APPENDIX A

SEDIMENT CORE COLLECTION AND PROCESSING METHODS, STATION SUMMARIES, AND GRAPH CORE PROFILES

APPENDIX A-1

SEDIMENT CORE COLLECTION AND PROCESSING METHODS

TABLE A-1

CORE PROCESSING INTERVAL SCHEMES
Penobscot River Phase III Engineering Study
Penobscot River Estuary, Maine

River Reach	Zone	Core Designation	Station ID	Planned Core length	Interval Scheme	Sample ID
Bucksport Harbor	Subtidal Sediment	Consolidated	BH-03-01-A	8 feet	Llithology/ Stratigraphy Based	BH-03-01-A-17_SED_00-01
						BH-03-01-A-17_SED_01-03
						BH-03-01-A-17_SED_03-05
						BH-03-01-A-17_SED_05-07
						BH-03-01-A-17_SED_07-10
						BH-03-01-A-17_SED_10-13
						BH-03-01-A-17_SED_13-17
						BH-03-01-A-17_SED_17-20
						BH-03-01-A-17_SED_20-25
						BH-03-01-A-17_SED_25-30
						BH-03-01-A-17_SED_30-35
						BH-03-01-A-17_SED_35-39
						BH-03-01-A-17_SED_39-43
	Subtidal Sediment	Unconsolidated	BH-03-01-E	1 foot	Frozen Core	BH-03-01-E-17_SED_00-01
						BH-03-01-E-17_SED_01-03
						BH-03-01-E-17_SED_03-05
						BH-03-01-E-17_SED_05-07
Bucksport	Intertidal Sediment	Consolidated	BU-01-01-C	2 feet	Pre-determined	BU-01-01-C-17_SED_00-01
						BU-01-01-C-17_SED_01-03
						BU-01-01-C-17_SED_03-05
						BU-01-01-C-17_SED_05-07
						BU-01-01-C-17_SED_07-10
						BU-01-01-C-17_SED_10-15
						BU-01-01-C-17_SED_15-20
	Subtidal Sediment	Consolidated	BU-02-01-D	2 feet	Pre-determined	BU-02-01-D-17_SED_00-01
						BU-02-01-D-17_SED_01-03
						BU-02-01-D-17_SED_03-05
						BU-02-01-D-17_SED_05-07
						BU-02-01-D-17_SED_07-10
						BU-02-01-D-17_SED_10-15
						BU-02-01-D-17_SED_15-20
						BU-02-01-D-17_SED_20-30
	Subtidal Sediment	Unconsolidated	BU-02-01-E	1 foot	Frozen Core	BU-02-01-E-17_SED_00-01
						BU-02-01-E-17_SED_01-03
						BU-02-01-E-17_SED_03-05
	Subtidal Sediment	Consolidated	BU-05-01-A	2 feet	Pre-determined	BU-05-01-A-17_SED_00-01
						BU-05-01-A-17_SED_01-03
						BU-05-01-A-17_SED_03-05
						BU-05-01-A-17_SED_05-07
						BU-05-01-A-17_SED_07-10
						BU-05-01-A-17_SED_10-15
						BU-05-01-A-17_SED_15-20
	Intertidal Sediment	Consolidated	BU-08-01-A	2 feet	Pre-determined	BU-08-01-A-17_SED_00-01
						BU-08-01-A-17_SED_01-03
						BU-08-01-A-17_SED_03-05
						BU-08-01-A-17_SED_05-07
						BU-08-01-A-17_SED_07-10
						BU-08-01-A-17_SED_10-15
						BU-08-01-A-17_SED_15-20
	Intertidal Sediment	Unconsolidated	BU-08-01-E	1 foot	Frozen Core	BU-08-01-E-17_SED_00-01
						BU-08-01-E-17_SED_01-03
						BU-08-01-E-17_SED_03-05
						BU-08-01-E-17_SED_05-07
						BU-08-01-E-17_SED_07-10
	Subtidal Sediment	Consolidated	BU-09-01-C	8 feet	Pre-determined	BU-09-01-C-17_SED_00-01
						BU-09-01-C-17_SED_01-03
						BU-09-01-C-17_SED_03-05
						BU-09-01-C-17_SED_05-07
						BU-09-01-C-17_SED_07-10
						BU-09-01-C-17_SED_10-15
						BU-09-01-C-17_SED_15-20
						BU-09-01-C-17_SED_20-30
						BU-09-01-C-17_SED_30-40
						BU-09-01-C-17_SED_40-50

