS)	SM 5540 C	0.05	mg/L
Aluminum (Al) ^b	EPA 1640	6.0	µg/L
Antimony (Sb) ^b	EPA 1640	0.015	µg/L
Arsenic (As) ^b	EPA 1640	0.015	µg/L
Barium (Ba) ^b	EPA 200.8	0.5	µg/L
Beryllium (Be) ^b	EPA 1640	0.01	µg/L
Cadmium (Cd) ^b	EPA 1640	0.005	µg/L
Chromium (Cr) ^b	EPA 1640	0.025	µg/L
Cobalt (Co) ^b	EPA 1640	0.01	µg/L
Copper (Cu) ^b	EPA 1640	0.01	µg/L
Iron (Fe) ^b	EPA 1640	1.0	µg/L
Lead (Pb) ^b	EPA 1640	0.005	µg/L
Manganese (Mn) ^b	EPA 1640	0.02	µg/L
Mercury (Hg) ^b	EPA 245.7	0.02	µg/L
Molybdenum (Mo) ^b	EPA 1640	0.01	µg/L
Nickel (Ni) ^b	EPA 1640	0.005	µg/L
Selenium (Se) ^b	EPA 1640	0.015	µg/L
Silver (Ag) ^b	EPA 1640	0.02	µg/L
Thallium (Tl) ^b	EPA 1640	0.01	µg/L
Tin (Sn) ^b	EPA 1640	0.01	µg/L
Titanium (Ti) ^b	EPA 1640	0.07	µg/L
Vanadium (V) ^b	EPA 1640	0.04	µg/L
Zinc (Zn) ^b	EPA 1640	0.005	µg/L
Polycyclic Aromatic Hydrocarbons (PAHs) ^c	EPA 625.1	5.0	ng/L

Notes:

a. Reporting limits provided by Physis Environmental Laboratories.

b. Metals analysis will consist of both total and dissolved fractions. Samples for the dissolved fraction will be filtered in the field immediately after collection.

c. Includes 1-methylnaphthalene, 1-methylphenanthrene, 2,3,5-trimethylnaphthalene, 2,6-dimethylnaphthalene, 2-methylnaphthalene, 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, and pyrene

µg/L = microgram(s) per liter; EPA = United States Environmental Protection Agency; mg/L = milligram(s) per liter; N = nitrogen; ng/L = nanogram(s) per liter; P = phosphorus; SM = Standard Method

Project Iteration ID: 2307008-025
Client Name: WSP USA
Project Name: 2023 Regional Harbor monitoring
Program Project #
2215100802.0003.PHYSIS PO #
TBD Org 3151 GL 573000
COC Page Number: 3 of 3
Bottle Label Color: Green w/X

Sample Receipt Summary

Receiving Info

1. Initials Received By: MN
2. Date Received: 9/12/23
3. Time Received: 1606
4. Client Name: WSP
5. Courier Information: (Please circle)

☐ Client	☐ UPS	☐ Area Fast	☐ DRS
☐ FedEx	☐ GSO/GLS	☐ Ontrac	☐ PAMS
☐ PHYSIS Driver: <u>PUAN</u>			

 - i. Start Time: 11:30 AM
 - ii. End Time: 5:30 PM
 - iii. Total Mileage: 248
 - iv. Number of Pickups: 2
6. Container Information: (Please put the # of containers or circle none)

☒ 10 ⁺ Cooler	☐ Styrofoam Cooler	☐ Boxes	☐ None
☐ Carboy(s)	☐ Carboy Trash Can(s)	☐ Carboy Cap(s)	☐ Other
7. What type of ice was used: (Please circle any that apply)

☐ Wet Ice	☐ Blue Ice	☐ Dry Ice	☐ Water	☐ None
----------------------------------	-----------------------------------	----------------------------------	--------------------------------	-------------------------------
8. Randomly Selected Samples Temperature (°C): 4.8
Used I/R Thermometer # 1-2

Inspection Info

1. Initials Inspected By: RGH

Sample Integrity Upon Receipt:

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

Notes:

Sediment Chemistry COC Forms
(Physis Environmental Laboratories)

CHAIN of CUSTODY

COMPANY NAME WSP USA Environment & Infrastructure Inc.				EMAIL chris.stransky@wsp.com		PROJECT NAME / NUMBER 2023 Regional Harbor Monitoring Program				COC PAGE 2 of 3					
PROJECT MANAGER Chris Stransky/Marisa Swiderski				marisa.swiderski@wsp.com		PO # TBD		PHYSIS SOS #		TYPE OF ICE USED ☒ WET ☐ BLUE ☐ DRY					
COMPANY ADDRESS 9177 Sky Park Court San Diego, CA 92123				PHONE (858)775-5547 (C. Stransky) (808)772-8740 (M. Swiderski)		SAMPLED BY John Rudolph, Nick Jernack				SHIPPED VIA ☐ FEDEX ☐ UPS ☐ USPS ☐ Client ☒ Physis ☐ other					
TURNAROUND TIME ☒ STANDARD (15-20 business days) ☐ RUSH business days						REQUESTED ANALYSES PLEASE SEE PHYSIS SOS									
REPORT FORMAT ☒ PHYSIS PDF/EDD ☐ SWAMP EDD ☒ other Bight '23 EDD															
SPECIAL INSTRUCTIONS See attached for analyte lists and methods. Please submit invoices to APIInvoice.US@woodplc.com (cc: chris.stransky@wsp.com & marissa.cuevas@wsp.com) and include the following info: (1) Project #: 2215100802.0003.PHYSIS (2) PO #: TBD (3) Org: 3151 (4) GL: 573000															
PHYSIS MATRIX CODES <u>SW</u> = seawater <u>FW</u> = freshwater <u>RW</u> = rainwater <u>WW</u> = wastewater <u>DW</u> = drinking water <u>S</u> = sediment <u>T</u> = tissue <u>E</u> = extract <u>O</u> = other (specify)															
SAMPLE ID		SAMPLE DESCRIPTION		SAMPLE date time		physis matrix code	# of bottles	RHMP Standard Sediment Analyte List (see attached Table 2) Neonotinoids (EPA 8270E-MRM) (see attached Table 3 for analyte list) Tire-wear Compounds (EPA 8270E) (see attached Table 3 for analyte list)							
1	B23-12000	sediment	8/3/23	1250	S	2	X								
2	B23-12001	sediment	8/3/23	1610	S	2	X								
3	B23-12002	sediment	8/3/23	1020	S	2	X					X	X		
4	B23-12148	sediment	8/3/23	1425	S	2	X					X	X		
5	B23-12005	sediment	8/4/23	0955	S	2	X								
6	B23-12150	sediment	8/4/23	1330	S	2	X					X	X		
7															
8															
9															
10															
RELINQUISHED BY						RECEIVED BY									
print		signature		company		date & time		print		signature		company		date & time	
Marisa Swiderski		<i>Marisa Swiderski</i>		WSP		8/4/23 1725		Riley von Richter		<i>Riley von Richter</i>		WSP		8/4/23 1725	
Riley von Richter		<i>Riley von Richter</i>		WSP		8/7/23 1405		Adam Deen		<i>Adam Deen</i>		Physis		8/7/23 1410	

Table 2. RHMP Standard Analyte List – Sediment

Analyte	Analysis Method	Sediment Target Reporting Limits ^a	Units
Total Solids	SM 2540 B	0.1	%
Total Organic Carbon	EPA 9060	0.01	%
Grain Size	SM 2560 D	0.1	%
Ammonia as N	SM 4500-NH ₃ D	0.2	mg/kg
Total Nitrogen	EPA 9060	4.0	mg/kg
Total Phosphorus	EPA 6020	4.0	mg/kg
Acid Volatile Sulfides	Plumb 1981 & TERL	0.1	mg/kg
Simultaneous Extracted Metals	EPA 200.8	0.0004–0.0124	µmol/g
Aluminum	EPA 6020	N/A	mg/kg
Antimony	EPA 6020	0.05	mg/kg
Arsenic	EPA 6020	0.05	mg/kg
Barium	EPA 6020	N/A	mg/kg
Beryllium	EPA 6020	0.05	mg/kg
Cadmium	EPA 6020	0.01	mg/kg
Chromium	EPA 6020	0.05	mg/kg
Copper	EPA 6020	0.01	mg/kg
Iron	EPA 6020	5.0	mg/kg
Lead	EPA 6020	0.01	mg/kg
Mercury	EPA 245.7	0.02	mg/kg
Nickel	EPA 6020	0.02	mg/kg
Selenium	EPA 6020	0.05	mg/kg
Silver	EPA 6020	0.02	mg/kg
Zinc	EPA 6020	0.05	mg/kg
Polycyclic Aromatic Hydrocarbons (PAHs) ^b	EPA 8270E	5.0	µg/kg
Chlorinated Pesticides ^c	EPA 8270E	0.5–20	µg/kg
Pyrethroid Pesticides ^d	EPA 8270E-MRM	0.5	µg/kg
Polychlorinated Biphenyl (PCB) Congeners ^e	EPA 8270E	0.25	µg/kg
Polybrominated Diphenyl Ethers (PBDEs) ^f	EPA 8270E-NCI	0.1	µg/kg

Notes:

- a. Sediment target reporting limits provided by Physis Environmental Laboratories are on a dry-weight basis.
- b. Includes 1,6,7-trimethylnaphthalene, 1-methylnaphthalene, 1-methylphenanthrene, 2,6-dimethylnaphthalene, 2-methylnaphthalene, 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, and pyrene
- c. Includes 2,4'-DDD, 2,4'-DDE, 2,4'-DDT, 4,4'-DDD, 4,4'-DDE, 4,4'-DDMU, 4,4'-DDT, aldrin, BHC-alpha, BHC-beta, BHC-delta, BHC-gamma, cis-chlordane, trans-chlordane, cis-nonachlor, DCPA (Dacthal), dicofol, dieldrin, endosulfan sulfate, endosulfan-I, endosulfan-II, endrin, endrin aldehyde, endrin ketone, heptachlor, heptachlor epoxide, methoxychlor, mirex, oxychlordane, perthane, toxaphene, and trans-nonachlor.
- d. Includes allethrin, bifenthrin, cyfluthrin, lambda-cyhalothrin, cypermethrin, Danitol (fenpropathrin), deltamethrin/tralomethrin esfenvalerate, fenvalerate, fluvalinate, cis-permethrin, trans-permethrin, and prallethrin.
- e. Includes congeners: PCB-3, 5, 8, 15, 18, 27, 28, 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, 157, 158, 167, 168+132, 169, 170, 174, 177, 180, 183, 187, 189, 194, 195, 199(200), 201, 203, 206, and 209.
- f. Includes PBDE-17, 28, 47, 49, 66, 85, 99, 100, 138, 153, 154, 183, 190, and 209.
- µg/kg = microgram(s) per kilogram; µmol/g = micromole(s) per gram; EPA = United States Environmental Protection Agency; mg/kg = milligram(s) per kilogram; N = nitrogen; N/A = not applicable; SM = Standard Method

Table 3. Bight '23 CEC List – Sediment

Analyte	Analysis Method	Sediment Target Reporting Limits ^a	Units
Neonicotinoids ^{b, e}	EPA 8270E-MRM	5.0	µg/kg
Per- and Polyfluoroalkyl Substances (PFAS) ^{c, e}	EPA 1633	1.0	µg/kg
Tire-wear Compounds ^{d, e}	EPA 8270E	10	µg/kg

Notes:

a. Sediment target reporting limits provided by Physis Environmental Laboratories are on a dry-weight basis.

b. Includes acetamiprid, clothianidin, imidacloprid, thiacloprid, and thiamethoxam.

c. Includes perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA).

d. Includes 6PPD-quinone

e. Analyses for chemicals of emerging concern (CECs) will occur only at a subset of stations (see COC).

µg/kg = microgram(s) per kilogram; EPA = United States Environmental Protection Agency; SM = Standard Method

Project Iteration ID: 2307008-002
Client Name: WSP USA
Project Name: 2023 Regional Harbor monitoring
Program Project #
2215100802.0003.PHYSIS PO #
TBD Org 3151 GL 573000
COC Page Number: 4 of 4
Bottle Label Color: NA

Sample Receipt Summary

Receiving Info

1. Initials Received By: DA
2. Date Received: 8/7/23
3. Time Received: 1415
4. Client Name: WSP
5. Courier Information: (Please circle)
 - Client • UPS • Area Fast • DRS
 - FedEx • GSO/GLS • Ontrac • PAMS
 - PHYSIS Driver:
 - i. Start Time: 6 hrs
 - ii. End Time: _____
 - iii. Total Mileage: _____
 - iv. Number of Pickups: _____
6. Container Information: (Please put the # of containers or circle none)
 - 7 Cooler • ___ Styrofoam Cooler • ___ Boxes • None
 - ___ Carboy(s) • ___ Carboy Trash Can(s) • ___ Carboy Cap(s) • Other _____
7. What type of ice was used: (Please circle any that apply)
 - Wet Ice • Blue Ice • Dry Ice • Water • None
8. Randomly Selected Samples Temperature (°C): 1.6
Used I/R Thermometer # 1-2

Inspection Info

1. Initials Inspected By: DA

Sample Integrity Upon Receipt:

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

Notes:

CHAIN of CUSTODY

COMPANY NAME WSP USA Environment & Infrastructure Inc.			EMAIL <u>chris.stransky@wsp.com</u>			PROJECT NAME / NUMBER 2023 Regional Harbor Monitoring Program				COC PAGE 3 of 3	
PROJECT MANAGER Chris Stransky/Marisa Swiderski			marisa.swiderski@wsp.com			PO # TBD		PHYSIS SOS #		TYPE OF ICE USED ☒ WET ☐ BLUE ☐ DRY	
COMPANY ADDRESS 9177 Sky Park Court San Diego, CA 92123			PHONE (858)775-5547 (C. Stransky) (808)772-8740 (M. Swiderski)			SAMPLED BY John Rudolph, Nick Jernack				SHIPPED VIA ☐ FEDEX ☐ UPS ☐ USPS ☐ Client ☒ Physis ☐ other	
TURNAROUND TIME ☒ STANDARD (15-20 business days) ☐ RUSH business days						REQUESTED ANALYSES PLEASE SEE PHYSIS SOS PFOS, PFOA (EPA 1633) (see attached Table 3 for analyte list)					
REPORT FORMAT ☒ PHYSIS PDF/EDD ☐ SWAMP EDD ☒ other Bight '23 EDD											
SPECIAL INSTRUCTIONS Please submit invoices to APlInvoice.US@woodplc.com (cc: chris.stransky@wsp.com & marissa.cuevas@wsp.com) and include the following info: (1) Project #: 2215100802.0003.PHYSIS (2) PO #: TBD (3) Org: 3151 (4) GL: 573000											
PHYSIS MATRIX CODES <u>SW</u> = seawater <u>FW</u> = freshwater <u>RW</u> = rainwater <u>WW</u> = wastewater <u>DW</u> = drinking water <u>S</u> = sediment <u>I</u> = tissue <u>E</u> = extract <u>O</u> = other (specify)											
SAMPLE ID		SAMPLE DESCRIPTION		SAMPLE date time		physis matrix code		# of bottles			
1	B23-12002-PFAS-EB	equipment blank	8/3/23	0830	FW	1	X				
2	B23-12002-PFAS-S	sediment	8/3/23	0940	S	1	X				
3	B23-12148-PFAS-S	sediment	8/3/23	1410	S	1	X				
4	B23-12150-PFAS-S	sediment	8/4/23	1305	S	1	X				
5	B23-12150-PFAS-FB	field blank	8/4/23	1306	FW	1	X				
6											
7											
8											
9											
10											

RELINQUISHED BY				RECEIVED BY			
print	signature	company	date & time	print	signature	company	date & time
Marisa Swiderski	<i>Marisa Swiderski</i>	WSP	8/4/2023	Riley von Richter	<i>Riley von Richter</i>	WSP	8/4/23
Riley von Richter	<i>Riley von Richter</i>	WSP	8/7/23 1405	Adam Floer	<i>Adam Floer</i>	Physis	8/7/23 1410

Project Iteration ID: 2307008-003
Client Name: WSP USA
Project Name: 2023 Regional Harbor monitoring
Program Project #
2215100802.003.PHYSIS PO #
TBD Org 3151 GL 573000
COC Page Number: 2 of 2
Bottle Label Color: NA

Sample Receipt Summary

Receiving Info

1. Initials Received By: DA
2. Date Received: 8/7/23
3. Time Received: 1410
4. Client Name: WSP
5. Courier Information: (Please circle)

☐ Client	☐ UPS	☐ Area Fast	☐ DRS
☐ FedEx	☐ GSO/GLS	☐ Ontrac	☐ PAMS
☐ PHYSIS Driver:			
i. Start Time: <u>6 hrs</u>		iii. Total Mileage: _____	
ii. End Time: _____		iv. Number of Pickups: _____	
6. Container Information: (Please put the # of containers or circle none)

☒ Cooler	☐ Styrofoam Cooler	☐ Boxes	☐ None
☐ Carboy(s)	☐ Carboy Trash Can(s)	☐ Carboy Cap(s)	☐ Other _____
7. What type of ice was used: (Please circle any that apply)

☒ Wet Ice	☐ Blue Ice	☐ Dry Ice	☐ Water	☐ None
---	-----------------------------------	----------------------------------	--------------------------------	-------------------------------
8. Randomly Selected Samples Temperature (°C): 1.6 Used I/R Thermometer # 1-2

Inspection Info

1. Initials Inspected By: DA

Sample Integrity Upon Receipt:

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

Notes:

CHAIN of CUSTODY

COMPANY NAME WSP USA Environment & Infrastructure Inc.		EMAIL chris.stransky@wsp.com		PROJECT NAME / NUMBER 2023 Regional Harbor Monitoring Program			COC PAGE 3 of 4												
PROJECT MANAGER Chris Stransky/Marisa Swiderski		marisa.swiderski@wsp.com		PO # TBD	PHYSIS SOS #	TYPE OF ICE USED ☒ WET ☐ BLUE ☐ DRY													
COMPANY ADDRESS 9177 Sky Park Court San Diego, CA 92123		PHONE (858)775-5547 (C. Stransky) (808)772-8740 (M. Swiderski)		SAMPLED BY Marisa Swiderski		SHIPPED VIA ☐ FEDEX ☐ UPS ☐ USPS ☐ Client ☒ Physis ☐ other													
TURNAROUND TIME ☒ STANDARD (15-20 business days) ☐ RUSH business days				REQUESTED ANALYSES PLEASE SEE PHYSIS SOS															
REPORT FORMAT ☒ PHYSIS PDF/EDD ☐ SWAMP EDD ☒ other Bight '23 EDD																			
SPECIAL INSTRUCTIONS See attached for analyte lists and methods. Please submit invoices to APInvoice.US@woodplc.com (cc: chris.stransky@wsp.com & marissa.cuevas@wsp.com) and include the following info: (1) Project #: 2215100802.0003.PHYSIS (2) PO #: TBD (3) Org: 3151 (4) GL: 573000																			
PHYSIS MATRIX CODES SW = seawater FW = freshwater RW = rainwater WW = wastewater DW = drinking water S = sediment I = tissue E = extract O = other (specify)																			
SAMPLE ID		SAMPLE DESCRIPTION		SAMPLE date time		physis matrix code	# of bottles	ANALYTES											
1	B23-12063	sediment	8/17/23	1035	S	2	X												
2	B23-12064	sediment	8/17/23	1605	S	2	X	X	X										
3	B23-12065	sediment	8/17/23	1230	S	2	X												
4	B23-12066	sediment	8/17/23	1445	S	2	X												
5	B23-12059	sediment	8/18/23	1225	S	2	X												
6	B23-12060	sediment	8/18/23	1105	S	2	X												
7	B23-12061	sediment (MS/MSD)	8/18/23	1545	S	2	X	X	X										
8	B23-12062	sediment	8/18/23	1425	S	2	X												
9																			
10																			
RELINQUISHED BY							RECEIVED BY												
print		signature		company		date & time		print		signature		company		date & time					
Kate Buckley		Kate Buckley		WSP		8/22/2023 1300		Adam Dell		Adam Dell		Physis		8/22/23 1300					

Table 2. RHMP Standard Analyte List – Sediment

Analyte	Analysis Method	Sediment Target Reporting Limits ^a	Units
Total Solids	SM 2540 B	0.1	%
Total Organic Carbon	EPA 9060	0.01	%
Grain Size	SM 2560 D	0.1	%
Ammonia as N	SM 4500-NH ₃ D	0.2	mg/kg
Total Nitrogen	EPA 9060	4.0	mg/kg
Total Phosphorus	EPA 6020	4.0	mg/kg
Acid Volatile Sulfides	Plumb 1981 & TERL	0.1	mg/kg
Simultaneous Extracted Metals	EPA 200.8	0.0004–0.0124	μmol/g
Aluminum	EPA 6020	N/A	mg/kg
Antimony	EPA 6020	0.05	mg/kg
Arsenic	EPA 6020	0.05	mg/kg
Barium	EPA 6020	N/A	mg/kg
Beryllium	EPA 6020	0.05	mg/kg
Cadmium	EPA 6020	0.01	mg/kg
Chromium	EPA 6020	0.05	mg/kg
Copper	EPA 6020	0.01	mg/kg
Iron	EPA 6020	5.0	mg/kg
Lead	EPA 6020	0.01	mg/kg
Mercury	EPA 245.7	0.02	mg/kg
Nickel	EPA 6020	0.02	mg/kg
Selenium	EPA 6020	0.05	mg/kg
Silver	EPA 6020	0.02	mg/kg
Zinc	EPA 6020	0.05	mg/kg
Polycyclic Aromatic Hydrocarbons (PAHs) ^b	EPA 8270E	5.0	μg/kg
Chlorinated Pesticides ^c	EPA 8270E	0.5–20	μg/kg
Pyrethroid Pesticides ^d	EPA 8270E-MRM	0.5	μg/kg
Polychlorinated Biphenyl (PCB) Congeners ^e	EPA 8270E	0.25	μg/kg
Polybrominated Diphenyl Ethers (PBDEs) ^f	EPA 8270E-NCI	0.1	μg/kg

Notes:

- a. Sediment target reporting limits provided by Physis Environmental Laboratories are on a dry-weight basis.
- b. Includes 1,6,7-trimethylnaphthalene, 1-methylnaphthalene, 1-methylphenanthrene, 2,6-dimethylnaphthalene, 2-methylnaphthalene, 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, and pyrene.
- c. Includes 2,4'-DDD, 2,4'-DDE, 2,4'-DDT, 4,4'-DDD, 4,4'-DDE, 4,4'-DDMU, 4,4'-DDT, aldrin, BHC-alpha, BHC-beta, BHC-delta, BHC-gamma, cis-chlordane, trans-chlordane, cis-nonachlor, DCPA (Dacthal), dicofol, dieldrin, endosulfan sulfate, endosulfan-I, endosulfan-II, endrin, endrin aldehyde, endrin ketone, heptachlor, heptachlor epoxide, methoxychlor, mirex, oxychlordane, perthane, toxaphene, and trans-nonachlor.
- d. Includes allethrin, bifenthrin, cyfluthrin, lambda-cyhalothrin, cypermethrin, Danitol (fenpropathrin), deltamethrin/tralomethrin esfenvalerate, fenvalerate, fluvalinate, cis-permethrin, trans-permethrin, and prallethrin.
- e. Includes congeners: PCB-3, 5, 8, 15, 18, 27, 28, 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, 157, 158, 167, 168+132, 169, 170, 174, 177, 180, 183, 187, 189, 194, 195, 199(200), 201, 203, 206, and 209.
- f. Includes PBDE-17, 28, 47, 49, 66, 85, 99, 100, 138, 153, 154, 183, 190, and 209.
- μg/kg = microgram(s) per kilogram; μmol/g = micromole(s) per gram; EPA = United States Environmental Protection Agency; mg/kg = milligram(s) per kilogram; N = nitrogen; N/A = not applicable; SM = Standard Method

Table 3. Bight '23 CEC List – Sediment

Analyte	Analysis Method	Sediment Target Reporting Limits ^a	Units
Neonicotinoids ^{b, e}	EPA 8270E-MRM	5.0	µg/kg
Per- and Polyfluoroalkyl Substances (PFAS) ^{c, e}	EPA 1633	1.0	µg/kg
Tire-wear Compounds ^{d, e}	EPA 8270E	10	µg/kg

Notes:

a. Sediment target reporting limits provided by Physis Environmental Laboratories are on a dry-weight basis.

b. Includes acetamiprid, clothianidin, imidacloprid, thiacloprid, and thiamethoxam.

c. Includes perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA).

d. Includes 6PPD-quinone

e. Analyses for chemicals of emerging concern (CECs) will occur only at a subset of stations (see COC).

µg/kg = microgram(s) per kilogram; EPA = United States Environmental Protection Agency; SM = Standard Method

Project Iteration ID: 2307008-005
Client Name: WSP USA
Project Name: 2023 Regional Harbor monitoring
Program Project #
2215100802.0003.PHYSIS PO #
TBD Org 3151 GL 573000
COC Page Number: 4 of 4
Bottle Label Color: NA

Sample Receipt Summary

Receiving Info

1. Initials Received By: DA
2. Date Received: 8/22/23
3. Time Received: 1300
4. Client Name: WSP
5. Courier Information: (Please circle)
 - Client
 - UPS
 - Area Fast
 - DRS
 - FedEx
 - GSO/GLS
 - Ontrac
 - PAMS
 - PHYSIS Driver:
 - i. Start Time: 4.5hrs
 - ii. End Time: _____
 - iii. Total Mileage: _____
 - iv. Number of Pickups: _____
6. Container Information: (Please put the # of containers or circle none)
 - 12 Cooler
 - Styrofoam Cooler
 - Boxes
 - None
 - Carboy(s)
 - Carboy Trash Can(s)
 - Carboy Cap(s)
 - Other _____
7. What type of ice was used: (Please circle any that apply)
 - Wet Ice
 - Blue Ice
 - Dry Ice
 - Water
 - None
8. Randomly Selected Samples Temperature (°C): 4.8
Used I/R Thermometer #/ 2

Inspection Info

1. Initials Inspected By: DA

Sample Integrity Upon Receipt:

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

Notes:

CHAIN of CUSTODY

COMPANY NAME WSP USA Environment & Infrastructure Inc.			EMAIL chris.stransky@wsp.com		PROJECT NAME / NUMBER 2023 Regional Harbor Monitoring Program			COC PAGE 4 of 4	
PROJECT MANAGER Chris Stransky/Marisa Swiderski			marisa.swiderski@wsp.com		PO # TBD		PHYSIS SOS #		TYPE OF ICE USED ☒ WET ☐ BLUE ☐ DRY
COMPANY ADDRESS 9177 Sky Park Court San Diego, CA 92123			PHONE (858)775-5547 (C. Stransky) (808)772-8740 (M. Swiderski)		SAMPLED BY Marisa Swiderski		SHIPPED VIA ☐ FEDEX ☐ UPS ☐ USPS ☐ Client ☒ Physis ☐ other		
TURNAROUND TIME ☒ STANDARD (15-20 business days) ☐ RUSH business days					REQUESTED ANALYSES PLEASE SEE PHYSIS SOS PFOS, PFOA (EPA 1633) (see attached Table 3 for analyte list)				
REPORT FORMAT ☒ PHYSIS PDF/EDD ☐ SWAMP EDD ☒ other Bight '23 EDD									
SPECIAL INSTRUCTIONS Please submit invoices to APInvoice.US@woodplc.com (cc: chris.stransky@wsp.com & marissa.cuevas@wsp.com) and include the following info: (1) Project #: 2215100802.0003.PHYSIS (2) PO #: TBD (3) Org: 3151 (4) GL: 573000									
PHYSIS MATRIX CODES <u>SW</u> = seawater <u>FW</u> = freshwater <u>RW</u> = rainwater <u>WW</u> = wastewater <u>DW</u> = drinking water <u>S</u> = sediment <u>T</u> = tissue <u>E</u> = extract <u>O</u> = other (specify)									
SAMPLE ID		SAMPLE DESCRIPTION		SAMPLE date time		physis matrix code	# of bottles		
1	B23-12064-PFAS-S	sediment	8/17/23	1545	S	1	X		
2	B23-12064-PFAS-FB	field blank	8/17/23	1546	FW	1	X		
3	B23-12061-PFAS-S	sediment	8/18/23	1525	S	1	X		
4	B23-12061-PFAS-FB	field blank	8/18/23	1526	FW	1	X		
5									
6									
7									
8									
9									
10									

RELINQUISHED BY				RECEIVED BY			
print	signature	company	date & time	print	signature	company	date & time
Kate Buckley	<i>Kate Buckley</i>	WSP	8/22/2023 1300	Adam Icill	<i>Adam Icill</i>	Physis	8/20/23 1300

Project Iteration ID: 2307008-006
Client Name: WSP USA
Project Name: 2023 Regional Harbor monitoring
Program Project #
2215100802.0003.PHYSIS PO #
TBD Org 3151 GL 573000
COC Page Number: 2 of 2
Bottle Label Color: NA

Sample Receipt Summary

Receiving Info

1. Initials Received By: AS
2. Date Received: 8/02/23
3. Time Received: 1300
4. Client Name: WSP
5. Courier Information: (Please circle)
 - Client • UPS • Area Fast • DRS
 - FedEx • GSO/GLS • Ontrac • PAMS
 - PHYSIS Driver:
- i. Start Time: 4.5hrs
 - ii. End Time: _____
 - iii. Total Mileage: _____
 - iv. Number of Pickups: _____
6. Container Information: (Please put the # of containers or circle none)
 - 12 Cooler • ___ Styrofoam Cooler • ___ Boxes • None
 - ___ Carboy(s) • ___ Carboy Trash Can(s) • ___ Carboy Cap(s) • Other _____
7. What type of ice was used: (Please circle any that apply)
 - Wet Ice • Blue Ice • Dry Ice • Water • None
8. Randomly Selected Samples Temperature (°C): 4.8 Used I/R Thermometer # 2

Inspection Info

1. Initials Inspected By: AS

Sample Integrity Upon Receipt:

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

Notes:

CHAIN of CUSTODY

[illegible]

CHAIN of CUSTODY

COMPANY NAME WSP USA Environment & Infrastructure Inc.				EMAIL chris.stransky@wsp.com				PROJECT NAME / NUMBER 2023 Regional Harbor Monitoring Program				COC PAGE 4 of 5					
PROJECT MANAGER Chris Stransky/Marisa Swiderski				PHONE marisa.swiderski@wsp.com				PO # TBD		PHYSIS SOS #		TYPE OF ICE USED ☒ WET ☐ BLUE ☐ DRY					
COMPANY ADDRESS 9177 Sky Park Court San Diego, CA 92123				PHONE (858)775-5547 (C. Stransky) (808)772-8740 (M. Swiderski)				SAMPLED BY Marisa Swiderski		SHIPPED VIA ☐ FEDEX ☐ UPS ☐ USPS ☐ Client ☒ Physis ☐ other							
TURNAROUND TIME ☒ STANDARD (15-20 business days) ☐ RUSH business days												REQUESTED ANALYSES PLEASE SEE PHYSIS SOS					
REPORT FORMAT ☒ PHYSIS PDF/EDD ☐ SWAMP EDD ☒ other Bight '23 EDD																	
SPECIAL INSTRUCTIONS See attached for analyte lists and methods. Please submit invoices to APInvoice.US@woodplc.com (cc: chris.stransky@wsp.com & marissa.cuevas@wsp.com) and include the following info: (1) Project #: 2215100802.0003.PHYSIS (2) PO #: TBD (3) Org: 3151 (4) GL: 573000																	
PHYSIS MATRIX CODES SW = seawater FW = freshwater RW = rainwater WW = wastewater DW = drinking water S = sediment I = tissue E = extract O = other (specify)																	
SAMPLE ID		SAMPLE DESCRIPTION		SAMPLE date time		physis matrix code	# of bottles	RHMP Standard Sediment Analyte List (see attached Table 2) Neonicotinoids (EPA 8270E-MRM) (see attached Table 3 for analyte list) Tire-wear Compounds (EPA 8270E) (see attached Table 3 for analyte list)									
1	B23-12014	sediment	8/28/23	1025	S	2	X									X	X
2	B23-12047	sediment	8/28/23	1545	S	2	X									X	X
3	B23-12116	sediment	8/28/23	0905	S	2	X										
4	B23-12121	sediment	8/28/23	1205	S	2	X										
5	B23-23232	sediment	8/28/23	1215	S	2	X										
6	B23-12122	sediment	8/28/23	1425	S	2	X									X	X
7																	
8																	
9																	
10																	
RELINQUISHED BY								RECEIVED BY									
print		signature		company		date & time		print		signature		company		date & time			
Tyler Daniel		Tyler Daniel		WSP		8/30/23 1526		ryan		MBJ		PHY S I S		8/30 1526			

Table 2. RHMP Standard Analyte List – Sediment

Analyte	Analysis Method	Sediment Target Reporting Limits ^a	Units
Total Solids	SM 2540 B	0.1	%
Total Organic Carbon	EPA 9060	0.01	%
Grain Size	SM 2560 D	0.1	%
Ammonia as N	SM 4500-NH ₃ D	0.2	mg/kg
Total Nitrogen	EPA 9060	4.0	mg/kg
Total Phosphorus	EPA 6020	4.0	mg/kg
Acid Volatile Sulfides	Plumb 1981 & TERL	0.1	mg/kg
Simultaneous Extracted Metals	EPA 200.8	0.0004–0.0124	µmol/g
Aluminum	EPA 6020	N/A	mg/kg
Antimony	EPA 6020	0.05	mg/kg
Arsenic	EPA 6020	0.05	mg/kg
Barium	EPA 6020	N/A	mg/kg
Beryllium	EPA 6020	0.05	mg/kg
Cadmium	EPA 6020	0.01	mg/kg
Chromium	EPA 6020	0.05	mg/kg
Copper	EPA 6020	0.01	mg/kg
Iron	EPA 6020	5.0	mg/kg
Lead	EPA 6020	0.01	mg/kg
Mercury	EPA 245.7	0.02	mg/kg
Nickel	EPA 6020	0.02	mg/kg
Selenium	EPA 6020	0.05	mg/kg
Silver	EPA 6020	0.02	mg/kg
Zinc	EPA 6020	0.05	mg/kg
Polycyclic Aromatic Hydrocarbons (PAHs) ^b	EPA 8270E	5.0	µg/kg
Chlorinated Pesticides ^c	EPA 8270E	0.5–20	µg/kg
Pyrethroid Pesticides ^d	EPA 8270E-MRM	0.5	µg/kg
Polychlorinated Biphenyl (PCB) Congeners ^e	EPA 8270E	0.25	µg/kg
Polybrominated Diphenyl Ethers (PBDEs) ^f	EPA 8270E-NCI	0.1	µg/kg

Notes:

a. Sediment target reporting limits provided by Physis Environmental Laboratories are on a dry-weight basis.

b. Includes 1,6,7-trimethylnaphthalene, 1-methylnaphthalene, 1-methylphenanthrene, 2,6-dimethylnaphthalene, 2-methylnaphthalene, 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, and pyrene

c. Includes 2,4'-DDD, 2,4'-DDE, 2,4'-DDT, 4,4'-DDD, 4,4'-DDE, 4,4'-DDMU, 4,4'-DDT, aldrin, BHC-alpha, BHC-beta, BHC-delta, BHC-gamma, cis-chlordane, trans-chlordane, cis-nonachlor, DCPA (Dacthal), dicofol, dieldrin, endosulfan sulfate, endosulfan-I, endosulfan-II, endrin, endrin aldehyde, endrin ketone, heptachlor, heptachlor epoxide, methoxychlor, mirex, oxychlordane, perthane, toxaphene, and trans-nonachlor.

d. Includes allethrin, bifenthrin, cyfluthrin, lambda-cyhalothrin, cypermethrin, Danitol (fenpropathrin), deltamethrin/tralomethrin esfenvalerate, fenvalerate, fluvalinate, cis-permethrin, trans-permethrin, and prallethrin.

e. Includes congeners: PCB-3, 5, 8, 15, 18, 27, 28, 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, 157, 158, 167, 168+132, 169, 170, 174, 177, 180, 183, 187, 189, 194, 195, 199(200), 201, 203, 206, and 209.

f. Includes PBDE-17, 28, 47, 49, 66, 85, 99, 100, 138, 153, 154, 183, 190, and 209.

µg/kg = microgram(s) per kilogram; µmol/g = micromole(s) per gram; EPA = United States Environmental Protection Agency; mg/kg = milligram(s) per kilogram; N = nitrogen; N/A = not applicable; SM = Standard Method

Table 3. Bight '23 CEC List – Sediment

Analyte	Analysis Method	Sediment Target Reporting Limits ^a	Units
Neonicotinoids ^{b, e}	EPA 8270E-MRM	5.0	µg/kg
Per- and Polyfluoroalkyl Substances (PFAS) ^{c, e}	EPA 1633	1.0	µg/kg
Tire-wear Compounds ^{d, e}	EPA 8270E	10	µg/kg

Notes:

a. Sediment target reporting limits provided by Physis Environmental Laboratories are on a dry-weight basis.

b. Includes acetamiprid, clothianidin, imidacloprid, thiacloprid, and thiamethoxam.

c. Includes perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA).

d. Includes 6PPD-quinone

e. Analyses for chemicals of emerging concern (CECs) will occur only at a subset of stations (see COC).