TABLE A-1

CORE PROCESSING INTERVAL SCHEMES
Penobscot River Phase III Engineering Study
Penobscot River Estuary, Maine

River Reach	Zone	Core Designation	Station ID	Planned Core length	Interval Scheme	Sample ID
Bucksport	Subtidal Sediment	Consolidated	BU-10-01-A	8 feet	Pre-determined	BU-10-01-A-17_SED_00-01
						BU-10-01-A-17_SED_01-03
						BU-10-01-A-17_SED_03-05
						BU-10-01-A-17_SED_05-07
						BU-10-01-A-17_SED_07-10
						BU-10-01-A-17_SED_10-15
						BU-10-01-A-17_SED_15-20
						BU-10-01-A-17_SED_20-30
						BU-10-01-A-17_SED_30-40
						BU-10-01-A-17_SED_40-50
						BU-10-01-A-17_SED_50-60
						BU-10-01-A-17_SED_60-70
						BU-10-01-A-17_SED_70-80
	Subtidal Sediment	Consolidated	BU-10-02-C	8 feet	Lithology/ Stratigraphy Based	BU-10-02-C-17_SED_00-01_R1
						BU-10-02-C-17_SED_00-01_R2
						BU-10-02-C-17_SED_00-01_R3
						BU-10-02-C-17_SED_00-01
						BU-10-02-C-17_SED_01-03
						BU-10-02-C-17_SED_01-03_R1
						BU-10-02-C-17_SED_01-03_R2
						BU-10-02-C-17_SED_01-03_R3
						BU-10-02-C-17_SED_03-04
						BU-10-02-C-17_SED_04-06
						BU-10-02-C-17_SED_04-06_R1
						BU-10-02-C-17_SED_04-06_R2
						BU-10-02-C-17_SED_04-06_R3
						BU-10-02-C-17_SED_06-09
						BU-10-02-C-17_SED_09-11
						BU-10-02-C-17_SED_11-12
						BU-10-02-C-17_SED_11-12_R1
						BU-10-02-C-17_SED_11-12_R2
						BU-10-02-C-17_SED_11-12_R3
						BU-10-02-C-17_SED_12-13
						BU-10-02-C-17_SED_13-14
						BU-10-02-C-17_SED_14-17
						BU-10-02-C-17_SED_17-20
						BU-10-02-C-17_SED_17-20_R1
						BU-10-02-C-17_SED_17-20_R2
						BU-10-02-C-17_SED_17-20_R3
						BU-10-02-C-17_SED_20-21
						BU-10-02-C-17_SED_21-25
						BU-10-02-C-17_SED_21-25_R1
						BU-10-02-C-17_SED_21-25_R2
						BU-10-02-C-17_SED_21-25_R3
						BU-10-02-C-17_SED_25-31
						BU-10-02-C-17_SED_25-31_R1
						BU-10-02-C-17_SED_25-31_R2
						BU-10-02-C-17_SED_25-31_R3
						BU-10-02-C-17_SED_31-35
						BU-10-02-C-17_SED_35-38
						BU-10-02-C-17_SED_35-38_R1
						BU-10-02-C-17_SED_35-38_R2
						BU-10-02-C-17_SED_35-38_R3
						BU-10-02-C-17_SED_38-39
						BU-10-02-C-17_SED_39-42
						BU-10-02-C-17_SED_42-44
						BU-10-02-C-17_SED_42-44_R1
						BU-10-02-C-17_SED_42-44_R2
						BU-10-02-C-17_SED_42-44_R3
						BU-10-02-C-17_SED_44-49
						BU-10-02-C-17_SED_44-49_R1
						BU-10-02-C-17_SED_44-49_R2
						BU-10-02-C-17_SED_44-49_R3
						BU-10-02-C-17_SED_49-52
						BU-10-02-C-17_SED_52-54
						BU-10-02-C-17_SED_54-55