µg/kg = microgram(s) per kilogram; EPA = United States Environmental Protection Agency; SM = Standard Method

Project Iteration ID: 2307008-008
Client Name: WSP USA
Project Name: 2023 Regional Harbor monitoring
Program Project #
2215100802.0003.PHYSIS PO #
TBD Org 3151 GL 573000
COC Page Number: 5 of 5
Bottle Label Color: Light Blue

Sample Receipt Summary

Receiving Info

1. Initials Received By: RBS
2. Date Received: 8/30/23
3. Time Received: 15 26
4. Client Name: _____
5. Courier Information: (Please circle)

• Client	• UPS	• Area Fast	• DRS
• FedEx	• GSO/GLS	• Ontrac	• PAMS
• PHYSIS Driver: <u>MAN</u>			
i. Start Time: <u>1:00 PM</u>		iii. Total Mileage: <u>240</u>	
ii. End Time: <u>7:00 PM</u>		iv. Number of Pickups: <u>2</u>	
6. Container Information: (Please put the # of containers or circle none)

• <u>10</u> Cooler	• ___ Styrofoam Cooler	• ___ Boxes	• None
• ___ Carboy(s)	• ___ Carboy Trash Can(s)	• ___ Carboy Cap(s)	• Other _____
7. What type of ice was used: (Please circle any that apply)

• Wet Ice	• Blue Ice	• Dry Ice	• Water	• None
-----------	------------	-----------	---------	--------
8. Randomly Selected Samples Temperature (°C): 0.3
Used I/R Thermometer # 1-2

Inspection Info

1. Initials Inspected By: RGH

Sample Integrity Upon Receipt:

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

Notes:

CHAIN of CUSTODY

COMPANY NAME WSP USA Environment & Infrastructure Inc.			EMAIL chris.stransky@wsp.com			PROJECT NAME / NUMBER 2023 Regional Harbor Monitoring Program				COC PAGE 2 of 5					
PROJECT MANAGER Chris Stransky/Marisa Swiderski			marisa.swiderski@wsp.com			PO # TBD		PHYSIS SOS #		TYPE OF ICE USED ☒ WET ☐ BLUE ☐ DRY					
COMPANY ADDRESS 9177 Sky Park Court San Diego, CA 92123			PHONE (858)775-5547 (C. Stransky) (808)772-8740 (M. Swiderski)			SAMPLED BY Marisa Swiderski		SHIPPED VIA ☐ FEDEX ☐ UPS ☐ USPS ☐ Client ☒ Physis ☐ other							
TURNAROUND TIME ☒ STANDARD (15-20 business days) ☐ RUSH business days						REQUESTED ANALYSES PLEASE SEE PHYSIS SOS									
REPORT FORMAT ☒ PHYSIS PDF/EDD ☐ SWAMP EDD ☒ other Bight '23 EDD															
SPECIAL INSTRUCTIONS Please submit invoices to APInvoice.US@woodplc.com (cc: chris.stransky@wsp.com & marissa.cuevas@wsp.com) and include the following info: (1) Project #: 2215100802.0003.PHYSIS (2) PO #: TBD (3) Org: 3151 (4) GL: 573000															
PHYSIS MATRIX CODES SW = seawater FW = freshwater RW = rainwater WW = wastewater DW = drinking water S = sediment I = tissue E = extract O = other (specify)															
SAMPLE ID		SAMPLE DESCRIPTION		SAMPLE date time		physis matrix code	# of bottles	PFOS, PFOA (EPA 1633) (see attached Table 3 for analyte list)							
1	B23-12022-PFAS-S	sediment	8/23/23	0835	S	1	X								
2	B23-12022-PFAS-FB	field blank	8/23/23	0836	FW	1	X								
3	B23-12023-PFAS-S	sediment	8/22/23	0920	S	1	X								
4	B23-12024-PFAS-S	sediment	8/22/23	1435	S	1	X								
5	B23-12024-PFAS-FB	field blank	8/22/23	1436	FW	1	X								
6	B23-12026-PFAS-S	sediment	8/22/23	1140	S	1	X								
7	B23-12026-PFAS-FB	field blank	8/22/23	1141	FW	1	X								
8	B23-12055-PFAS-S	sediment	8/22/23	1535	S	1	X								
9	B23-12056-PFAS-S	sediment	8/23/23	0725	S	1	X								
10	B23-12058-PFAS-S	sediment	8/22/23	0810	S	1	X								
RELINQUISHED BY								RECEIVED BY							
print		signature		company		date & time		print		signature		company		date & time	
Tyler Daniel		Tyler Daniel		WSP		8/30/23 1526		Ryan		Ryan		PHYSIS		8/30 1526	

CHAIN of CUSTODY

COMPANY NAME WSP USA Environment & Infrastructure Inc.			EMAIL chris.stransky@wsp.com		PROJECT NAME / NUMBER 2023 Regional Harbor Monitoring Program				COC PAGE 5 of 5						
PROJECT MANAGER Chris Stransky/Marisa Swiderski			marisa.swiderski@wsp.com		PO # TBD		PHYSIS SOS #		TYPE OF ICE USED ☒ WET ☐ BLUE ☐ DRY						
COMPANY ADDRESS 9177 Sky Park Court San Diego, CA 92123			PHONE (858)775-5547 (C. Stransky) (808)772-8740 (M. Swiderski)		SAMPLED BY Marisa Swiderski				SHIPPED VIA ☐ FEDEX ☐ UPS ☐ USPS ☐ Client ☒ Physis ☐ other						
TURNAROUND TIME ☒ STANDARD (15-20 business days) ☐ RUSH business days					REQUESTED ANALYSES PLEASE SEE PHYSIS SOS										
REPORT FORMAT ☒ PHYSIS PDF/EDD ☐ SWAMP EDD ☒ other Bight '23 EDD															
SPECIAL INSTRUCTIONS Please submit invoices to APInvoice.US@woodplc.com (cc: chris.stransky@wsp.com & marissa.cuevas@wsp.com) and include the following info: (1) Project #: 2215100802.0003.PHYSIS (2) PO #: TBD (3) Org: 3151 (4) GL: 573000															
PHYSIS MATRIX CODES SW = seawater FW = freshwater RW = rainwater WW = wastewater DW = drinking water S = sediment I = tissue E = extract O = other (specify)															
SAMPLE ID		SAMPLE DESCRIPTION		SAMPLE date time		physis matrix code	# of bottles	PFOS, PFOA (EPA 1633) (see attached Table 3 for analyte list)							
1	B23-12014-PFAS-S	sediment	8/28/23	1005	S	1	X								
2	B23-12014-PFAS-FB	field blank	8/28/23	1006	FW	1	X								
3	B23-12047-PFAS-S	sediment	8/28/23	1520	S	1	X								
4	B23-12047-PFAS-FB	field blank	8/28/23	1521	FW	1	X								
5	B23-12122-PFAS-S	sediment	8/28/23	1355	S	1	X								
6	B23-12122-PFAS-FB	field blank	8/28/23	1356	FW	1	X								
7															
8															
9															
10															
RELINQUISHED BY				RECEIVED BY											
print		signature		company		date & time		print		signature		company		date & time	
Tyler Daniel		Tyler Daniel		WSP		8/30/23 1526		ryan		PSS		PHYSIS		8/30 1526	

Project Iteration ID: 2307008-009
Client Name: WSP USA
Project Name: 2023 Regional Harbor monitoring
Program Project #
2215100802.0003.PHYSIS PO #
TBD Org 3151 GL 573000
COC Page Number: 3 of 3
Bottle Label Color: Light Blue

Sample Receipt Summary

Receiving Info

1. Initials Received By: RBS
2. Date Received: 8/30/23
3. Time Received: 1526
4. Client Name: WSP
5. Courier Information: (Please circle)
 - Client
 - UPS
 - FedEx
 - PHYSIS Driver: MAN
 - Area Fast
 - Ontrac
 - DRS
 - PAMS
- i. Start Time: 1:00 PM
- ii. End Time: 7:00 PM
- iii. Total Mileage: 240
- iv. Number of Pickups: 2
6. Container Information: (Please put the # of containers or circle none)
 - 10 Cooler
 - Styrofoam Cooler
 - Boxes
 - None
 - Carboy(s)
 - Carboy Trash Can(s)
 - Carboy Cap(s)
 - Other
7. What type of ice was used: (Please circle any that apply)
 - Wet Ice
 - Blue Ice
 - Dry Ice
 - Water
 - None
8. Randomly Selected Samples Temperature (°C): 0.3
- Used I/R Thermometer # 1-2

Inspection Info

1. Initials Inspected By: RCH

Sample Integrity Upon Receipt:

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

Notes:

CHAIN of CUSTODY

COMPANY NAME WSP USA Environment & Infrastructure Inc.				EMAIL chris.stransky@wsp.com				PROJECT NAME / NUMBER 2023 Regional Harbor Monitoring Program				COC PAGE 2 of 3					
PROJECT MANAGER Chris Stransky/Marisa Swiderski				marisa.swiderski@wsp.com				PO # TBD		PHYSIS SOS #		TYPE OF ICE USED ☒ WET ☐ BLUE ☐ DRY					
COMPANY ADDRESS 9177 Sky Park Court San Diego, CA 92123				PHONE (858)775-5547 (C. Stransky) (808)772-8740 (M. Swiderski)				SAMPLED BY Marisa Swiderski				SHIPPED VIA ☐ FEDEX ☐ UPS ☐ USPS ☐ Client ☒ Physis ☐ other					
TURNAROUND TIME ☒ STANDARD (15-20 business days) ☐ RUSH business days								REQUESTED ANALYSES PLEASE SEE PHYSIS SOS									
REPORT FORMAT ☒ PHYSIS PDF/EDD ☐ SWAMP EDD ☒ other Bight '23 EDD																	
SPECIAL INSTRUCTIONS See attached for analyte lists and methods. Please submit invoices to APInvoice.US@woodplc.com (cc: chris.stransky@wsp.com & marissa.cuevas@wsp.com) and include the following info: (1) Project #: 2215100802.0003.PHYSIS (2) PO #: TBD (3) Org: 3151 (4) GL: 573000																	
PHYSIS MATRIX CODES SW = seawater FW = freshwater RW = rainwater WW = wastewater DW = drinking water S = sediment I = tissue E = extract O = other (specify)																	
SAMPLE ID		SAMPLE DESCRIPTION		SAMPLE date time		physis matrix code	# of bottles	RHMP Standard Sediment Analyte List (see attached Table 2) Neonicotinoids (EPA 8270E-MRM) (see attached Table 3 for analyte list) Tire-wear Compounds (EPA 8270E) (see attached Table 3 for analyte list)									
1	B23-12048	sediment	8/29/23	0815	S	2	X									X	X
2	B23-12049	sediment	8/29/23	1040	S	2	X									X	X
3	B23-12050	sediment	8/29/23	0915	S	2	X										
4	B23-12051	sediment (MS/MSD)	8/29/23	1625	S	2	X									X	X
5	B23-12053	sediment	8/29/23	1400	S	2	X									X	X
6	B23-12054	sediment	8/29/23	1215	S	2	X										
7	B23-12841	sediment	8/29/23	1510	S	2	X									X	X
8																	
9																	
10																	

RELINQUISHED BY				RECEIVED BY			
print	signature	company	date & time	print	signature	company	date & time
Tyler Daniel	<i>Tyler Daniel</i>	WSP	8/31/23 1510	MAN	<i>MAN</i>	PHYGIS	8/13/23 1510

Table 2. RHMP Standard Analyte List – Sediment

Analyte	Analysis Method	Sediment Target Reporting Limits ^a	Units
Total Solids	SM 2540 B	0.1	%
Total Organic Carbon	EPA 9060	0.01	%
Grain Size	SM 2560 D	0.1	%
Ammonia as N	SM 4500-NH ₃ D	0.2	mg/kg
Total Nitrogen	EPA 9060	4.0	mg/kg
Total Phosphorus	EPA 6020	4.0	mg/kg
Acid Volatile Sulfides	Plumb 1981 & TERL	0.1	mg/kg
Simultaneous Extracted Metals	EPA 200.8	0.0004–0.0124	μmol/g
Aluminum	EPA 6020	N/A	mg/kg
Antimony	EPA 6020	0.05	mg/kg
Arsenic	EPA 6020	0.05	mg/kg
Barium	EPA 6020	N/A	mg/kg
Beryllium	EPA 6020	0.05	mg/kg
Cadmium	EPA 6020	0.01	mg/kg
Chromium	EPA 6020	0.05	mg/kg
Copper	EPA 6020	0.01	mg/kg
Iron	EPA 6020	5.0	mg/kg
Lead	EPA 6020	0.01	mg/kg
Mercury	EPA 245.7	0.02	mg/kg
Nickel	EPA 6020	0.02	mg/kg
Selenium	EPA 6020	0.05	mg/kg
Silver	EPA 6020	0.02	mg/kg
Zinc	EPA 6020	0.05	mg/kg
Polycyclic Aromatic Hydrocarbons (PAHs) ^b	EPA 8270E	5.0	μg/kg
Chlorinated Pesticides ^c	EPA 8270E	0.5–20	μg/kg
Pyrethroid Pesticides ^d	EPA 8270E-MRM	0.5	μg/kg
Polychlorinated Biphenyl (PCB) Congeners ^e	EPA 8270E	0.25	μg/kg
Polybrominated Diphenyl Ethers (PBDEs) ^f	EPA 8270E-NCI	0.1	μg/kg

Notes:

a. Sediment target reporting limits provided by Physis Environmental Laboratories are on a dry-weight basis.

b. Includes 1,6,7-trimethylnaphthalene, 1-methylnaphthalene, 1-methylphenanthrene, 2,6-dimethylnaphthalene, 2-methylnaphthalene, 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, and pyrene

c. Includes 2,4'-DDD, 2,4'-DDE, 2,4'-DDT, 4,4'-DDD, 4,4'-DDE, 4,4'-DDMU, 4,4'-DDT, aldrin, BHC-alpha, BHC-beta, BHC-delta, BHC-gamma, cis-chlordane, trans-chlordane, cis-nonachlor, DCPA (Dacthal), dicofol, dieldrin, endosulfan sulfate, endosulfan-I, endosulfan-II, endrin, endrin aldehyde, endrin ketone, heptachlor, heptachlor epoxide, methoxychlor, mirex, oxychlordane, perthane, toxaphene, and trans-nonachlor.

d. Includes allethrin, bifenthrin, cyfluthrin, lambda-cyhalothrin, cypermethrin, Danitol (fenpropathrin), deltamethrin/tralomethrin esfenvalerate, fenvalerate, fluvalinate, cis-permethrin, trans-permethrin, and prallethrin.

e. Includes congeners: PCB-3, 5, 8, 15, 18, 27, 28, 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, 157, 158, 167, 168+132, 169, 170, 174, 177, 180, 183, 187, 189, 194, 195, 199(200), 201, 203, 206, and 209.

f. Includes PBDE-17, 28, 47, 49, 66, 85, 99, 100, 138, 153, 154, 183, 190, and 209.

μg/kg = microgram(s) per kilogram; μmol/g = micromole(s) per gram; EPA = United States Environmental Protection Agency; mg/kg = milligram(s) per kilogram; N = nitrogen; N/A = not applicable; SM = Standard Method

Table 3. Bight '23 CEC List – Sediment

Analyte	Analysis Method	Sediment Target Reporting Limits ^a	Units
Neonicotinoids ^{b, e}	EPA 8270E-MRM	5.0	µg/kg
Per- and Polyfluoroalkyl Substances (PFAS) ^{c, e}	EPA 1633	1.0	µg/kg
Tire-wear Compounds ^{d, e}	EPA 8270E	10	µg/kg

Notes:

a. Sediment target reporting limits provided by Physis Environmental Laboratories are on a dry-weight basis.

b. Includes acetamiprid, clothianidin, imidacloprid, thiacloprid, and thiamethoxam.

c. Includes perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA).

d. Includes 6PPD-quinone

e. Analyses for chemicals of emerging concern (CECs) will occur only at a subset of stations (see COC).

µg/kg = microgram(s) per kilogram; EPA = United States Environmental Protection Agency; SM = Standard Method

Project Iteration ID: 2307008-011
Client Name: WSP USA
Project Name: 2023 Regional Harbor monitoring
Program Project #
2215100802.0003.PHYSIS PO #
TBD Org 3151 GL 573000
COC Page Number: 4 of 4
Bottle Label Color: Green

Sample Receipt Summary

Receiving Info

1. Initials Received By: PH
2. Date Received: 8/31/23
3. Time Received: 1535
4. Client Name: WSP
5. Courier Information: (Please circle)
 - Client • UPS • Area Fast • DRS
 - FedEx • GSO/GLS • Ontrac • PAMS
 - PHYSIS Driver: PH
- i. Start Time: 12:20
 - ii. End Time: 2:00
 - iii. Total Mileage: 240
 - iv. Number of Pickups: 2
6. Container Information: (Please put the # of containers or circle none)
 - 10 Cooler • Styrofoam Cooler • Boxes • None
 - Carboy(s) • Carboy Trash Can(s) • Carboy Cap(s) • Other
7. What type of ice was used: (Please circle any that apply)
 - Wet Ice • Blue Ice • Dry Ice • Water • None
8. Randomly Selected Samples Temperature (°C): 4.5
Used I/R Thermometer # 1-2

Inspection Info

1. Initials Inspected By: PH

Sample Integrity Upon Receipt:

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

Notes:

CHAIN of CUSTODY

[illegible]

CHAIN of CUSTODY

COMPANY NAME WSP USA Environment & Infrastructure Inc.			EMAIL chris.stransky@wsp.com			PROJECT NAME / NUMBER 2023 Regional Harbor Monitoring Program				COC PAGE 4 of 6		
PROJECT MANAGER Chris Stransky/Marisa Swiderski			PHONE (858)775-5547 (C. Stransky) (808)772-8740 (M. Swiderski)			PO # TBD		PHYSIS SOS #		TYPE OF ICE USED ☒ WET ☐ BLUE ☐ DRY		
COMPANY ADDRESS 9177 Sky Park Court San Diego, CA 92123			PHONE (858)775-5547 (C. Stransky) (808)772-8740 (M. Swiderski)			SAMPLED BY Marisa Swiderski		SHIPPED VIA ☐ FEDEX ☐ UPS ☐ USPS ☐ Client ☒ Physis ☐ other				
TURNAROUND TIME ☒ STANDARD (15-20 business days) ☐ RUSH business days						REQUESTED ANALYSES PLEASE SEE PHYSIS SOS						
REPORT FORMAT ☒ PHYSIS PDF/EDD ☐ SWAMP EDD ☒ other Bight '23 EDD												
SPECIAL INSTRUCTIONS See attached for analyte lists and methods. Please submit invoices to APlinvoice.US@woodplc.com (cc: chris.stransky@wsp.com & marissa.cuevas@wsp.com) and include the following info: (1) Project #: 2215100802.0003.PHYSIS (2) PO #: TBD (3) Org: 3151 (4) GL: 573000												
PHYSIS MATRIX CODES SW = seawater FW = freshwater RW = rainwater WW = wastewater DW = drinking water S = sediment T = tissue E = extract O = other (specify)												
SAMPLE ID		SAMPLE DESCRIPTION		SAMPLE date time		physis matrix code	# of bottles					
1	B23-12114	sediment	8/31/23	1515	S	2	X					
2	B23-12115	sediment	8/31/23	1410	S	2	X	X	X			
3												
4												
5												
6												
7												
8												
9												
10												

RELINQUISHED BY				RECEIVED BY			
print	signature	company	date & time	print	signature	company	date & time
Hannah Kranz	<i>Hannah Kranz</i>	WSP	9/1/23 1535	PHAN	<i>PHAN</i>	PHYSIS	9/1/23 1537

Table 2. RHMP Standard Analyte List – Sediment

Analyte	Analysis Method	Sediment Target Reporting Limits ^a	Units
Total Solids	SM 2540 B	0.1	%
Total Organic Carbon	EPA 9060	0.01	%
Grain Size	SM 2560 D	0.1	%
Ammonia as N	SM 4500-NH ₃ D	0.2	mg/kg
Total Nitrogen	EPA 9060	4.0	mg/kg
Total Phosphorus	EPA 6020	4.0	mg/kg
Acid Volatile Sulfides	Plumb 1981 & TERL	0.1	mg/kg
Simultaneous Extracted Metals	EPA 200.8	0.0004–0.0124	μmol/g
Aluminum	EPA 6020	N/A	mg/kg
Antimony	EPA 6020	0.05	mg/kg
Arsenic	EPA 6020	0.05	mg/kg
Barium	EPA 6020	N/A	mg/kg
Beryllium	EPA 6020	0.05	mg/kg
Cadmium	EPA 6020	0.01	mg/kg
Chromium	EPA 6020	0.05	mg/kg
Copper	EPA 6020	0.01	mg/kg
Iron	EPA 6020	5.0	mg/kg
Lead	EPA 6020	0.01	mg/kg
Mercury	EPA 245.7	0.02	mg/kg
Nickel	EPA 6020	0.02	mg/kg
Selenium	EPA 6020	0.05	mg/kg
Silver	EPA 6020	0.02	mg/kg
Zinc	EPA 6020	0.05	mg/kg
Polycyclic Aromatic Hydrocarbons (PAHs) ^b	EPA 8270E	5.0	μg/kg
Chlorinated Pesticides ^c	EPA 8270E	0.5–20	μg/kg
Pyrethroid Pesticides ^d	EPA 8270E-MRM	0.5	μg/kg
Polychlorinated Biphenyl (PCB) Congeners ^e	EPA 8270E	0.25	μg/kg
Polybrominated Diphenyl Ethers (PBDEs) ^f	EPA 8270E-NCI	0.1	μg/kg

Notes:

a. Sediment target reporting limits provided by Physis Environmental Laboratories are on a dry-weight basis.

b. Includes 1,6,7-trimethylnaphthalene, 1-methylnaphthalene, 1-methylphenanthrene, 2,6-dimethylnaphthalene, 2-methylnaphthalene, 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, and pyrene.

c. Includes 2,4'-DDD, 2,4'-DDE, 2,4'-DDT, 4,4'-DDD, 4,4'-DDE, 4,4'-DDMU, 4,4'-DDT, aldrin, BHC-alpha, BHC-beta, BHC-delta, BHC-gamma, cis-chlordane, trans-chlordane, cis-nonachlor, DCPA (Dacthal), dicofol, dieldrin, endosulfan sulfate, endosulfan-I, endosulfan-II, endrin, endrin aldehyde, endrin ketone, heptachlor, heptachlor epoxide, methoxychlor, mirex, oxychlordane, perthane, toxaphene, and trans-nonachlor.

d. Includes allethrin, bifenthrin, cyfluthrin, lambda-cyhalothrin, cypermethrin, Danitol (fenpropathrin), deltamethrin/tralomethrin esfenvalerate, fenvalerate, fluvalinate, cis-permethrin, trans-permethrin, and prallethrin.

e. Includes congeners: PCB-3, 5, 8, 15, 18, 27, 28, 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, 157, 158, 167, 168+132, 169, 170, 174, 177, 180, 183, 187, 189, 194, 195, 199(200), 201, 203, 206, and 209.

f. Includes PBDE-17, 28, 47, 49, 66, 85, 99, 100, 138, 153, 154, 183, 190, and 209.

μg/kg = microgram(s) per kilogram; μmol/g = micromole(s) per gram; EPA = United States Environmental Protection Agency; mg/kg = milligram(s) per kilogram; N = nitrogen; N/A = not applicable; SM = Standard Method

Table 3. Bight '23 CEC List – Sediment

Analyte	Analysis Method	Sediment Target Reporting Limits ^a	Units
Neonicotinoids ^{b, e}	EPA 8270E-MRM	5.0	µg/kg
Per- and Polyfluoroalkyl Substances (PFAS) ^{c, e}	EPA 1633	1.0	µg/kg
Tire-wear Compounds ^{d, e}	EPA 8270E	10	µg/kg

Notes:

a. Sediment target reporting limits provided by Physis Environmental Laboratories are on a dry-weight basis.

b. Includes acetamiprid, clothianidin, imidacloprid, thiacloprid, and thiamethoxam.

c. Includes perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA).

d. Includes 6PPD-quinone

e. Analyses for chemicals of emerging concern (CECs) will occur only at a subset of stations (see COC).

µg/kg = microgram(s) per kilogram; EPA = United States Environmental Protection Agency; SM = Standard Method

Project Iteration ID: 2307008-014
Client Name: WSP USA
Project Name: 2023 Regional Harbor monitoring
Program Project #
2215100802.0003.PHYSIS PO #
TBD Org 3151 GL 573000
COC Page Number: 5 of 5
Bottle Label Color: Purple w/dot

Sample Receipt Summary

Receiving Info

1. Initials Received By: RBS
2. Date Received: 9/1/23
3. Time Received: 1535
4. Client Name: WSP
5. Courier Information: (Please circle)
 - Client • UPS • Area Fast • DRS
 - FedEx • GSO/GLS • Ontrac • PAMS
 - PHYSIS Driver: RYAN
- i. Start Time: 12 PM
 - ii. End Time: 7 PM
 - iii. Total Mileage: 241
 - iv. Number of Pickups: 2
6. Container Information: (Please put the # of containers or circle none)
 - 13 Cooler • Styrofoam Cooler • Boxes • None
 - Carboy(s) • Carboy Trash Can(s) • Carboy Cap(s) • Other
7. What type of ice was used: (Please circle any that apply)
 - Wet Ice • Blue Ice • Dry Ice • Water • None
8. Randomly Selected Samples Temperature (°C): 6.2 Used I/R Thermometer # 1-2

Inspection Info

1. Initials Inspected By: RGH

Sample Integrity Upon Receipt:

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

Notes:

See temp



1904 E. Wright Circle, Anaheim CA 92806

CHAIN of CUSTODY

COMPANY NAME WSP USA Environment & Infrastructure Inc.				EMAIL chris.stransky@wsp.com				PROJECT NAME / NUMBER 2023 Regional Harbor Monitoring Program				COC PAGE 6 of 6													
PROJECT MANAGER Chris Stransky/Marisa Swiderski				marisa.swiderski@wsp.com				PO # TBD		PHYSIS SOS #		TYPE OF ICE USED ☒ WET ☐ BLUE ☐ DRY													
COMPANY ADDRESS 9177 Sky Park Court San Diego, CA 92123				PHONE (858)775-5547 (C. Stransky) (808)772-8740 (M. Swiderski)				SAMPLED BY Marisa Swiderski				SHIPPED VIA ☐ FEDEX ☐ UPS ☐ USPS ☐ Client ☒ Physis ☐ other													
TURNAROUND TIME ☒ STANDARD (15-20 business days) ☐ RUSH business days												REQUESTED ANALYSES PLEASE SEE PHYSIS SOS													
REPORT FORMAT ☒ PHYSIS PDF/EDD ☐ SWAMP EDD ☒ other Bight '23 EDD																									
SPECIAL INSTRUCTIONS Please submit invoices to APInvoice.US@woodplc.com (cc: chris.stransky@wsp.com & marissa.cuevas@wsp.com) and include the following info: (1) Project #: 2215100802.0003.PHYSIS (2) PO #: TBD (3) Org: 3151 (4) GL: 573000																									
PHYSIS MATRIX CODES SW = seawater FW = freshwater RW = rainwater WW = wastewater DW = drinking water S = sediment T = tissue E = extract O = other (specify)																									
SAMPLE ID		SAMPLE DESCRIPTION		SAMPLE date time		physis matrix code	# of bottles	PFOS, PFOA (EPA 1633) (see attached Table 3 for analyte list)																	
1 B23-12118-PFAS-S		sediment		8/31/23 1035		S	1		X																
2 B23-12119-PFAS-S		sediment		8/31/23 0915		S	1		X																
3 B23-12120-PFAS-S		sediment		8/31/23 0800		S	1		X																
4 B23-12120-PFAS-FB		field blank		8/31/23 0801		FW	1		X																
5 B23-12115-PFAS-S		sediment		8/31/23 1355		S	1		X																
6																									
7																									
8																									
9																									
10																									
RELINQUISHED BY print signature company date & time Hannah Kranz Hannah Kranz WSP 9/11/23 1:55									RECEIVED BY print signature company date & time RHAN RB PHYSIS 2/1/23 15																

Project Iteration ID: 2307008-015
Client Name: WSP USA
Project Name: 2023 Regional Harbor monitoring
Program Project #
2215100802.0003.PHYSIS PO #
TBD Org 3151 GL 573000
COC Page Number: 3 of 3
Bottle Label Color: Purple w/dot

Sample Receipt Summary

Receiving Info

1. Initials Received By: LBS
2. Date Received: 9/1/23
3. Time Received: 1535
4. Client Name: WSP
5. Courier Information: (Please circle)

☐ Client	☐ UPS	☐ Area Fast	☐ DRS
☐ FedEx	☐ GSO/GLS	☐ Ontrac	☐ PAMS
☐ PHYSIS Driver: <u>RYAN</u>			
i. Start Time: <u>12PM</u>		iii. Total Mileage: <u>241</u>	
ii. End Time: <u>7PM</u>		iv. Number of Pickups: <u>2</u>	
6. Container Information: (Please put the # of containers or circle none)

☒ 13 Cooler	☐ Styrofoam Cooler	☐ Boxes	☐ None
☐ Carboy(s)	☐ Carboy Trash Can(s)	☐ Carboy Cap(s)	☐ Other
7. What type of ice was used: (Please circle any that apply)

☐ Wet Ice	☐ Blue Ice	☐ Dry Ice	☐ Water	☐ None
----------------------------------	-----------------------------------	----------------------------------	--------------------------------	-------------------------------
8. Randomly Selected Samples Temperature (°C): 62 Used I/R Thermometer # 1-2

Inspection Info

1. Initials Inspected By: LGK

Sample Integrity Upon Receipt:

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

Notes:

RGK
Sediment samples ~~received~~ sampled on 8/31/23
were not received.



main (714) 602-5320 fax (714) 602-5321

Project Iteration ID: 2307008-015B
Client Name: WSP USA
Project Name: 2023 Regional Harbor monitoring
Program Project #
2215100802.0003.PHYSIS PO #
TBD Org 3151 GL 573000
COC Page Number: 2 of 2
Bottle Label Color: Purple w/dot

Sample Receipt Summary

Receiving Info

1. Initials Received By: RBS
2. Date Received: 9/5/23
3. Time Received: 1640
4. Client Name: WSP
5. Courier Information: (Please circle)
 - Client
 - UPS
 - Area Fast
 - DRS
 - FedEx
 - GSO/GLS
 - Ontrac
 - PAMS
 - PHYSIS Driver:
 - i. Start Time: 11:30
 - ii. End Time: 7:30
 - iii. Total Mileage: 240
 - iv. Number of Pickups: 1
6. Container Information: (Please put the # of containers or circle none)
 - 6 Cooler
 - Styrofoam Cooler
 - Boxes
 - None
 - Carboy(s)
 - Carboy Trash Can(s)
 - Carboy Cap(s)
 - Other
7. What type of ice was used: (Please circle any that apply)
 - Wet Ice
 - Blue Ice
 - Dry Ice
 - Water
 - None
8. Randomly Selected Samples Temperature (°C): 2.3
Used I/R Thermometer # 1-2

Inspection Info

1. Initials Inspected By: RGH

Sample Integrity Upon Receipt:

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

Notes:

CHAIN of CUSTODY

COMPANY NAME WSP USA Environment & Infrastructure Inc.						EMAIL chris.stransky@wsp.com		PROJECT NAME / NUMBER 2023 Regional Harbor Monitoring Program							COC PAGE 2 of 34											
PROJECT MANAGER Chris Stransky/Marisa Swiderski						marisa.swiderski@wsp.com		PO # TBD		PHYSIS SOS #		TYPE OF ICE USED ☒ WET ☐ BLUE ☐ DRY														
COMPANY ADDRESS 9177 Sky Park Court San Diego, CA 92123						PHONE (858)775-5547 (C. Stransky) (808)772-8740 (M. Swiderski)		SAMPLED BY Marisa Swiderski			SHIPPED VIA ☐ FEDEX ☐ UPS ☐ USPS ☐ Client ☒ Physis ☐ other															
TURNAROUND TIME ☒ STANDARD (15-20 business days) ☐ RUSH business days														REQUESTED ANALYSES PLEASE SEE PHYSIS SOS												
REPORT FORMAT ☒ PHYSIS PDF/EDD ☐ SWAMP EDD ☒ other Bight '23 EDD																										
SPECIAL INSTRUCTIONS See attached for analyte lists and methods. Please submit invoices to APInvoice.US@woodplc.com (cc: chris.stransky@wsp.com & marissa.cuevas@wsp.com) and include the following info: (1) Project #: 2215100802.0003.PHYSIS (2) PO #: TBD (3) Org: 3151 (4) GL: 573000																										
PHYSIS MATRIX CODES SW = seawater FW = freshwater RW = rainwater WW = wastewater DW = drinking water S = sediment T = tissue E = extract O = other (specify)																										
SAMPLE ID		SAMPLE DESCRIPTION		SAMPLE date time		physis matrix code	# of bottles	RHP Standard Sediment Analyte List (see attached Table 2) Neonicotinoids (EPA 8270E-MRM) (see attached Table 3 for analyte list) Tire-wear Compounds (EPA 8270E) (see attached Table 3 for analyte list)																		
1	B23-12009	sediment	9/1/23	1230	S	2	X																		X	X
2	B23-12010	sediment	9/1/23	1110	S	2	X																		X	X
3	B23-23121	sediment	9/1/23	1115	S	2	X																			
4	B23-12011	sediment	9/1/23	0950	S	2	X																		X	X
5	B23-12012	sediment	9/1/23	0840	S	2	X																		X	X
6																										
7																										
8																										
9																										
10																										
RELINQUISHED BY								RECEIVED BY																		
print		signature		company		date & time		print		signature		company		date & time												
Kate Buckley		[Signature]		WSP		9/5/2023 1640		RMR		RBS		PHYSIS		9/5/23 1640												

Table 2. RHMP Standard Analyte List – Sediment

Analyte	Analysis Method	Sediment Target Reporting Limits ^a	Units
Total Solids	SM 2540 B	0.1	%
Total Organic Carbon	EPA 9060	0.01	%
Grain Size	SM 2560 D	0.1	%
Ammonia as N	SM 4500-NH ₃ D	0.2	mg/kg
Total Nitrogen	EPA 9060	4.0	mg/kg
Total Phosphorus	EPA 6020	4.0	mg/kg
Acid Volatile Sulfides	Plumb 1981 & TERL	0.1	mg/kg
Simultaneous Extracted Metals	EPA 200.8	0.0004–0.0124	μmol/g
Aluminum	EPA 6020	N/A	mg/kg
Antimony	EPA 6020	0.05	mg/kg
Arsenic	EPA 6020	0.05	mg/kg
Barium	EPA 6020	N/A	mg/kg
Beryllium	EPA 6020	0.05	mg/kg
Cadmium	EPA 6020	0.01	mg/kg
Chromium	EPA 6020	0.05	mg/kg
Copper	EPA 6020	0.01	mg/kg
Iron	EPA 6020	5.0	mg/kg
Lead	EPA 6020	0.01	mg/kg
Mercury	EPA 245.7	0.02	mg/kg
Nickel	EPA 6020	0.02	mg/kg
Selenium	EPA 6020	0.05	mg/kg
Silver	EPA 6020	0.02	mg/kg
Zinc	EPA 6020	0.05	mg/kg
Polycyclic Aromatic Hydrocarbons (PAHs) ^b	EPA 8270E	5.0	μg/kg
Chlorinated Pesticides ^c	EPA 8270E	0.5–20	μg/kg
Pyrethroid Pesticides ^d	EPA 8270E-MRM	0.5	μg/kg
Polychlorinated Biphenyl (PCB) Congeners ^e	EPA 8270E	0.25	μg/kg
Polybrominated Diphenyl Ethers (PBDEs) ^f	EPA 8270E-NCI	0.1	μg/kg

Notes:

a. Sediment target reporting limits provided by Physis Environmental Laboratories are on a dry-weight basis.

b. Includes 1,6,7-trimethylnaphthalene, 1-methylnaphthalene, 1-methylphenanthrene, 2,6-dimethylnaphthalene, 2-methylnaphthalene, 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, and pyrene

c. Includes 2,4'-DDD, 2,4'-DDE, 2,4'-DDT, 4,4'-DDD, 4,4'-DDE, 4,4'-DDMU, 4,4'-DDT, aldrin, BHC-alpha, BHC-beta, BHC-delta, BHC-gamma, cis-chlordane, trans-chlordane, cis-nonachlor, DCPA (Dacthal), dicofol, dieldrin, endosulfan sulfate, endosulfan-I, endosulfan-II, endrin, endrin aldehyde, endrin ketone, heptachlor, heptachlor epoxide, methoxychlor, mirex, oxychlordane, perthane, toxaphene, and trans-nonachlor.

d. Includes allethrin, bifenthrin, cyfluthrin, lambda-cyhalothrin, cypermethrin, Danitol (fenpropathrin),

deltamethrin/tralomethrin esfenvalerate, fenvalerate, fluvalinate, cis-permethrin, trans-permethrin, and prallethrin.

e. Includes congeners: PCB-3, 5, 8, 15, 18, 27, 28, 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, 157, 158, 167, 168+132, 169, 170, 174, 177, 180, 183, 187, 189, 194, 195, 199(200), 201, 203, 206, and 209.

f. Includes PBDE-17, 28, 47, 49, 66, 85, 99, 100, 138, 153, 154, 183, 190, and 209.

μg/kg = microgram(s) per kilogram; μmol/g = micromole(s) per gram; EPA = United States Environmental Protection Agency; mg/kg = milligram(s) per kilogram; N = nitrogen; N/A = not applicable; SM = Standard Method

Table 3. Bight '23 CEC List – Sediment

Analyte	Analysis Method	Sediment Target Reporting Limits ^a	Units
Neonicotinoids ^{b, e}	EPA 8270E-MRM	5.0	µg/kg
Per- and Polyfluoroalkyl Substances (PFAS) ^{c, e}	EPA 1633	1.0	µg/kg
Tire-wear Compounds ^{d, e}	EPA 8270E	10	µg/kg

Notes:

a. Sediment target reporting limits provided by Physis Environmental Laboratories are on a dry-weight basis.

b. Includes acetamiprid, clothianidin, imidacloprid, thiacloprid, and thiamethoxam.

c. Includes perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA).

d. Includes 6PPD-quinone

e. Analyses for chemicals of emerging concern (CECs) will occur only at a subset of stations (see COC).

µg/kg = microgram(s) per kilogram; EPA = United States Environmental Protection Agency; SM = Standard Method



ENVIRONMENTAL LABORATORIES, INC.