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CORE PROCESSING INTERVAL SCHEMES
Penobscot River Phase III Engineering Study
Penobscot River Estuary, Maine

River Reach	Zone	Core Designation	Station ID	Planned Core length	Interval Scheme	Sample ID
Bucksport	Subtidal Sediment	Consolidated	BU-10-02-C	8 feet	Lithology/ Stratigraphy Based	BU-10-02-C-17_SED_54-55_R1
						BU-10-02-C-17_SED_54-55_R2
						BU-10-02-C-17_SED_54-55_R3
Frankfort Flats	Subtidal Sediment	Consolidated	FF-04-01-D	8 feet	Pre-determined	FF-04-01-D-17_SED_00-01
						FF-04-01-D-17_SED_01-03
						FF-04-01-D-17_SED_03-05
						FF-04-01-D-17_SED_05-07
						FF-04-01-D-17_SED_07-10
						FF-04-01-D-17_SED_10-15
						FF-04-01-D-17_SED_15-20
						FF-04-01-D-17_SED_20-30
						FF-04-01-D-17_SED_30-40
						FF-04-01-D-17_SED_40-50
	Subtidal Sediment	Consolidated	FF-06-01-A	2 feet	Pre-determined	FF-06-01-A-17_SED_00-01
						FF-06-01-A-17_SED_01-03
						FF-06-01-A-17_SED_03-05
						FF-06-01-A-17_SED_05-07
						FF-06-01-A-17_SED_07-10
						FF-06-01-A-17_SED_10-15
						FF-06-01-A-17_SED_15-20
	Subtidal Sediment	Consolidated	FF-07-01-E	8 feet	Lithology/ Stratigraphy Based	FF-07-01-E-17_SED_00-01
						FF-07-01-E-17_SED_01-03
						FF-07-01-E-17_SED_03-05
						FF-07-01-E-17_SED_05-07
						FF-07-01-E-17_SED_07-10
						FF-07-01-E-17_SED_10-15
						FF-07-01-E-17_SED_15-20
						FF-07-01-E-17_SED_20-25
						FF-07-01-E-17_SED_25-27
						FF-07-01-E-17_SED_27-30
						FF-07-01-E-17_SED_30-40
						FF-07-01-E-17_SED_40-45
						FF-07-01-E-17_SED_45-49
	Subtidal Sediment	Consolidated	FF-07-02-B	8 feet	Lithology/ Stratigraphy Based	FF-07-02-B-17_SED_30-33
						FF-07-02-B-17_SED_33-35
						FF-07-02-B-17_SED_35-38
						FF-07-02-B-17_SED_38-40
						FF-07-02-B-17_SED_40-43
						FF-07-02-B-17_SED_43-45
						FF-07-02-B-17_SED_45-48
						FF-07-02-B-17_SED_48-50
						FF-07-02-B-17_SED_50-53
						FF-07-02-B-17_SED_53-55
						FF-07-02-B-17_SED_55-58
						FF-07-02-B-17_SED_58-60
						FF-07-02-B-17_SED_60-63
						FF-07-02-B-17_SED_63-65
						FF-07-02-B-17_SED_65-68
						FF-07-02-B-17_SED_68-70
						FF-07-02-B-17_SED_70-73
						FF-07-02-B-17_SED_73-75
						FF-07-02-B-17_SED_75-78
						FF-07-02-B-17_SED_78-80
						FF-07-02-B-17_SED_80-83
	Intertidal Sediment	Consolidated	FF-08-01-B	8 feet	Pre-determined	FF-08-01-B-17_SED_00-01
						FF-08-01-B-17_SED_01-03
						FF-08-01-B-17_SED_03-05
						FF-08-01-B-17_SED_05-07
						FF-08-01-B-17_SED_07-10
						FF-08-01-B-17_SED_10-15
						FF-08-01-B-17_SED_15-20
						FF-08-01-B-17_SED_20-30
						FF-08-01-B-17_SED_30-40
						FF-08-01-B-17_SED_40-50
						FF-08-01-B-17_SED_50-60
						FF-08-01-B-17_SED_60-70