Innovative Solutions for Nature

PHYSIS

ENVIRONMENTAL LABORATORIES, INC.
Innovative Solutions for Nature

Project Iteration ID: 2307008-017

Client Name: WSP USA

Project Name: 2023 Regional Harbor monitoring
Program Project #
2215100802.0003.PHYSIS PO #
TBD Org 3151 GL 573000

COC Page Number: 4 of 4

Bottle Label Color: Green w/dot



Sample Receipt Summary

Receiving Info

1. Initials Received By: RBS

2. Date Received: 9/5/23

3. Time Received: 1640

4. Client Name: WSP

5. Courier Information: (Please circle)

- | | | | |
|---------------------------------|----------------------------------|------------------------------------|-------------------------------|
| ☐ Client | ☐ UPS | ☐ Area Fast | ☐ DRS |
| ☐ FedEx | ☐ GSO/GLS | ☐ Ontrac | ☐ PAMS |

☒ PHYSIS Driver:

i. Start Time: 1:30

iii. Total Mileage: 240

ii. End Time: 7:30

iv. Number of Pickups: 1

6. Container Information: (Please put the # of containers or circle none)

- | | | | |
|--|--|--|--------------------------------|
| ☒ Cooler | ☐ Styrofoam Cooler | ☐ Boxes | ☐ None |
| ☐ Carboy(s) | ☐ Carboy Trash Can(s) | ☐ Carboy Cap(s) | ☐ Other |

7. What type of ice was used: (Please circle any that apply)

- | | | | | |
|---|-----------------------------------|----------------------------------|--------------------------------|-------------------------------|
| ☒ Wet Ice | ☐ Blue Ice | ☐ Dry Ice | ☐ Water | ☐ None |
|---|-----------------------------------|----------------------------------|--------------------------------|-------------------------------|

8. Randomly Selected Samples Temperature (°C): 2.3

Used I/R Thermometer # 1-2

Inspection Info

1. Initials Inspected By: RGH

Sample Integrity Upon Receipt:

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

Notes:

CHAIN of CUSTODY

COMPANY NAME WSP USA Environment & Infrastructure Inc.			EMAIL chris.stransky@wsp.com		PROJECT NAME / NUMBER 2023 Regional Harbor Monitoring Program				COC PAGE 3 of 3		
PROJECT MANAGER Chris Stransky/Marisa Swiderski			PHONE marisa.swiderski@wsp.com		PO # TBD		PHYSIS SOS #		TYPE OF ICE USED ☒ WET ☐ BLUE ☐ DRY		
COMPANY ADDRESS 9177 Sky Park Court San Diego, CA 92123			PHONE (858)775-5547 (C. Stransky) (808)772-8740 (M. Swiderski)		SAMPLED BY Marisa Swiderski				SHIPPED VIA ☐ FEDEX ☐ UPS ☐ USPS ☐ Client ☒ Physis ☐ other		
TURNAROUND TIME ☒ STANDARD (15-20 business days) ☐ RUSH business days					REQUESTED ANALYSES PLEASE SEE PHYSIS SOS PFOS, PFOA (EPA 1633) (see attached Table 3 for analyte list)						
REPORT FORMAT ☒ PHYSIS PDF/EDD ☐ SWAMP EDD ☒ other Bight '23 EDD											
SPECIAL INSTRUCTIONS Please submit invoices to APInvoice.US@woodplc.com (cc: chris.stransky@wsp.com & marissa.cuevas@wsp.com) and include the following info: (1) Project #: 2215100802.0003.PHYSIS (2) PO #: TBD (3) Org: 3151 (4) GL: 573000											
PHYSIS MATRIX CODES SW = seawater FW = freshwater RW = rainwater WW = wastewater DW = drinking water S = sediment T = tissue E = extract O = other (specify)											
SAMPLE ID		SAMPLE DESCRIPTION		SAMPLE date time		physis matrix code		# of bottles			
1	B23-12009-PFAS-S	sediment		9/1/23	1210	S	1	X			
2	B23-12009-PFAS-FB	field blank		9/1/23	1211	FW	1	X			
3	B23-12010-PFAS-S	sediment		9/1/23	1050	S	1	X			
4	B23-12011-PFAS-S	sediment		9/1/23	0935	S	1	X			
5	B23-12012-PFAS-S	sediment		9/1/23	0815	S	1	X			
6	B23-12012-PFAS-FB	field blank		9/1/23	0816	FW	1	X			
7											
8											
9											
10											

RELINQUISHED BY				RECEIVED BY			
print	signature	company	date & time	print	signature	company	date & time
Kate Buckley	<i>Kate Buckley</i>	WSP	9/5/2023 1640	RAM	<i>PBS</i>	PHYSIS	9/5/23 1640

Project Iteration ID: 2307008-018
Client Name: WSP USA
Project Name: 2023 Regional Harbor monitoring
Program Project #
2215100802.0003.PHYSIS PO #
TBD Org 3151 GL 573000
COC Page Number: 2 of 2
Bottle Label Color: Green w/dot



Sample Receipt Summary

Receiving Info

1. Initials Received By: RBS
2. Date Received: 9/5/23
3. Time Received: 1640
4. Client Name: WSP
5. Courier Information: (Please circle)

☐ Client	☐ UPS	☐ Area Fast	☐ DRS
☐ FedEx	☐ GSO/GLS	☐ Ontrac	☐ PAMS

☒ PHYSIS Driver:

 - i. Start Time: 1:30
 - ii. End Time: 7:30
 - iii. Total Mileage: 240
 - iv. Number of Pickups: 1
6. Container Information: (Please put the # of containers or circle none)

☒ Cooler	☐ Styrofoam Cooler	☐ Boxes	☐ None
☐ Carboy(s)	☐ Carboy Trash Can(s)	☐ Carboy Cap(s)	☐ Other _____
7. What type of ice was used: (Please circle any that apply)

☒ Wet Ice	☐ Blue Ice	☐ Dry Ice	☐ Water	☐ None
---	-----------------------------------	----------------------------------	--------------------------------	-------------------------------
8. Randomly Selected Samples Temperature (°C): 2.3
Used I/R Thermometer # 1-2

Inspection Info

1. Initials Inspected By: RGH

Sample Integrity Upon Receipt:

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

Notes:



main (714) 602-5320 fax (714) 602-5321



main (714) 602-5320 fax (714) 602-5321

Table 2. RHMP Standard Analyte List – Sediment

Analyte	Analysis Method	Sediment Target Reporting Limits ^a	Units
Total Solids	SM 2540 B	0.1	%
Total Organic Carbon	EPA 9060	0.01	%
Grain Size	SM 2560 D	0.1	%
Ammonia as N	SM 4500-NH ₃ D	0.2	mg/kg
Total Nitrogen	EPA 9060	4.0	mg/kg
Total Phosphorus	EPA 6020	4.0	mg/kg
Acid Volatile Sulfides	Plumb 1981 & TERL	0.1	mg/kg
Simultaneous Extracted Metals	EPA 200.8	0.0004–0.0124	μmol/g
Aluminum	EPA 6020	N/A	mg/kg
Antimony	EPA 6020	0.05	mg/kg
Arsenic	EPA 6020	0.05	mg/kg
Barium	EPA 6020	N/A	mg/kg
Beryllium	EPA 6020	0.05	mg/kg
Cadmium	EPA 6020	0.01	mg/kg
Chromium	EPA 6020	0.05	mg/kg
Copper	EPA 6020	0.01	mg/kg
Iron	EPA 6020	5.0	mg/kg
Lead	EPA 6020	0.01	mg/kg
Mercury	EPA 245.7	0.02	mg/kg
Nickel	EPA 6020	0.02	mg/kg
Selenium	EPA 6020	0.05	mg/kg
Silver	EPA 6020	0.02	mg/kg
Zinc	EPA 6020	0.05	mg/kg
Polycyclic Aromatic Hydrocarbons (PAHs) ^b	EPA 8270E	5.0	μg/kg
Chlorinated Pesticides ^c	EPA 8270E	0.5–20	μg/kg
Pyrethroid Pesticides ^d	EPA 8270E-MRM	0.5	μg/kg
Polychlorinated Biphenyl (PCB) Congeners ^e	EPA 8270E	0.25	μg/kg
Polybrominated Diphenyl Ethers (PBDEs) ^f	EPA 8270E-NCI	0.1	μg/kg

Notes:

- a. Sediment target reporting limits provided by Physis Environmental Laboratories are on a dry-weight basis.
- b. Includes 1,6,7-trimethylnaphthalene, 1-methylnaphthalene, 1-methylphenanthrene, 2,6-dimethylnaphthalene, 2-methylnaphthalene, 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, and pyrene
- c. Includes 2,4'-DDD, 2,4'-DDE, 2,4'-DDT, 4,4'-DDD, 4,4'-DDE, 4,4'-DDMU, 4,4'-DDT, aldrin, BHC-alpha, BHC-beta, BHC-delta, BHC-gamma, cis-chlordane, trans-chlordane, cis-nonachlor, DCPA (Dacthal), dicofol, dieldrin, endosulfan sulfate, endosulfan-I, endosulfan-II, endrin, endrin aldehyde, endrin ketone, heptachlor, heptachlor epoxide, methoxychlor, mirex, oxychlordane, perthane, toxaphene, and trans-nonachlor.
- d. Includes allethrin, bifenthrin, cyfluthrin, lambda-cyhalothrin, cypermethrin, Danitol (fenpropathrin), deltamethrin/tralomethrin esfenvalerate, fenvalerate, fluvalinate, cis-permethrin, trans-permethrin, and prallethrin.
- e. Includes congeners: PCB-3, 5, 8, 15, 18, 27, 28, 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, 157, 158, 167, 168+132, 169, 170, 174, 177, 180, 183, 187, 189, 194, 195, 199(200), 201, 203, 206, and 209.
- f. Includes PBDE-17, 28, 47, 49, 66, 85, 99, 100, 138, 153, 154, 183, 190, and 209.
- μg/kg = microgram(s) per kilogram; μmol/g = micromole(s) per gram; EPA = United States Environmental Protection Agency; mg/kg = milligram(s) per kilogram; N = nitrogen; N/A = not applicable; SM = Standard Method

Table 3. Bight '23 CEC List – Sediment

Analyte	Analysis Method	Sediment Target Reporting Limits ^a	Units
Neonicotinoids ^{b, e}	EPA 8270E-MRM	5.0	µg/kg
Per- and Polyfluoroalkyl Substances (PFAS) ^{c, e}	EPA 1633	1.0	µg/kg
Tire-wear Compounds ^{d, e}	EPA 8270E	10	µg/kg

Notes:

- a. Sediment target reporting limits provided by Physis Environmental Laboratories are on a dry-weight basis.
- b. Includes acetamiprid, clothianidin, imidacloprid, thiacloprid, and thiamethoxam.
- c. Includes perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA).
- d. Includes 6PPD-quinone
- e. Analyses for chemicals of emerging concern (CECs) will occur only at a subset of stations (see COC).
- µg/kg = microgram(s) per kilogram; EPA = United States Environmental Protection Agency; SM = Standard Method

Project Iteration ID: 2307008-020
Client Name: WSP USA
Project Name: 2023 Regional Harbor monitoring
Program Project #
2215100802.0003.PHYSIS PO #
TBD Org 3151 GL 573000
COC Page Number: 5 of 5
Bottle Label Color: White w/dot

Sample Receipt Summary

Receiving Info

1. Initials Received By: [Signature]
2. Date Received: 9/7/23
3. Time Received: 1335
4. Client Name: WSP
5. Courier Information! (Please circle)
 - Client
 - FedEx
 - PHYSIS Driver: RYAN
 - UPS
 - GSO/GLS
 - Area Fast
 - Ontrac
 - DRS
 - PAMS
- i. Start Time: 11:00 AM
- ii. End Time: 5:00 PM
- iii. Total Mileage: 240
- iv. Number of Pickups: 1
6. Container Information: (Please put the # of containers or circle none)
 - 1 Cooler
 - ___ Styrofoam Cooler
 - ___ Boxes
 - None
 - ___ Carboy(s)
 - ___ Carboy Trash Can(s)
 - ___ Carboy Cap(s)
 - Other
7. What type of ice was used: (Please circle any that apply)
 - Wet Ice
 - Blue Ice
 - Dry Ice
 - Water
 - None
8. Randomly Selected Samples Temperature (°C): 4.1
- Used I/R Thermometer # 1-2

Inspection Info

1. Initials Inspected By: [Signature]

Sample Integrity Upon Receipt:

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

Notes:



main (714) 602-5320 fax (714) 602-5321

Project Iteration ID: 2307008-021
Client Name: WSP USA
Project Name: 2023 Regional Harbor monitoring
Program Project #
2215100802.0003.PHYSIS PO #
TBD Org 3151 GL 573000
COC Page Number: 2 of 2
Bottle Label Color: White w/dot

Sample Receipt Summary

Receiving Info

1. Initials Received By: [Signature]
2. Date Received: 9/7/23
3. Time Received: 1335
4. Client Name: WSP
5. Courier Information: (Please circle)
 - Client
 - FedEx
 - PHYSIS Driver: RYAN
 - UPS
 - GSO/GLS
 - Area Fast
 - Ontrac
 - DRS
 - PAMS
- i. Start Time: 11:00 AM
- ii. End Time: 5:00 PM
- iii. Total Mileage: 240
- iv. Number of Pickups: 1
6. Container Information: (Please put the # of containers or circle none)
 - 16 Cooler
 - Styrofoam Cooler
 - Boxes
 - None
 - Carboy(s)
 - Carboy Trash Can(s)
 - Carboy Cap(s)
 - Other
7. What type of ice was used: (Please circle any that apply)
 - Wet Ice
 - Blue Ice
 - Dry Ice
 - Water
 - None
8. Randomly Selected Samples Temperature (°C): 4.1
- Used I/R Thermometer # 1-2

Inspection Info

1. Initials Inspected By: [Signature]

Sample Integrity Upon Receipt:

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

Notes:

CHAIN of CUSTODY



1904 E. Wright Circle, Anaheim CA 92806

Table 2. RHMP Standard Analyte List – Sediment

Analyte	Analysis Method	Sediment Target Reporting Limits ^a	Units
Total Solids	SM 2540 B	0.1	%
Total Organic Carbon	EPA 9060	0.01	%
Grain Size	SM 2560 D	0.1	%
Ammonia as N	SM 4500-NH ₃ D	0.2	mg/kg
Total Nitrogen	EPA 9060	4.0	mg/kg
Total Phosphorus	EPA 6020	4.0	mg/kg
Acid Volatile Sulfides	Plumb 1981 & TERL	0.1	mg/kg
Simultaneous Extracted Metals	EPA 200.8	0.0004–0.0124	μmol/g
Aluminum	EPA 6020	N/A	mg/kg
Antimony	EPA 6020	0.05	mg/kg
Arsenic	EPA 6020	0.05	mg/kg
Barium	EPA 6020	N/A	mg/kg
Beryllium	EPA 6020	0.05	mg/kg
Cadmium	EPA 6020	0.01	mg/kg
Chromium	EPA 6020	0.05	mg/kg
Copper	EPA 6020	0.01	mg/kg
Iron	EPA 6020	5.0	mg/kg
Lead	EPA 6020	0.01	mg/kg
Mercury	EPA 245.7	0.02	mg/kg
Nickel	EPA 6020	0.02	mg/kg
Selenium	EPA 6020	0.05	mg/kg
Silver	EPA 6020	0.02	mg/kg
Zinc	EPA 6020	0.05	mg/kg
Polycyclic Aromatic Hydrocarbons (PAHs) ^b	EPA 8270E	5.0	μg/kg
Chlorinated Pesticides ^c	EPA 8270E	0.5–20	μg/kg
Pyrethroid Pesticides ^d	EPA 8270E-MRM	0.5	μg/kg
Polychlorinated Biphenyl (PCB) Congeners ^e	EPA 8270E	0.25	μg/kg
Polybrominated Diphenyl Ethers (PBDEs) ^f	EPA 8270E-NCI	0.1	μg/kg

Notes:

a. Sediment target reporting limits provided by Physis Environmental Laboratories are on a dry-weight basis.

b. Includes 1,6,7-trimethylnaphthalene, 1-methylnaphthalene, 1-methylphenanthrene, 2,6-dimethylnaphthalene, 2-methylnaphthalene, 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, and pyrene

c. Includes 2,4'-DDD, 2,4'-DDE, 2,4'-DDT, 4,4'-DDD, 4,4'-DDE, 4,4'-DDMU, 4,4'-DDT, aldrin, BHC-alpha, BHC-beta, BHC-delta, BHC-gamma, cis-chlordane, trans-chlordane, cis-nonachlor, DCPA (Dacthal), dicofol, dieldrin, endosulfan sulfate, endosulfan-I, endosulfan-II, endrin, endrin aldehyde, endrin ketone, heptachlor, heptachlor epoxide, methoxychlor, mirex, oxychlordane, perthane, toxaphene, and trans-nonachlor.

d. Includes allethrin, bifenthrin, cyfluthrin, lambda-cyhalothrin, cypermethrin, Danitol (fenpropathrin), deltamethrin/tralomethrin esfenvalerate, fenvalerate, fluvalinate, cis-permethrin, trans-permethrin, and prallethrin.

e. Includes congeners: PCB-3, 5, 8, 15, 18, 27, 28, 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, 157, 158, 167, 168+132, 169, 170, 174, 177, 180, 183, 187, 189, 194, 195, 199(200), 201, 203, 206, and 209.

f. Includes PBDE-17, 28, 47, 49, 66, 85, 99, 100, 138, 153, 154, 183, 190, and 209.

μg/kg = microgram(s) per kilogram; μmol/g = micromole(s) per gram; EPA = United States Environmental Protection Agency; mg/kg = milligram(s) per kilogram; N = nitrogen; N/A = not applicable; SM = Standard Method

Table 3. Bight '23 CEC List – Sediment

Analyte	Analysis Method	Sediment Target Reporting Limits ^a	Units
Neonicotinoids ^{b, e}	EPA 8270E-MRM	5.0	µg/kg
Per- and Polyfluoroalkyl Substances (PFAS) ^{c, e}	EPA 1633	1.0	µg/kg
Tire-wear Compounds ^{d, e}	EPA 8270E	10	µg/kg

Notes:

a. Sediment target reporting limits provided by Physis Environmental Laboratories are on a dry-weight basis.

b. Includes acetamiprid, clothianidin, imidacloprid, thiacloprid, and thiamethoxam.

c. Includes perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA).

d. Includes 6PPD-quinone

e. Analyses for chemicals of emerging concern (CECs) will occur only at a subset of stations (see COC).

µg/kg = microgram(s) per kilogram; EPA = United States Environmental Protection Agency; SM = Standard Method

Project Iteration ID: 2307008-023
Client Name: WSP USA
Project Name: 2023 Regional Harbor monitoring
Program Project #
2215100802.0003.PHYSIS PO #
TBD Org 3151 GL 573000
COC Page Number: 5 of 5
Bottle Label Color: Blue w/X

Sample Receipt Summary

Receiving Info

1. Initials Received By: Ag
2. Date Received: 9/11/23
3. Time Received: 16:30
4. Client Name: WSP
5. Courier Information: (Please circle)
 - Client
 - FedEx
 - PHYSIS Driver: man
 - UPS
 - GSO/GLS
 - Area Fast
 - Ontrac
 - DRS
 - PAMS
- i. Start Time: 12:00
- ii. End Time: 5:30
- iii. Total Mileage: 240
- iv. Number of Pickups: 1
6. Container Information: (Please put the # of containers or circle none)
 - 13 Cooler
 - 1 Carboy(s)
 - 1 Styrofoam Cooler
 - 1 Carboy Trash Can(s)
 - 1 Boxes
 - 1 Carboy Cap(s)
 - None
 - Other
7. What type of ice was used: (Please circle any that apply)
 - Wet Ice
 - Blue Ice
 - Dry Ice
 - Water
 - None
8. Randomly Selected Samples Temperature (°C): 0.2
- Used I/R Thermometer # 1

Inspection Info

1. Initials Inspected By: RGH

Sample Integrity Upon Receipt:

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

Notes:



1904 E. Wright Circle, Anaheim CA 92806

CHAIN of CUSTODY

[illegible]

Sample Receipt Summary

Receiving Info

1. Initials Received By: AG
2. Date Received: 9/11/23
3. Time Received: 16:30
4. Client Name: WSP
5. Courier Information: (Please circle)
- Client
 - UPS
 - Area Fast
 - DRS
 - FedEx
 - GSO/GLS
 - Ontrac
 - PAMS
 - PHYSIS Driver: none
- i. Start Time: 12:00
- ii. End Time: 5:30
- iii. Total Mileage: 240
- iv. Number of Pickups: 1
6. Container Information: (Please put the # of containers or circle none)
- 13 Cooler
 - Styrofoam Cooler
 - Boxes
 - None
 - Carboy(s)
 - Carboy Trash Can(s)
 - Carboy Cap(s)
 - Other
7. What type of ice was used: (Please circle any that apply)
- Wet Ice
 - Blue Ice
 - Dry Ice
 - Water
 - None
8. Randomly Selected Samples Temperature (°C): 0.2
- Used I/R Thermometer # 1

Inspection Info

1. Initials Inspected By: RGH

Sample Integrity Upon Receipt:

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

Notes:

Sediment Toxicity COC Forms
(WSP Environmental Toxicology Laboratory)



WSP Environmental Toxicology Lab
 4905 Morena Blvd, Ste. 1304
 San Diego, CA 92117
 Phone: (858) 299-5368

Chain of Custody Form

Page 1 of 1

Client/Send Report To:			Project Information (if needed):			Analysis Requested (write out or use codes below)					Receipt Temp (°C)
Company <u>WSP USA Environment and Infrastructure Inc.</u> Address <u>9177 Sky Park Ct.</u> <u>San Diego, CA 92123</u> Contact/PM <u>Chris Stransky, Marisa Swiderski</u> Phone Number <u>858-775-5547; 808-772-8740</u> Email Address <u>chris.stransky@wsp.com, marisa.swiderski@wsp.com</u>			Project Name <u>2023 Regional Harbor Monitoring Program</u> Project No. <u>2215100802.0003</u> PO Number <u>N/A</u> Personal Cooler Shipped: Return Requested: YES <u>X</u> NO <u> </u>			Eohaustorius estuarius 10-day amphipod survival test 48-hour Mytilus galloprovincialis embryo sediment-water interface test					
Sample ID	Collection Date	Collection Time	Sample Volume	Sample Type: Grab/Comp.	Sample Number (for lab use)						
B23-12000	8/3/2023	1250	7L	Comp		X	X				15.6
B23-12001	8/3/2023	1610	8L	Comp		X	X				14.8
B23-12002	8/3/2023	1020	5L	Comp		X	X				16.7
B23-12148	8/3/2023	1425	7L	Comp		X	X				15.4
B23-12005	8/4/2023	0955	6L	Comp		X	X				13
B23-12150	8/4/2023	1330	6L	Comp		X	X				17.8
Samples Collected By: John Rudolph, Nick Jernack			Please conduct tests in accordance with the RHMP Work Plan/QAPP and the Bight '23 Toxicology Laboratory Manual.						Samples Shipped via: Condition Upon Receipt:		
Relinquished/Shipped By: Signature: <u>Marisa Swiderski</u> Print Name: <u>Marisa Swiderski</u> Date/Time: <u>8/4/2023 1550</u>			Received By: Signature: <u>Hannah Kranz</u> Print Name: <u>Hannah Kranz</u> Date/Time: <u>8/4/23 1530</u>			Relinquished By: Signature: _____ Print Name: _____ Date/Time: _____			Received By: Signature: _____ Print Name: _____ Date/Time: _____		

Test Codes (marine):

Mp-c: Chronic Kelp
Hr-dv: Chronic Abalone
Aa-a: Acute Topsmelt
Aa-c: Chronic Topsmelt
Mb-a: Acute Menidia/Silverside
Mb-c: Chronic Menidia/Silverside
Ab-a: Acute Mysid Shrimp
Ab-c: Chronic Mysid Shrimp
Sp-c: Chronic Urchin Fertilization
Sp-dv: Chronic Urchin Development
Ms-dv: Chronic Mussel Development
Other: Write out the test organism

Test Codes (freshwater):

Cd-a: Acute Ceriodaphnia
Cd-c: Chronic Ceriodaphnia
Pp-a: Acute Fathead Minnow
Pp-c: Chronic Fathead Minnow
Sc-c: Chronic Green Algae
Ha-a: Acute Hyalella amphipod
Ha-c: Chronic Hyalella amphipod
T-22: CA Title 22 Hazardous Waste



WSP Environmental Toxicology Lab
4905 Morena Blvd, Ste. 1304
San Diego, CA 92117
Phone: (858) 299-5368

Chain of Custody Form

Page 1 of 1

Client/Send Report To: Company <u>WSP USA Environment and Infrastructure Inc.</u> Address <u>9177 Sky Park Ct.</u> <u>San Diego, CA 92123</u> Contact/PM <u>Chris Stransky, Marisa Swiderski</u> Phone Number <u>858-775-5547; 808-772-8740</u> Email Address <u>chris.stransky@wsp.com, marisa.swiderski@wsp.com</u>			Project Information (if needed): Project Name <u>2023 Regional Harbor Monitoring Program</u> Project No. <u>2215100802.0003</u> PO Number <u>N/A</u> Personal Cooler Shipped: _____ Return Requested: YES <u>X</u> NO _____			Analysis Requested (write out or use codes below)					Receipt Temp (°C)
						<i>Eohaustorius estuarius</i> 10-day amphipod survival test	<i>48-hour Mytilus galloprovincialis</i> embryo sediment-water interface test				
Sample ID	Collection Date	Collection Time	Sample Volume	Sample Type: Grab/Comp.	Sample Number (for lab use)						
B23-12059	8/18/2023	1225	9L	Comp		X	X			11.8	
B23-12060	8/18/2023	1105	11L	Comp		X	X			12.9	
B23-12061	8/18/2023	1545	11L	Comp		X	X			16.8	
B23-12062	8/18/2023	1425	11L	Comp		X	X			13.8	
Samples Collected By: Marisa Swiderski			Please conduct tests in accordance with the RHMP Work Plan/QAPP and the Bight '23 Toxicology Laboratory Manual.			Samples Shipped via: Condition Upon Receipt:					
Relinquished/Shipped By: Signature: <u>Marisa Swiderski</u> Print Name: <u>Marisa Swiderski</u> Date/Time: <u>8/18/2023 1800</u>			Received By: Signature: <u>Hannah Kranz</u> Print Name: <u>Hannah Kranz</u> Date/Time: <u>8/18/2023 1800</u>			Relinquished By: Signature: _____ Print Name: _____ Date/Time: _____			Received By: Signature: _____ Print Name: _____ Date/Time: _____		

Test Codes (marine):

Mp-c: Chronic Kelp Mb-a: Acute Menidia/Silverside Sp-c: Chronic Urchin Fertilization
Hr-dv: Chronic Abalone Mb-c: Chronic Menidia/Silverside Sp-dv: Chronic Urchin Development
Aa-a: Acute Topsmelt Ab-a: Acute Mysid Shrimp Ms-dv: Chronic Mussel Development
Aa-c: Chronic Topsmelt Ab-c: Chronic Mysid Shrimp Other: Write out the test organism

Test Codes (freshwater):

Cd-a: Acute Ceriodaphnia Sc-c: Chronic Green Algae
Cd-c: Chronic Ceriodaphnia Ha-a: Acute Hyalella amphipod
Pp-a: Acute Fathead Minnow Ha-c: Chronic Hyalella amphipod
Pp-c: Chronic Fathead Minnow T-22: CA Title 22 Hazardous Waste



WSP Environmental Toxicology Lab
 4905 Morena Blvd, Ste. 1304
 San Diego, CA 92117
 Phone: (858) 299-5368

Chain of Custody Form

Page 1 of 1

Client/Send Report To: Company <u>WSP USA Environment and Infrastructure Inc.</u> Address <u>9177 Sky Park Ct.</u> <u>San Diego, CA 92123</u> Contact/PM <u>Chris Stransky, Marisa Swiderski</u> Phone Number <u>858-775-5547; 808-772-8740</u> Email Address <u>chris.stransky@wsp.com, marisa.swiderski@wsp.com</u>			Project Information (if needed): Project Name <u>2023 Regional Harbor Monitoring Program</u> Project No. <u>2215100802.0003</u> PO Number <u>N/A</u> Personal Cooler Shipped: Return Requested: YES <u>X</u> NO <u> </u>			Analysis Requested (write out or use codes below)					Receipt Temp (°C)
						<i>Eohaustorius estuarius</i> 10-day amphipod survival test	48-hour <i>Mytilus galloprovincialis</i> embryo sediment-water interface test				
Sample ID	Collection Date	Collection Time	Sample Volume	Sample Type: Grab/Comp.	Sample Number (for lab use)						
B23-12063	8/17/2023	1035	9L	Comp		X	X			2.0	
B23-12064	8/17/2023	1605	10L	Comp		X	X			6.0	
B23-12065	8/17/2023	1230	10L	Comp		X	X			6.0	
B23-12066	8/17/2023	1445	8L	Comp		X	X			6.0	
Samples Collected By: Marisa Swiderski		Please conduct tests in accordance with the RHMP Work Plan/QAPP and the Bight '23 Toxicology Laboratory Manual.				Samples Shipped via: Condition Upon Receipt:					
Relinquished/Shipped By: Signature: <u>Marisa Swiderski</u> Print Name: <u>Marisa Swiderski</u> Date/Time: <u>8/17/2023 2025</u>		Received By: Signature: <u>Riley von Richter</u> Print Name: <u>Riley von Richter</u> Date/Time: <u>8/17/23 2025</u>		Relinquished By: Signature: _____ Print Name: _____ Date/Time: _____		Received By: Signature: _____ Print Name: _____ Date/Time: _____					

Test Codes (marine):

Mp-c: Chronic Kelp Mb-a: Acute Menidia/Silverside Sp-c: Chronic Urchin Fertilization
 Hr-dv: Chronic Abalone Mb-c: Chronic Menidia/Silverside Sp-dv: Chronic Urchin Development
 Aa-a: Acute Topsmelt Ab-a: Acute Mysid Shrimp Ms-dv: Chronic Mussel Development
 Aa-c: Chronic Topsmelt Ab-c: Chronic Mysid Shrimp Other: Write out the test organism

Test Codes (freshwater):

Cd-a: Acute Ceriodaphnia Sc-c: Chronic Green Algae
 Cd-c: Chronic Ceriodaphnia Ha-a: Acute Hyalella amphipod
 Pp-a: Acute Fathead Minnow Ha-c: Chronic Hyalella amphipod
 Pp-c: Chronic Fathead Minnow T-22: CA Title 22 Hazardous Waste



WSP Environmental Toxicology Lab
4905 Morena Blvd, Ste. 1304
San Diego, CA 92117
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Chain of Custody Form

Page 1 of 1

Client/Send Report To:			Project Information (if needed):			Analysis Requested (write out or use codes below)					Receipt Temp (°C)	
Company <u>WSP USA Environment and Infrastructure Inc.</u>			Project Name <u>2023 Regional Harbor Monitoring Program</u>			<i>Eohaustorius estuarius</i> 10-day amphipod survival test	<i>48-hour Mytilus galloprovincialis</i> embryo sediment-water interface test					
Address <u>9177 Sky Park Ct.</u>			Project No. <u>2215100802.0003</u>									
<u>San Diego, CA 92123</u>			PO Number <u>N/A</u>									
Contact/PM <u>Chris Stransky, Marisa Swiderski</u>			Personal Cooler Shipped:									
Phone Number <u>858-775-5547; 808-772-8740</u>			Return Requested: YES <u>X</u> NO <u> </u>									
Email Address <u>chris.stransky@wsp.com, marisa.swiderski@wsp.com</u>												
Sample ID	Collection Date	Collection Time	Sample Volume	Sample Type: Grab/Comp.	Sample Number (for lab use)							
B23-12023	8/22/2023	0945	8L	Comp				X	X			
B23-12024	8/22/2023	1445	10L	Comp				X	X			
B23-12025	8/22/2023	1345	8L	Comp				X	X			
B23-12026	8/22/2023	1155	7L	Comp		X	X					
B23-12055	8/22/2023	1555	8L	Comp		X	X					
WSP B23-12056	8/22/2023			Comp		X	X					
B23-12057	8/22/2023	1045	9L	Comp		X	X					
B23-12058	8/22/2023	0835	9L	Comp		X	X					
Samples Collected By: Marisa Swiderski			Please conduct tests in accordance with the RHMP Work Plan/QAPP and the Bight '23 Toxicology Laboratory Manual.			Samples Shipped via: Condition Upon Receipt:						
Relinquished/Shipped By:			Received By:			Relinquished By:						
Signature: <u>Marisa Swiderski</u>			Signature: <u>Hannah Kranz</u>			Signature: _____						
Print Name: <u>Marisa Swiderski</u>			Print Name: <u>Hannah Kranz</u>			Print Name: _____						
Date/Time: <u>8/22/2023 1715</u>			Date/Time: <u>8/22/23 1715</u>			Date/Time: _____						

Test Codes (marine):

Mp-c: Chronic Kelp **Mb-a:** Acute Menidia/Silverside **Sp-c:** Chronic Urchin Fertilization
Hr-dv: Chronic Abalone **Mb-c:** Chronic Menidia/Silverside **Sp-dv:** Chronic Urchin Development
Aa-a: Acute Topsmelt **Ab-a:** Acute Mysid Shrimp **Ms-dv:** Chronic Mussel Development
Aa-c: Chronic Topsmelt **Ab-c:** Chronic Mysid Shrimp **Other:** Write out the test organism

Test Codes (freshwater):

Cd-a: Acute Ceriodaphnia **Sc-c:** Chronic Green Algae
Cd-c: Chronic Ceriodaphnia **Ha-a:** Acute Hyalella amphipod
Pp-a: Acute Fathead Minnow **Ha-c:** Chronic Hyalella amphipod
Pp-c: Chronic Fathead Minnow **T-22:** CA Title 22 Hazardous Waste



WSP Environmental Toxicology Lab
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San Diego, CA 92117
Phone: (858) 299-5368

Chain of Custody Form

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Client/Send Report To:			Project Information (if needed):			Analysis Requested (write out or use codes below)					Receipt Temp (°C)																																																											
Company <u>WSP USA Environment and Infrastructure Inc.</u> Address <u>9177 Sky Park Ct.</u> <u>San Diego, CA 92123</u> Contact/PM <u>Chris Stransky, Marisa Swiderski</u> Phone Number <u>858-775-5547; 808-772-8740</u> Email Address <u>chris.stransky@wsp.com, marisa.swiderski@wsp.com</u>			Project Name <u>2023 Regional Harbor Monitoring Program</u> Project No. <u>2215100802.0003</u> PO Number <u>N/A</u> Personal Cooler Shipped: _____ Return Requested: YES <u>X</u> NO _____			<table border="1"> <tr> <td><i>Eohaustorius estuarius</i> 10-day amphipod survival test</td> <td>48-hour <i>Mytilus galloprovincialis</i> embryo sediment-water interface test</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>						<i>Eohaustorius estuarius</i> 10-day amphipod survival test	48-hour <i>Mytilus galloprovincialis</i> embryo sediment-water interface test					X	X					X	X																																													
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B23-12056	8/23/2023	0745	11L	Comp																																																																		
Samples Collected By: Marisa Swiderski			Please conduct tests in accordance with the RHMP Work Plan/QAPP and the Bight '23 Toxicology Laboratory Manual.			Samples Shipped via: Condition Upon Receipt:																																																																
Relinquished/Shipped By:			Received By:			Relinquished By:			Received By:																																																													
Signature: <u>Marisa Swiderski</u>			Signature: <u>Hannah Kraus</u>			Signature: _____			Signature: _____																																																													
Print Name: <u>Marisa Swiderski</u>			Print Name: <u>Hannah Kraus</u>			Print Name: _____			Print Name: _____																																																													
Date/Time: <u>8/23/2023 1700</u>			Date/Time: <u>8/23/2023 1700</u>			Date/Time: _____			Date/Time: _____																																																													

Test Codes (marine):

Mp-c: Chronic Kelp	Mb-a: Acute Menidia/Silverside	Sp-c: Chronic Urchin Fertilization
Hr-dv: Chronic Abalone	Mb-c: Chronic Menidia/Silverside	Sp-dv: Chronic Urchin Development
Aa-a: Acute Topsmelt	Ab-a: Acute Mysid Shrimp	Ms-dv: Chronic Mussel Development
Aa-c: Chronic Topsmelt	Ab-c: Chronic Mysid Shrimp	Other: Write out the test organism

Test Codes (freshwater):

Cd-a: Acute Ceriodaphnia	Sc-c: Chronic Green Algae
Cd-c: Chronic Ceriodaphnia	Ha-a: Acute Hyalella amphipod
Pp-a: Acute Fathead Minnow	Ha-c: Chronic Hyalella amphipod
Pp-c: Chronic Fathead Minnow	T-22: CA Title 22 Hazardous Waste



WSP Environmental Toxicology Lab
4905 Morena Blvd, Ste. 1304
San Diego, CA 92117
Phone: (858) 299-5368

Chain of Custody Form

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Client/Send Report To:			Project Information (if needed):			Analysis Requested (write out or use codes below)				Receipt Temp (°C)
Company <u>WSP USA Environment and Infrastructure Inc.</u>			Project Name <u>2023 Regional Harbor Monitoring Program</u>			<i>Eohaustorius estuarius</i> 10-day amphipod survival test	48-hour <i>Mytilus</i> <i>galloprovincialis</i> embryo sediment-water interface test			
Address <u>9177 Sky Park Ct.</u>			Project No. <u>2215100802.0003</u>							
<u>San Diego, CA 92123</u>			PO Number <u>N/A</u>							
Contact/PM <u>Chris Stransky, Marisa Swiderski</u>			Personal Cooler Shipped:							
Phone Number <u>858-775-5547; 808-772-8740</u>			Return Requested: YES <u>X</u> NO <u> </u>							
Email Address <u>chris.stransky@wsp.com, marisa.swiderski@wsp.com</u>										
Sample ID	Collection Date	Collection Time	Sample Volume	Sample Type: Grab/Comp.	Sample Number (for lab use)					
B23-12014	8/28/2023	1025	7L	Comp		X	X			
B23-12047	8/28/2023	1545	7L	Comp		X	X			
B23-12116	8/28/2023	0905	8L	Comp		X	X			
B23-12121	8/28/2023	1205	8L	Comp		X	X			
B23-12122	8/28/2023	1425	7L	Comp		X	X			
Samples Collected By: Marisa Swiderski		Please conduct tests in accordance with the RHMP Work Plan/QAPP and the Bight '23 Toxicology Laboratory Manual.				Samples Shipped via: Condition Upon Receipt:				
Relinquished/Shipped By: Signature: <u>Marisa Swiderski</u> Print Name: <u>Marisa Swiderski</u> Date/Time: <u>8/28/2023 1730</u>		Received By: Signature: <u>Jacob Pletcher</u> Print Name: <u>Jacob Pletcher</u> Date/Time: <u>8/28/23 1730</u>		Relinquished By: Signature: _____ Print Name: _____ Date/Time: _____		Received By: Signature: _____ Print Name: _____ Date/Time: _____				

Test Codes (marine):

Mp-c: Chronic Kelp **Mb-a:** Acute Menidia/Silverside **Sp-c:** Chronic Urchin Fertilization
Hr-dv: Chronic Abalone **Mb-c:** Chronic Menidia/Silverside **Sp-dv:** Chronic Urchin Development
Aa-a: Acute Topsmelt **Ab-a:** Acute Mysid Shrimp **Ms-dv:** Chronic Mussel Development
Aa-c: Chronic Topsmelt **Ab-c:** Chronic Mysid Shrimp **Other:** Write out the test organism

Test Codes (freshwater):

Cd-a: Acute Ceriodaphnia **Sc-c:** Chronic Green Algae
Cd-c: Chronic Ceriodaphnia **Ha-a:** Acute Hyalella amphipod
Pp-a: Acute Fathead Minnow **Ha-c:** Chronic Hyalella amphipod
Pp-c: Chronic Fathead Minnow **T-22:** CA Title 22 Hazardous Waste