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CORE PROCESSING INTERVAL SCHEMES
Penobscot River Phase III Engineering Study
Penobscot River Estuary, Maine

River Reach	Zone	Core Designation	Station ID	Planned Core length	Interval Scheme	Sample ID
Frankfort Flats	Intertidal Sediment	Unconsolidated	FF-08-02-G	1 foot	Frozen Core	FF-08-02-G-17_SED_00-01
						FF-08-02-G-17_SED_01-03
						FF-08-02-G-17_SED_03-05
						FF-08-02-G-17_SED_05-07
	Intertidal Sediment	Consolidated	FF-08-02-J	8 feet	Lithology/ Stratigraphy Based	FF-08-02-J-17_SED_00-01
						FF-08-02-J-17_SED_01-03
						FF-08-02-J-17_SED_03-05
						FF-08-02-J-17_SED_05-07
						FF-08-02-J-17_SED_07-10
						FF-08-02-J-17_SED_07-10_R1
						FF-08-02-J-17_SED_07-10_R2
						FF-08-02-J-17_SED_07-10_R3
						FF-08-02-J-17_SED_10-13
						FF-08-02-J-17_SED_13-16
						FF-08-02-J-17_SED_13-16_R1
						FF-08-02-J-17_SED_13-16_R2
						FF-08-02-J-17_SED_13-16_R3
						FF-08-02-J-17_SED_16-19
						FF-08-02-J-17_SED_19-22
						FF-08-02-J-17_SED_19-22_R1
						FF-08-02-J-17_SED_19-22_R2
						FF-08-02-J-17_SED_19-22_R3
						FF-08-02-J-17_SED_22-25
						FF-08-02-J-17_SED_25-28
						FF-08-02-J-17_SED_25-28_R1
						FF-08-02-J-17_SED_25-28_R2
						FF-08-02-J-17_SED_25-28_R3
						FF-08-02-J-17_SED_28-31
						FF-08-02-J-17_SED_31-34
						FF-08-02-J-17_SED_34-37
						FF-08-02-J-17_SED_37-40
						FF-08-02-J-17_SED_40-45
						FF-08-02-J-17_SED_45-50
						FF-08-02-J-17_SED_50-55
						FF-08-02-J-17_SED_55-62
Mendall Marsh	Intertidal Sediment	Consolidated	MM-04-01-C	2 feet	Pre-determined	MM-04-01-C-17_SED_00-01
						MM-04-01-C-17_SED_01-03
						MM-04-01-C-17_SED_03-05
						MM-04-01-C-17_SED_05-07
						MM-04-01-C-17_SED_07-10
						MM-04-01-C-17_SED_10-15
						MM-04-01-C-17_SED_15-20
						MM-04-01-C-17_SED_20-30
	Intertidal Sediment	Unconsolidated	MM-04-01-F	1 foot	Frozen Core	MM-04-01-F-17_SED_00-01
						MM-04-01-F-17_SED_01-03
						MM-04-01-F-17_SED_03-05
						MM-04-01-F-17_SED_05-07
Orrington	Intertidal Sediment	Consolidated	ON-10-01-B	2 feet	Lithology/ Stratigraphy Based	ON-10-01-B-17_SED_00-01
						ON-10-01-B-17_SED_01-03
						ON-10-01-B-17_SED_03-05
						ON-10-01-B-17_SED_05-07
						ON-10-01-B-17_SED_07-09
						ON-10-01-B-17_SED_09-11
						ON-10-01-B-17_SED_11-15
						ON-10-01-B-17_SED_15-20
						ON-10-01-B-17_SED_20-25
						ON-10-01-B-17_SED_25-28
						ON-10-01-B-17_SED_28-30
						ON-10-01-B-17_SED_30-37
	Intertidal Sediment	Unconsolidated	ON-10-01-C	1 foot	Frozen Core	ON-10-01-C-17_SED_00-01
						ON-10-01-C-17_SED_01-03
						ON-10-01-C-17_SED_03-05