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Chain of Custody Form

Page 1 of 1

Client/Send Report To:			Project Information (if needed):			Analysis Requested (write out or use codes below)					Receipt Temp (°C)					
Company <u>WSP USA Environment and Infrastructure Inc.</u> Address <u>9177 Sky Park Ct.</u> <u>San Diego, CA 92123</u> Contact/PM <u>Chris Stransky, Marisa Swiderski</u> Phone Number <u>858-775-5547; 808-772-8740</u> Email Address <u>chris.stransky@wsp.com, marisa.swiderski@wsp.com</u>			Project Name <u>2023 Regional Harbor Monitoring Program</u> Project No. <u>2215100802.0003</u> PO Number <u>N/A</u> Personal Cooler Shipped: _____ Return Requested: YES <u>X</u> NO ____			<table border="1"> <tr> <td><i>Eohaustorius estuarius</i> 10-day amphipod survival test</td> <td>48-hour <i>Mytilus galloprovincialis</i> embryo sediment-water interface test</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>						<i>Eohaustorius estuarius</i> 10-day amphipod survival test	48-hour <i>Mytilus galloprovincialis</i> embryo sediment-water interface test			
<i>Eohaustorius estuarius</i> 10-day amphipod survival test	48-hour <i>Mytilus galloprovincialis</i> embryo sediment-water interface test															
Sample ID	Collection Date	Collection Time	Sample Volume	Sample Type: Grab/Comp.	Sample Number (for lab use)											
B23-12048	8/29/2023	0815	9L	Comp		X	X									
B23-12049	8/29/2023	1040	7L	Comp		X	X									
B23-12050	8/29/2023	0915	8L	Comp		X	X									
B23-12051	8/29/2023	1625	9L	Comp		X	X									
B23-12841	8/29/2023	1510	7L	Comp		X	X									
B23-12054	8/29/2023	1215	9L	Comp		X	X									
B23-12053	8/29/2023	1400	9L	Comp		X	X									
Samples Collected By: Marisa Swiderski		Please conduct tests in accordance with the RHMP Work Plan/QAPP and the Bight '23 Toxicology Laboratory Manual.				Samples Shipped via: Condition Upon Receipt:										
Relinquished/Shipped By: Signature: <u>Marisa Swiderski</u> Print Name: <u>Marisa Swiderski</u> Date/Time: <u>8/29/2023 1745</u>		Received By: Signature: <u>Hannah Kranz</u> Print Name: <u>Hannah Kranz</u> Date/Time: <u>8/29/23 1745</u>		Relinquished By: Signature: _____ Print Name: _____ Date/Time: _____		Received By: Signature: _____ Print Name: _____ Date/Time: _____										

Test Codes (marine):

Mp-c: Chronic Kelp
Hr-dv: Chronic Abalone
Aa-a: Acute Topsmelt
Aa-c: Chronic Topsmelt
Mb-a: Acute Menidia/Silverside
Mb-c: Chronic Menidia/Silverside
Ab-a: Acute Mysid Shrimp
Ab-c: Chronic Mysid Shrimp
Sp-c: Chronic Urchin Fertilization
Sp-dv: Chronic Urchin Development
Ms-dv: Chronic Mussel Development
Other: Write out the test organism

Test Codes (freshwater):

Cd-a: Acute Ceriodaphnia
Cd-c: Chronic Ceriodaphnia
Pp-a: Acute Fathead Minnow
Pp-c: Chronic Fathead Minnow
Sc-c: Chronic Green Algae
Ha-a: Acute Hyalella amphipod
Ha-c: Chronic Hyalella amphipod
T-22: CA Title 22 Hazardous Waste



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Page 1 of 1

Client/Send Report To:		Project Information (if needed):				Analysis Requested (write out or use codes below)					Receipt Temp (°C)
Company	Address	Project Name	Project No.	PO Number	Personal Cooler Shipped:	Eohaustorius estuarius 10-day amphipod survival test	48-hour Mytilus galloprovincialis embryo sediment-water interface test				
WSP USA Environment and Infrastructure Inc.	9177 Sky Park Ct. San Diego, CA 92123	2023 Regional Harbor Monitoring Program	2215100802.0003	N/A	Return Requested: YES ☒ NO ☐						
Contact/PM	Chris Stransky, Marisa Swiderski										
Phone Number	858-775-5547; 808-772-8740										
Email Address	chris.stransky@wsp.com, marisa.swiderski@wsp.com										
Sample ID	Collection Date	Collection Time	Sample Volume	Sample Type: Grab/Comp.	Sample Number (for lab use)						
B23-12019	8/30/2023	1230	9L	Comp		X	X			5.6	
B23-12020	I	1115	10L	Comp		X	X			5.5	
B23-12021		1000	7L	Comp		X	X			5.6	
B23-12052		0840	7L	Comp		X	X			7.4	
B23-12123		1425	9L	Comp		X	X			9.7	
B23-12124		1535	10L	Comp		X	X			11.6	
Samples Collected By: Marisa Swiderski		Please conduct tests in accordance with the RHMP Work Plan/QAPP and the Bight '23 Toxicology Laboratory Manual.				Samples Shipped via: Condition Upon Receipt:					
Relinquished/Shipped By: Signature: <u>Marisa Swiderski</u> Print Name: <u>Marisa Swiderski</u> Date/Time: <u>8/30/2023 1725</u>		Received By: Signature: <u>Alex Gabriel</u> Print Name: <u>Alex Gabriel</u> Date/Time: <u>8/30/23 1725</u>		Relinquished By: Signature: _____ Print Name: _____ Date/Time: _____		Received By: Signature: _____ Print Name: _____ Date/Time: _____					

Test Codes (marine):

Mp-c: Chronic Kelp
Hr-dv: Chronic Abalone
Aa-a: Acute Topsmelt
Aa-c: Chronic Topsmelt
Mb-a: Acute Menidia/Silverside
Mb-c: Chronic Menidia/Silverside
Ab-a: Acute Mysid Shrimp
Ab-c: Chronic Mysid Shrimp
Sp-c: Chronic Urchin Fertilization
Sp-dv: Chronic Urchin Development
Ms-dv: Chronic Mussel Development
Other: Write out the test organism

Test Codes (freshwater):

Cd-a: Acute Ceriodaphnia
Cd-c: Chronic Ceriodaphnia
Pp-a: Acute Fathead Minnow
Pp-c: Chronic Fathead Minnow
Sc-c: Chronic Green Algae
Ha-a: Acute Hyalella amphipod
Ha-c: Chronic Hyalella amphipod
T-22: CA Title 22 Hazardous Waste

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4905 Morena Blvd, Ste. 1304
San Diego, CA 92117
Phone: (858) 299-5368

Chain of Custody Form

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Client/Send Report To:

Company WSP USA Environment and Infrastructure Inc.
Address 9177 Sky Park Ct.
San Diego, CA 92123
Contact/PM Chris Stransky, Marisa Swiderski
Phone Number 858-775-5547; 808-772-8740
Email Address chris.stransky@wsp.com, marisa.swiderski@wsp.com

Project Information (if needed):

Project Name 2023 Regional Harbor Monitoring Program
Project No. 2215100802.0003
PO Number N/A

Personal Cooler Shipped:

Return Requested: YES X NO

Analysis Requested

(write out or use codes below)

Sample ID	Collection Date	Collection Time	Sample Volume	Sample Type: Grab/Comp.	Sample Number (for lab use)	Analysis Requested					Receipt Temp (°C)
						<i>Eohaustorius estuarius</i> 10-day amphipod survival test	48-hour <i>Mytilus galloprovincialis</i> embryo sediment-water interface test				
B23-12117	8/31/2023	1210	10L	Comp		X	X				
B23-12118	8/31/2023	1050	8L	Comp		X	X				
B23-12119	8/31/2023	0945	8L	Comp		X	X				
B23-12120	8/31/2023	0820	8L	Comp		X	X				
B23-12115	8/31/2023	1410	8L	Comp		X	X				
B23-12114	8/31/2023	1515	7.5L	Comp		X	X				

Samples Collected By:

Marisa Swiderski

Please conduct tests in accordance with the RHMP Work Plan/QAPP and the Bight '23 Toxicology Laboratory Manual.

Samples Shipped via:

Condition Upon Receipt:

Relinquished/Shipped By:

Signature: Marisa Swiderski

Print Name: Marisa Swiderski

Date/Time: 8/31/2023 1700

Received By:

Signature: Riley von Richter

Print Name: Riley von Richter

Date/Time: 8/31/2023 1700

Relinquished By:

Signature: _____

Print Name: _____

Date/Time: _____

Received By:

Signature: _____

Print Name: _____

Date/Time: _____

Test Codes (marine):

Mp-c: Chronic Kelp

Hr-dv: Chronic Abalone

Aa-a: Acute Topsmelt

Aa-c: Chronic Topsmelt

Mb-a: Acute Menidia/Silverside

Mb-c: Chronic Menidia/Silverside

Ab-a: Acute Mysid Shrimp

Ab-c: Chronic Mysid Shrimp

Sp-c: Chronic Urchin Fertilization

Sp-dv: Chronic Urchin Development

Ms-dv: Chronic Mussel Development

Other: Write out the test organism

Test Codes (freshwater):

Cd-a: Acute Ceriodaphnia

Cd-c: Chronic Ceriodaphnia

Pp-a: Acute Fathead Minnow

Pp-c: Chronic Fathead Minnow

Sc-c: Chronic Green Algae

Ha-a: Acute Hyalella amphipod

Ha-c: Chronic Hyalella amphipod

T-22: CA Title 22 Hazardous Waste



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						<i>Eohaustorius estuarius</i> 10-day amphipod survival test	48-hour <i>Mytilus</i> <i>galloprovincialis</i> embryo sediment-water interface test				
Sample ID	Collection Date	Collection Time	Sample Volume	Sample Type: Grab/Comp.	Sample Number (for lab use)						
B23-12009	9/1/2023	1230	8L	Comp		X	X				
B23-12010	9/1/2023	1110	7L	Comp		X	X				
B23-12011	9/1/2023	0950	7L	Comp		X	X				
B23-12012	9/1/2023	0840	7.5L	Comp		X	X				
Samples Collected By: Marisa Swiderski		Please conduct tests in accordance with the RHMP Work Plan/QAPP and the Bight '23 Toxicology Laboratory Manual.				Samples Shipped via: Condition Upon Receipt:					
Relinquished/Shipped By: Signature: <u>Marisa Swiderski</u> Print Name: <u>Marisa Swiderski</u> Date/Time: <u>9/1/2023 1450</u>		Received By: Signature: <u>Hannah Kranz</u> Print Name: <u>Hannah Kranz</u> Date/Time: <u>9/1/2023 1450</u>		Relinquished By: Signature: _____ Print Name: _____ Date/Time: _____		Received By: Signature: _____ Print Name: _____ Date/Time: _____					

Test Codes (marine):

Mp-c: Chronic Kelp **Mb-a:** Acute Menidia/Silverside **Sp-c:** Chronic Urchin Fertilization
Hr-dv: Chronic Abalone **Mb-c:** Chronic Menidia/Silverside **Sp-dv:** Chronic Urchin Development
Aa-a: Acute Topsmelt **Ab-a:** Acute Mysid Shrimp **Ms-dv:** Chronic Mussel Development
Aa-c: Chronic Topsmelt **Ab-c:** Chronic Mysid Shrimp **Other:** Write out the test organism

Test Codes (freshwater):

Cd-a: Acute Ceriodaphnia **Sc-c:** Chronic Green Algae
Cd-c: Chronic Ceriodaphnia **Ha-a:** Acute Hyalella amphipod
Pp-a: Acute Fathead Minnow **Ha-c:** Chronic Hyalella amphipod
Pp-c: Chronic Fathead Minnow **T-22:** CA Title 22 Hazardous Waste



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Client/Send Report To:			Project Information (if needed):			Analysis Requested (write out or use codes below)					Receipt Temp (°C)
Company	WSP USA Environment and Infrastructure Inc.		Project Name	2023 Regional Harbor Monitoring Program		Eohaustorius estuarius 10-day amphipod survival test	48-hour Mytilus galloprovincialis embryo sediment-water interface test				
Address	9177 Sky Park Ct. San Diego, CA 92123		Project No.	2215100802.0003							
Contact/PM	Chris Stransky, Marisa Swiderski		PO Number	N/A							
Phone Number	858-775-5547; 808-772-8740		Personal Cooler Shipped:								
Email Address	chris.stransky@wsp.com, marisa.swiderski@wsp.com		Return Requested: YES <u>X</u> NO <u> </u>								
Sample ID	Collection Date	Collection Time	Sample Volume	Sample Type: Grab/Comp.	Sample Number (for lab use)						
B23-12099	9/5/2023	1520	6L	Comp		X	X				
B23-12103	9/5/2023	1415	7.5L	Comp		X	X				
B23-12107	9/5/2023	1325	8L	Comp		X	X				
B23-12109	9/5/2023	0915	8L	Comp		X	X				
B23-12110	9/5/2023	1025	7L	Comp		X	X				
B23-12155	9/5/2023	1135	9L	Comp		X	X				
B23-12098	9/5/2023	1610	9L	Comp		X	X				
Samples Collected By: Marisa Swiderski			Please conduct tests in accordance with the RHMP Work Plan/QAPP and the Bight '23 Toxicology Laboratory Manual.			Samples Shipped via: Condition Upon Receipt:					
Relinquished/Shipped By: Signature: <u>Marisa Swiderski</u> Print Name: <u>Marisa Swiderski</u> Date/Time: <u>9/5/2023 1807</u>			Received By: Signature: <u>[Signature]</u> Print Name: <u>Jacob Fletcher</u> Date/Time: <u>9/5/23 1807</u>			Relinquished By: Signature: _____ Print Name: _____ Date/Time: _____			Received By: Signature: _____ Print Name: _____ Date/Time: _____		

Test Codes (marine):

Mp-c: Chronic Kelp **Mb-a:** Acute Menidia/Silverside **Sp-c:** Chronic Urchin Fertilization
Hr-dv: Chronic Abalone **Mb-c:** Chronic Menidia/Silverside **Sp-dv:** Chronic Urchin Development
Aa-a: Acute Topsmelt **Ab-a:** Acute Mysid Shrimp **Ms-dv:** Chronic Mussel Development
Aa-c: Chronic Topsmelt **Ab-c:** Chronic Mysid Shrimp **Other:** Write out the test organism

Test Codes (freshwater):

Cd-a: Acute Ceriodaphnia **Sc-c:** Chronic Green Algae
Cd-c: Chronic Ceriodaphnia **Ha-a:** Acute Hyalella amphipod
Pp-a: Acute Fathead Minnow **Ha-c:** Chronic Hyalella amphipod
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Chain of Custody Form

Page 1 of 1

Client/Send Report To: Company <u>WSP USA Environment and Infrastructure Inc.</u> Address <u>9177 Sky Park Ct.</u> <u>San Diego, CA 92123</u> Contact/PM <u>Chris Stransky, Marisa Swiderski</u> Phone Number <u>858-775-5547; 808-772-8740</u> Email Address <u>chris.stransky@wsp.com, marisa.swiderski@wsp.com</u>			Project Information (if needed): Project Name <u>2023 Regional Harbor Monitoring Program</u> Project No. <u>2215100802.0003</u> PO Number <u>N/A</u> Personal Cooler Shipped: _____ Return Requested: YES <u>X</u> NO _____			Analysis Requested (write out or use codes below)					Receipt Temp (°C)
						<i>Eohaustorius estuarius</i> 10-day amphipod survival test	48-hour <i>Mytilus</i> <i>galloprovincialis</i> embryo sediment-water interface test				
Sample ID	Collection Date	Collection Time	Sample Volume	Sample Type: Grab/Comp.	Sample Number (for lab use)						
B23-12093	9/6/2023	1350	10L	Comp		X	X				
B23-12095	9/6/2023	1205	8L	Comp		X	X				
B23-12096	9/6/2023	1055	9L	Comp		X	X				
B23-12097	9/6/2023	0940	8L	Comp		X	X				
ms B23-12098	9/6/2023			Comp		X	X				
B23-12102	9/6/2023	0830	8L	Comp		X	X				
B23-12003	9/6/2023	1530	8L	Comp		X	X				
B23-12091	9/6/2023	1630	9L	Comp		X	X				
Samples Collected By: Marisa Swiderski			Please conduct tests in accordance with the RHMP Work Plan/QAPP and the Bight '23 Toxicology Laboratory Manual.			Samples Shipped via: Condition Upon Receipt:					
Relinquished/Shipped By: Signature: <u>Marisa Swiderski</u> Print Name: <u>Marisa Swiderski</u> Date/Time: <u>9/6/2023 1830</u>			Received By: Signature: <u>Hannah Kranz</u> Print Name: <u>Hannah Kranz</u> Date/Time: <u>9/6/23 1830</u>			Relinquished By: Signature: _____ Print Name: _____ Date/Time: _____			Received By: Signature: _____ Print Name: _____ Date/Time: _____		

Test Codes (marine):

Mp-c: Chronic Kelp
Hr-dv: Chronic Abalone
Aa-a: Acute Topsmelt
Aa-c: Chronic Topsmelt
Mb-a: Acute Menidia/Silverside
Mb-c: Chronic Menidia/Silverside
Ab-a: Acute Mysid Shrimp
Ab-c: Chronic Mysid Shrimp
Sp-c: Chronic Urchin Fertilization
Sp-dv: Chronic Urchin Development
Ms-dv: Chronic Mussel Development
Other: Write out the test organism

Test Codes (freshwater):

Cd-a: Acute Ceriodaphnia
Cd-c: Chronic Ceriodaphnia
Pp-a: Acute Fathead Minnow
Pp-c: Chronic Fathead Minnow
Sc-c: Chronic Green Algae
Ha-a: Acute Hyalella amphipod
Ha-c: Chronic Hyalella amphipod
T-22: CA Title 22 Hazardous Waste



WSP Environmental Toxicology Lab
4905 Morena Blvd, Ste. 1304
San Diego, CA 92117
Phone: (858) 299-5368

Chain of Custody Form

Page 1 of 1

Client/Send Report To:			Project Information (if needed):			Analysis Requested (write out or use codes below)					Receipt Temp (°C)
Company	WSP USA Environment and Infrastructure Inc.		Project Name	2023 Regional Harbor Monitoring Program		Eohaustorius estuarius 10-day amphipod survival test	48-hour Mytilus galloprovincialis embryo sediment-water interface test				
Address	9177 Sky Park Ct. San Diego, CA 92123		Project No.	2215100802.0003							
Contact/PM	Chris Stransky, Marisa Swiderski		PO Number	N/A							
Phone Number	858-775-5547; 808-772-8740		Personal Cooler Shipped:								
Email Address	chris.stransky@wsp.com, marisa.swiderski@wsp.com		Return Requested: YES ☒ NO ☐								
Sample ID	Collection Date	Collection Time	Sample Volume	Sample Type: Grab/Comp.	Sample Number (for lab use)						
B23-12089	9/7/2023	1055	12L	Comp		X	X				2.2
B23-12090	9/7/2023	0935	8L	Comp		X	X				3.2
B23-12004	9/7/2023	1225	10L	Comp		X	X				8.8
B23-12045	9/7/2023	1605	11L	Comp		X	X				9.3
B23-12046	9/7/2023	1435	10L	Comp		X	X				8.2
Samples Collected By: Marisa Swiderski		Please conduct tests in accordance with the RHMP Work Plan/QAPP and the Bight '23 Toxicology Laboratory Manual.				Samples Shipped via: Condition Upon Receipt:					
Relinquished/Shipped By: Signature: <u>Marisa Swiderski</u> Print Name: <u>Marisa Swiderski</u> Date/Time: <u>9/7/2023 1840</u>		Received By: Signature: <u>Alexi Gabriel</u> Print Name: <u>Alexi Gabriel</u> Date/Time: <u>9/7/23 1840</u>		Relinquished By: Signature: _____ Print Name: _____ Date/Time: _____		Received By: Signature: _____ Print Name: _____ Date/Time: _____					

Test Codes (marine):

Mp-c: Chronic Kelp
Hr-dv: Chronic Abalone
Aa-a: Acute Topsmelt
Aa-c: Chronic Topsmelt
Mb-a: Acute Menidia/Silverside
Mb-c: Chronic Menidia/Silverside
Ab-a: Acute Mysid Shrimp
Ab-c: Chronic Mysid Shrimp
Sp-c: Chronic Urchin Fertilization
Sp-dv: Chronic Urchin Development
Ms-dv: Chronic Mussel Development
Other: Write out the test organism

Test Codes (freshwater):

Cd-a: Acute Ceriodaphnia
Cd-c: Chronic Ceriodaphnia
Pp-a: Acute Fathead Minnow
Pp-c: Chronic Fathead Minnow
Sc-c: Chronic Green Algae
Ha-a: Acute Hyalella amphipod
Ha-c: Chronic Hyalella amphipod
T-22: CA Title 22 Hazardous Waste



WSP Environmental Toxicology Lab
4905 Morena Blvd, Ste. 1304
San Diego, CA 92117
Phone: (858) 299-5368

Chain of Custody Form

Page 1 of 1

Client/Send Report To: Company <u>WSP USA Environment and Infrastructure Inc.</u> Address <u>9177 Sky Park Ct.</u> <u>San Diego, CA 92123</u> Contact/PM <u>Chris Stransky, Marisa Swiderski</u> Phone Number <u>858-775-5547; 808-772-8740</u> Email Address <u>chris.stransky@wsp.com, marisa.swiderski@wsp.com</u>			Project Information (if needed): Project Name <u>2023 Regional Harbor Monitoring Program</u> Project No. <u>2215100802.0003</u> PO Number <u>N/A</u> Personal Cooler Shipped: _____ Return Requested: YES <u>X</u> NO _____.			Analysis Requested (write out or use codes below)					Receipt Temp (°C)
						<i>Eohaustorius estuarius</i> 10-day amphipod survival test	48-hour <i>Mytilus galloprovincialis</i> embryo sediment-water interface test				
Sample ID	Collection Date	Collection Time	Sample Volume	Sample Type: Grab/Comp.	Sample Number (for lab use)						
B23-12006	9/8/2023	1425	10L	Comp		X	X			15.7	
B23-12007	9/8/2023	1230	10L	Comp		X	X			10.4	
B23-12008	9/8/2023	1115	10L	Comp		X	X			14.0	
B23-12151	9/8/2023	1005	10L	Comp		X	X			14.0	
B23-12152	9/8/2023	0850	9L	Comp		X	X			13.0	
Samples Collected By: Marisa Swiderski		Please conduct tests in accordance with the RHMP Work Plan/QAPP and the Bight '23 Toxicology Laboratory Manual.				Samples Shipped via: Condition Upon Receipt:					
Relinquished/Shipped By: Signature: <u>Marisa Swiderski</u> Print Name: <u>Marisa Swiderski</u> Date/Time: <u>9/8/2023 1805</u>		Received By: Signature: <u>Riley von Richter</u> Print Name: <u>Riley von Richter</u> Date/Time: <u>9/8/2023 1805</u>		Relinquished By: Signature: _____ Print Name: _____ Date/Time: _____		Received By: Signature: _____ Print Name: _____ Date/Time: _____					

Test Codes (marine):

Mp-c: Chronic Kelp
Hr-dv: Chronic Abalone
Aa-a: Acute Topsmelt
Aa-c: Chronic Topsmelt
Mb-a: Acute Menidia/Silverside
Mb-c: Chronic Menidia/Silverside
Ab-a: Acute Mysid Shrimp
Ab-c: Chronic Mysid Shrimp
Sp-c: Chronic Urchin Fertilization
Sp-dv: Chronic Urchin Development
Ms-dv: Chronic Mussel Development
Other: Write out the test organism

Test Codes (freshwater):

Cd-a: Acute Ceriodaphnia
Cd-c: Chronic Ceriodaphnia
Pp-a: Acute Fathead Minnow
Pp-c: Chronic Fathead Minnow
Sc-c: Chronic Green Algae
Ha-a: Acute Hyalella amphipod
Ha-c: Chronic Hyalella amphipod
T-22: CA Title 22 Hazardous Waste

Benthic Infauna COC Forms (EcoAnalysts)

BIGHT '23 CHAIN OF CUSTODY FORM

Agency: WSP

Contact name: Chris Stransky / Marisa Swiderski

Date: 10/10/2023

Contact Phone #/Email: (858)775-5547; chris.stransky@wsp.com
(808)772-8740; marisa.swiderski@wsp.com

Sampled By: Marisa Swiderski

Station	Collection Date	Collection Time	Analyses Requested	Container type	# of Containers	Comments
✓ B23-12000	8/3/2023	11:55	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	Ethanol decanted from all samples prior to shipment; please re-preserve samples with ethanol upon receipt.
✓ B23-12001	8/3/2023	15:55	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12002	8/3/2023	09:40	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12148	8/3/2023	14:25	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12005	8/4/2023	09:10	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12150	8/4/2023	12:50	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12063	8/17/2023	10:00	Benthic Infauna Taxonomic ID and Enumeration	Variety	7	
✓ B23-12064	8/17/2023	15:45	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12065	8/17/2023	11:45	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12066	8/17/2023	14:20	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	

Comments:

Samples were fixed in 10% formalin in the field and transferred to 70% ethanol. All samples were decanted prior to shipment and will need to be re-preserved with ethanol upon receipt.

Please analyze samples in accordance with procedures in the Bight '23 Macrobenthic (Infaunal) Sample Analysis Laboratory Manual.

Please submit invoices to apquery.us@wsp.com (cc: chris.stransky@wsp.com & marissa.cuevas@wsp.com) and include the following info:

(1) Project #: 2215100802.0003.ECOANA (2) PO #: TBD (3) Org: 3151 (4) GL: 573000

Relinquished by: Marisa Swiderski

Agency: WSP

Signature: Marisa Swiderski

Date: 10/10/2023

Comments: Relinquished to FedEx via Priority Overnight

Accepted by: Max Ries

Agency: EcoAnalysts, Inc.

Signature: Max Ries

Date: 10/11/2023

Relinquished by: _____

Agency: _____

Signature: _____

Date: _____

Comments: _____

Accepted by: _____

Agency: _____

Signature: _____

Date: _____

BIGHT '23/2023 RHMP CHAIN OF CUSTODY FORM

Batch 2

Agency: WSPContact name: Chris Stransky / Marisa SwiderskiDate: 10/12/2023Contact Phone #/Email: (858)775-5547; chris.stransky@wsp.com
(808)772-8740; marisa.swiderski@wsp.comSampled By: Marisa Swiderski

Station	Collection Date	Collection Time	Analyses Requested	Container type	# of Containers	Comments
✓ B23-12059	8/18/2023	12:10	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	Ethanol decanted from all samples prior to shipment; please re-preserve samples with ethanol upon receipt.
✓ B23-12060	8/18/2023	10:25	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12061	8/18/2023	15:25	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12062	8/18/2023	14:15	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12023	8/22/2023	09:20	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12024	8/22/2023	14:35	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12025	8/22/2023	13:30	Benthic Infauna Taxonomic ID and Enumeration	1gal HDPE	1	
✓ B23-12026	8/22/2023	11:40	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	2	
✓ B23-12055	8/22/2023	15:35	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12057	8/22/2023	10:30	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	2	
✓ B23-12058	8/22/2023	08:10	Benthic Infauna Taxonomic ID and Enumeration	1gal HDPE	1	

Comments:

Samples were fixed in 10% formalin in the field and transferred to 70% ethanol. All samples were decanted prior to shipment and will need to be re-preserved with ethanol upon receipt.

Please analyze samples in accordance with procedures in the Bight '23 Macrobenthic (Infaunal) Sample Analysis Laboratory Manual.

Please submit invoices to apquery.us@wsp.com (cc: chris.stransky@wsp.com & marissa.cuevas@wsp.com) and include the following info:

(1) Project #: 2215100802.0003.ECOANA (2) PO #: TBD (3) Org: 3151 (4) GL: 573000

Relinquished by: Marisa SwiderskiAgency: WSPSignature: Marisa SwiderskiDate: 10/12/2023 1325Comments: Relinquished to FedEx via Priority OvernightAccepted by: Max RiosAgency: EcoAnalysts, Inc.Signature: [Signature]Date: 10/13/2023

Relinquished by: _____

Agency: _____

Signature: _____

Date: _____

Comments: _____

Accepted by: _____

Agency: _____

Signature: _____

Date: _____

BIGHT '23/2023 RHMP CHAIN OF CUSTODY FORM

Agency: WSP

Contact name: Chris Stransky / Marisa Swiderski

Date: 10/25/2023

Contact Phone #: (858)775-5547; chris.stransky@wsp.com
(808)772-8740; marisa.swiderski@wsp.com

Sampled By: Marisa Swiderski

Station	Collection Date	Collection Time	Analyses Requested	Container type	# of Containers	Comments
✓✓✓ B23-12022	8/23/2023	09:05	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	3	Ethanol decanted from all samples prior to shipment; please re-preserve samples with ethanol upon receipt.
✓ B23-12056	8/23/2023	07:25	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12014	8/28/2023	10:05	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12047	8/28/2023	15:20	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12116	8/28/2023	08:50	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12121	8/28/2023	11:55	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12122	8/28/2023	13:55	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12048	8/29/2023	07:55	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12049	8/29/2023	10:15	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12050	8/29/2023	09:00	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12051	8/29/2023	16:10	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12053	8/29/2023	13:40	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12841	8/29/2023	14:55	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	

Comments:

Samples were fixed in 10% formalin in the field and transferred to 70% ethanol. All samples were decanted prior to shipment and will need to be re-preserved with ethanol upon receipt.

Please analyze samples in accordance with procedures in the Bight '23 Macrobenthic (Infaunal) Sample Analysis Laboratory Manual.

Please submit invoices to apquery.us@wsp.com (cc: chris.stransky@wsp.com & marissa.cuevas@wsp.com) and include the following info:

(1) Project #: 2215100802.0003.ECOANA (2) PO #: TBD (3) Org: 3151 (4) GL: 573000

Relinquished by: Marisa Swiderski

Agency: WSP

Signature: Marisa Swiderski

Date: 10/25/2023 1300

Comments: Relinquished to FedEx via Priority Overnight

Accepted by: Max Ries

Agency: EcoAnalysts, Inc.

Signature: [Signature]

Date: 10/26/2023 1200

Relinquished by: _____

Agency: _____

Signature: _____

Date: _____

Comments: _____

Accepted by: _____

Agency: _____

Signature: _____

Date: _____

BIGHT '23/2023 RHMP CHAIN OF CUSTODY FORM

Agency: WSP
 Date: 10/25/2023

Contact name: Chris Stransky / Marisa Swiderski
 Contact Phone #: (858)775-5547; chris.stransky@wsp.com
(808)772-8740; marisa.swiderski@wsp.com
 Sampled By: Marisa Swiderski

Station	Collection Date	Collection Time	Analyses Requested	Container type	# of Containers	Comments
B23-12054	8/29/2023	11:50	Benthic Infauna Taxonomic ID and Enumeration	1gal HDPE	1	Ethanol decanted from all samples prior to shipment; please re-preserve samples with ethanol upon receipt.
B23-12019	8/30/2023	12:10	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	2	
B23-12020	8/30/2023	11:00	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
B23-12021	8/30/2023	09:45	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
B23-12052	8/30/2023	08:10	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
B23-12123	8/30/2023	14:10	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
B23-12124	8/30/2023	15:20	Benthic Infauna Taxonomic ID and Enumeration	1gal HDPE	1	
B23-12115	8/31/2023	13:55	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
B23-12118	8/31/2023	10:35	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
B23-12120	8/31/2023	08:00	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
B23-12009	9/1/2023	12:10	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
B23-12010	9/1/2023	10:50	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
Comments: Samples were fixed in 10% formalin in the field and transferred to 70% ethanol. All samples were decanted prior to shipment and will need to be re-preserved with ethanol upon receipt. Please analyze samples in accordance with procedures in the Bight '23 Macrobenthic (Infaunal) Sample Analysis Laboratory Manual. Please submit invoices to apquery.us@wsp.com (cc: chris.stransky@wsp.com & marissa.cuevas@wsp.com) and include the following info: (1) Project #: 2215100802.0003.ECOANA (2) PO #: TBD (3) Org: 3151 (4) GL: 573000						

Relinquished by: Marisa Swiderski
 Agency: WSP
 Signature: Marisa Swiderski
 Date: 10/25/2023 1300
 Comments: Relinquished to FedEx via Priority Overnight

Accepted by: Max Rios
 Agency: EcoAnalysts, Inc.
 Signature: [Signature]
 Date: 10/26/2023 1200

Relinquished by: _____
 Agency: _____
 Signature: _____
 Date: _____
 Comments: _____

Accepted by: _____
 Agency: _____
 Signature: _____
 Date: _____

BIGHT '23/2023 RHMP CHAIN OF CUSTODY FORM

Agency: WSP Contact name: Chris Stransky / Marisa Swiderski

Date: 11/9/2023 Contact Phone #/Email: (858)775-5547; chris.stransky@wsp.com
(808)772-8740; marisa.swiderski@wsp.com

Sampled By: Marisa Swiderski

Station	Collection Date	Collection Time	Analyses Requested	Container type	# of Containers	Comments
B23-12114	8/31/2023	15:00	Benthic Infauna Taxonomic ID and Enumeration	1gal HDPE	1	Ethanol decanted from all samples prior to shipment; please re-preserve samples with ethanol upon receipt.
B23-12117	8/31/2023	11:35	Benthic Infauna Taxonomic ID and Enumeration	1gal HDPE	1	
B23-12119	8/31/2023	09:15	Benthic Infauna Taxonomic ID and Enumeration	1gal HDPE	1	
B23-12011	9/1/2023	09:35	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
B23-12012	9/1/2023	08:15	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
B23-12098	9/5/2023	16:00	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
B23-12099	9/5/2023	15:20	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	2	
B23-12103	9/5/2023	14:05	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
B23-12107	9/5/2023	13:10	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	

Comments:

Samples were fixed in 10% formalin in the field and transferred to 70% ethanol. All samples were decanted prior to shipment and will need to be re-preserved with ethanol upon receipt.

Please analyze samples in accordance with procedures in the Bight '23 Macrobenthic (Infaunal) Sample Analysis Laboratory Manual.

Please submit invoices to apquery.us@wsp.com (cc: chris.stransky@wsp.com & marissa.cuevas@wsp.com) and include the following info:

(1) Project #: 2215100802.0003.ECOANA (2) PO #: TBD (3) Org: 3151 (4) GL: 573000

Relinquished by: Marisa Swiderski
 Agency: WSP
 Signature: Marisa Swiderski
 Date: 11/9/2023 1330
 Comments: Relinquished to FedEx via Priority Overnight

Accepted by: Dylan Wellner
 Agency: Ecoanalysts Inc.
 Signature: Dylan Wellner
 Date: 11/10/2023

Relinquished by: _____
 Agency: _____
 Signature: _____
 Date: _____
 Comments: _____

Accepted by: _____
 Agency: _____
 Signature: _____
 Date: _____

BIGHT '23/2023 RHMP CHAIN OF CUSTODY FORM

Agency: WSP Contact name: Chris Stransky / Marisa Swiderski

Date: 11/9/2023 Contact Phone #/Email: (858)775-5547; chris.stransky@wsp.com
(808)772-8740; marisa.swiderski@wsp.com

Sampled By: Marisa Swiderski

Station	Collection Date	Collection Time	Analyses Requested	Container type	# of Containers	Comments
✓ B23-12109	9/5/2023	08:40	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	2	Ethanol decanted from all samples prior to shipment; please re-preserve samples with ethanol upon receipt.
✓ B23-12110	9/5/2023	10:15	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12155	9/5/2023	11:25	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12003	9/6/2023	15:15	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12091	9/6/2023	16:15	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12093	9/6/2023	13:40	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	3	
✓ B23-12095	9/6/2023	11:50	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12096	9/6/2023	10:40	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12097	9/6/2023	09:25	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12102	9/6/2023	08:15	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
✓ B23-12004	9/7/2023	12:00	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	2	

Comments:

Samples were fixed in 10% formalin in the field and transferred to 70% ethanol. All samples were decanted prior to shipment and will need to be re-preserved with ethanol upon receipt.

Please analyze samples in accordance with procedures in the Bight '23 Macroinfaunal (Infaunal) Sample Analysis Laboratory Manual.

Please submit invoices to apquery.us@wsp.com (cc: chris.stransky@wsp.com & marissa.cuevas@wsp.com) and include the following info:

(1) Project #: 2215100802.0003.ECOANA (2) PO #: TBD (3) Org: 3151 (4) GL: 573000

Relinquished by: Marisa Swiderski

Agency: WSP

Signature: Marisa Swiderski

Date: 11/9/2023 1330

Comments: Relinquished to FedEx via Priority Overnight

Accepted by: Max Rios

Agency: EcoAnalysts, Inc.

Signature: [Signature]

Date: 11/13/2023

Relinquished by: _____

Agency: _____

Signature: _____

Date: _____

Comments: _____

Accepted by: _____

Agency: _____

Signature: _____

Date: _____

BIGHT '23/2023 RHMP CHAIN OF CUSTODY FORM

Agency: WSP Contact name: Chris Stransky / Marisa Swiderski
 Date: 11/9/2023 Contact Phone #/Email: (858)775-5547; chris.stransky@wsp.com
(808)772-8740; marisa.swiderski@wsp.com
 Sampled By: Marisa Swiderski

Station	Collection Date	Collection Time	Analyses Requested	Container type	# of Containers	Comments
B23-12045	9/7/2023	15:50	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	Ethanol decanted from all samples prior to shipment; please re-preserve samples with ethanol upon receipt.
B23-12046	9/7/2023	14:00	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
B23-12089	9/7/2023	10:25	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	6	
B23-12090	9/7/2023	08:35	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	2	
B23-12006	9/8/2023	14:10	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
B23-12007	9/8/2023	12:00	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
B23-12008	9/8/2023	10:55	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
B23-12151	9/8/2023	09:50	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
B23-12152	9/8/2023	08:30	Benthic Infauna Taxonomic ID and Enumeration	1L HDPE	1	
Comments: Samples were fixed in 10% formalin in the field and transferred to 70% ethanol. All samples were decanted prior to shipment and will need to be re-preserved with ethanol upon receipt. Please analyze samples in accordance with procedures in the Bight '23 Macrobenthic (Infaunal) Sample Analysis Laboratory Manual. Please submit invoices to apquery.us@wsp.com (cc: chris.stransky@wsp.com & marissa.cuevas@wsp.com) and include the following info: (1) Project #: 2215100802.0003.ECOANA (2) PO #: TBD (3) Org: 3151 (4) GL: 573000						

Relinquished by: Marisa Swiderski
 Agency: WSP
 Signature: Marisa Swiderski
 Date: 11/9/2023 1330
 Comments: Relinquished to FedEx via Priority Overnight

Accepted by: Dylan Wellner
 Agency: Ecological Systems Inc.
 Signature: Dylan Wellner
 Date: 11/10/2023

Relinquished by: _____
 Agency: _____
 Signature: _____
 Date: _____
 Comments: _____

Accepted by: _____
 Agency: _____
 Signature: _____
 Date: _____