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CORE PROCESSING INTERVAL SCHEMES
Penobscot River Phase III Engineering Study
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River Reach	Zone	Core Designation	Station ID	Planned Core length	Interval Scheme	Sample ID
Orrington	Subtidal Sediment	Consolidated	ON-18-01-C	8 feet	Lithology/ Stratigraphy Based	ON-18-01-C-17_SED_00-01
						ON-18-01-C-17_SED_01-03
						ON-18-01-C-17_SED_03-05
						ON-18-01-C-17_SED_05-07
						ON-18-01-C-17_SED_07-10
						ON-18-01-C-17_SED_10-13
						ON-18-01-C-17_SED_13-16
						ON-18-01-C-17_SED_16-18
						ON-18-01-C-17_SED_18-20
						ON-18-01-C-17_SED_20-25
						ON-18-01-C-17_SED_25-30
						ON-18-01-C-17_SED_30-35
						ON-18-01-C-17_SED_35-40
						ON-18-01-C-17_SED_40-45
						ON-18-01-C-17_SED_45-50
						ON-18-01-C-17_SED_50-55
						ON-18-01-C-17_SED_55-60
						ON-18-01-C-17_SED_60-63
						ON-18-01-C-17_SED_63-67
	Subtidal Sediment	Unconsolidated	ON-18-01-F	1 foot	Frozen Core	ON-18-01-F-17_SED_00-01
						ON-18-01-F-17_SED_01-03
						ON-18-01-F-17_SED_03-05
						ON-18-01-F-17_SED_05-07
						ON-18-01-F-17_SED_07-10
	Subtidal Sediment	Consolidated	ON-18-02-C	2 feet	Lithology/ Stratigraphy Based	ON-18-02-C-17_SED_00-01
						ON-18-02-C-17_SED_01-03
						ON-18-02-C-17_SED_03-05
						ON-18-02-C-17_SED_05-07
						ON-18-02-C-17_SED_07-10
						ON-18-02-C-17_SED_10-15
						ON-18-02-C-17_SED_15-17
						ON-18-02-C-17_SED_17-20
						ON-18-02-C-17_SED_20-22
	Subtidal Sediment	Unconsolidated	ON-18-02-E	1 foot	Frozen Core	ON-18-02-E-17_SED_00-01
						ON-18-02-E-17_SED_01-03
						ON-18-02-E-17_SED_03-05
						ON-18-02-E-17_SED_05-07
						ON-18-02-E-17_SED_07-10
	Subtidal Sediment	Consolidated	ON-19-01-A	2 feet	Pre-determined	ON-19-01-A-17_SED_00-01
						ON-19-01-A-17_SED_01-03
						ON-19-01-A-17_SED_03-05
						ON-19-01-A-17_SED_05-07
						ON-19-01-A-17_SED_07-10
						ON-19-01-A-17_SED_10-15

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CORE PROCESSING INTERVAL SCHEMES
Penobscot River Phase III Engineering Study
Penobscot River Estuary, Maine

River Reach	Zone	Core Designation	Station ID	Planned Core length	Interval Scheme	Sample ID
Verona East	Subtidal Sediment	Consolidated	VE-05-01-E	8 feet	Lithology/ Stratigraphy Based	VE-05-01-E-17_SED_00-01_R1
						VE-05-01-E-17_SED_00-01_R2
						VE-05-01-E-17_SED_00-01_R3
						VE-05-01-E-17_SED_00-01
						VE-05-01-E-17_SED_01-03
						VE-05-01-E-17_SED_01-03_R1
						VE-05-01-E-17_SED_01-03_R2
						VE-05-01-E-17_SED_01-03_R3
						VE-05-01-E-17_SED_03-05
						VE-05-01-E-17_SED_03-05_R1
						VE-05-01-E-17_SED_03-05_R2
						VE-05-01-E-17_SED_03-05_R3
						VE-05-01-E-17_SED_05-07
						VE-05-01-E-17_SED_05-07_R1
						VE-05-01-E-17_SED_05-07_R2
						VE-05-01-E-17_SED_05-07_R3
						VE-05-01-E-17_SED_07-10
						VE-05-01-E-17_SED_07-10_R1
						VE-05-01-E-17_SED_07-10_R2
						VE-05-01-E-17_SED_07-10_R3
						VE-05-01-E-17_SED_10-15
						VE-05-01-E-17_SED_15-20
						VE-05-01-E-17_SED_20-25
						VE-05-01-E-17_SED_25-30
						VE-05-01-E-17_SED_30-35
						VE-05-01-E-17_SED_35-38
						VE-05-01-E-17_SED_38-39
						VE-05-01-E-17_SED_38-39_R1
						VE-05-01-E-17_SED_38-39_R2
						VE-05-01-E-17_SED_38-39_R3
						VE-05-01-E-17_SED_39-40
						VE-05-01-E-17_SED_39-40_R1
						VE-05-01-E-17_SED_39-40_R2
						VE-05-01-E-17_SED_39-40_R3
						VE-05-01-E-17_SED_40-42
						VE-05-01-E-17_SED_40-42_R1
						VE-05-01-E-17_SED_40-42_R2
						VE-05-01-E-17_SED_40-42_R3
						VE-05-01-E-17_SED_42-43
						VE-05-01-E-17_SED_43-44
						VE-05-01-E-17_SED_43-44_R1
						VE-05-01-E-17_SED_43-44_R2
						VE-05-01-E-17_SED_43-44_R3
						VE-05-01-E-17_SED_44-45
						VE-05-01-E-17_SED_45-46
						VE-05-01-E-17_SED_45-46_R1
						VE-05-01-E-17_SED_45-46_R2
						VE-05-01-E-17_SED_45-46_R3
						VE-05-01-E-17_SED_46-48
						VE-05-01-E-17_SED_48-49
						VE-05-01-E-17_SED_48-49_R1
						VE-05-01-E-17_SED_48-49_R2
						VE-05-01-E-17_SED_48-49_R3
						VE-05-01-E-17_SED_49-52
						VE-05-01-E-17_SED_52-54
						VE-05-01-E-17_SED_52-54_R1
						VE-05-01-E-17_SED_52-54_R2
						VE-05-01-E-17_SED_52-54_R3
						VE-05-01-E-17_SED_54-55
						VE-05-01-E-17_SED_54-55_R1
						VE-05-01-E-17_SED_54-55_R2
						VE-05-01-E-17_SED_54-55_R3
						VE-05-01-E-17_SED_55-57
						VE-05-01-E-17_SED_57-58
						VE-05-01-E-17_SED_57-58_R1
						VE-05-01-E-17_SED_57-58_R2

TABLE A-1

CORE PROCESSING INTERVAL SCHEMES
Penobscot River Phase III Engineering Study
Penobscot River Estuary, Maine

River Reach	Zone	Core Designation	Station ID	Planned Core length	Interval Scheme	Sample ID
Verona East	Subtidal Sediment	Consolidated	VE-05-01-E	8 feet	Lithology/ Stratigraphy Based	VE-05-01-E-17_SED_57-58_R3
						VE-05-01-E-17_SED_58-59
						VE-05-01-E-17_SED_59-60
						VE-05-01-E-17_SED_59-60-D_R1
						VE-05-01-E-17_SED_59-60-D_R2
						VE-05-01-E-17_SED_59-60-D_R3
						VE-05-01-E-17_SED_59-60_R1
						VE-05-01-E-17_SED_59-60_R2
						VE-05-01-E-17_SED_59-60_R3
						VE-05-01-E-17_SED_60-61
						VE-05-01-E-17_SED_60-61_R1
						VE-05-01-E-17_SED_60-61_R2
						VE-05-01-E-17_SED_60-61_R3
						VE-05-01-E-17_SED_61-62
						VE-05-01-E-17_SED_61-62_R1
						VE-05-01-E-17_SED_61-62_R2
						VE-05-01-E-17_SED_61-62_R3
						VE-05-01-E-17_SED_62-64
						VE-05-01-E-17_SED_62-64_R1
						VE-05-01-E-17_SED_62-64_R2
						VE-05-01-E-17_SED_62-64_R3
	Intertidal Sediment	Consolidated	VE-09-01-B	2 feet	Lithology/ Stratigraphy Based	VE-09-01-B-17_SED_00-01
						VE-09-01-B-17_SED_01-03
						VE-09-01-B-17_SED_03-05
						VE-09-01-B-17_SED_05-07
						VE-09-01-B-17_SED_07-10
						VE-09-01-B-17_SED_10-13
						VE-09-01-B-17_SED_13-16
						VE-09-01-B-17_SED_16-20
						VE-09-01-B-17_SED_20-23
	Intertidal Sediment	Unconsolidated	VE-09-01-E	1 foot	Frozen Core	VE-09-01-E-17_SED_00-01
						VE-09-01-E-17_SED_01-03
						VE-09-01-E-17_SED_03-05
						VE-09-01-E-17_SED_05-07
						VE-09-01-E-17_SED_07-10
	Intertidal Sediment	Consolidated	VE-10-01-C	2 feet	Lithology/ Stratigraphy Based	VE-10-01-C-17_SED_00-01
						VE-10-01-C-17_SED_01-02
						VE-10-01-C-17_SED_02-03
						VE-10-01-C-17_SED_03-05
						VE-10-01-C-17_SED_05-07
						VE-10-01-C-17_SED_07-10
						VE-10-01-C-17_SED_10-13
						VE-10-01-C-17_SED_13-16
						VE-10-01-C-17_SED_16-20
	Intertidal Sediment	Unconsolidated	VE-10-01-E	1 foot	Frozen Core	VE-10-01-E-17_SED_00-01
						VE-10-01-E-17_SED_01-03
						VE-10-01-E-17_SED_03-05
						VE-10-01-E-17_SED_05-07
						VE-10-01-E-17_SED_07-10
Verona Northeast	Intertidal Sediment	Unconsolidated	VN-01-01-B	1 foot	Frozen Core	VN-01-01-B-17_SED_00-01
						VN-01-01-B-17_SED_01-03
						VN-01-01-B-17_SED_03-05
						VN-01-01-B-17_SED_05-07
						VN-01-01-B-17_SED_07-10
	Intertidal Sediment	Consolidated	VN-01-01-E	2 feet	Lithology/ Stratigraphy Based	VN-01-01-E-17_SED_00-01
						VN-01-01-E-17_SED_01-03
						VN-01-01-E-17_SED_03-05
						VN-01-01-E-17_SED_05-07
						VN-01-01-E-17_SED_07-10
						VN-01-01-E-17_SED_10-15
						VN-01-01-E-17_SED_15-17
						VN-01-01-E-17_SED_17-18
						VN-01-01-E-17_SED_18-20
						VN-01-01-E-17_SED_20-23

TABLE A-1

CORE PROCESSING INTERVAL SCHEMES
Penobscot River Phase III Engineering Study
Penobscot River Estuary, Maine

River Reach	Zone	Core Designation	Station ID	Planned Core length	Interval Scheme	Sample ID
Verona Northeast	Intertidal Sediment	Unconsolidated	VN-02-01-A	1 foot	Frozen Core	VN-02-01-A-17_SED_00-01
						VN-02-01-A-17_SED_01-03
						VN-02-01-A-17_SED_03-05
						VN-02-01-A-17_SED_05-07
						VN-02-01-A-17_SED_07-10
	Intertidal Sediment	Consolidated	VN-02-01-D	2 feet	Lithology/ Stratigraphy Based	VN-02-01-D-17_SED_00-01
						VN-02-01-D-17_SED_01-03
						VN-02-01-D-17_SED_03-05
						VN-02-01-D-17_SED_05-07
						VN-02-01-D-17_SED_07-10
						VN-02-01-D-17_SED_10-15
						VN-02-01-D-17_SED_15-17
						VN-02-01-D-17_SED_17-22
	Intertidal Sediment	Unconsolidated	VN-02-03-A	1 foot	Frozen Core	VN-02-03-A-17_SED_00-01
						VN-02-03-A-17_SED_01-03
						VN-02-03-A-17_SED_03-05
						VN-02-03-A-17_SED_05-07
						VN-02-03-A-17_SED_07-10
	Intertidal Sediment	Consolidated	VN-02-03-E	2 feet	Lithology/ Stratigraphy Based	VN-02-03-E-17_SED_00-01
						VN-02-03-E-17_SED_01-03
						VN-02-03-E-17_SED_03-05
						VN-02-03-E-17_SED_05-07
						VN-02-03-E-17_SED_07-10
						VN-02-03-E-17_SED_10-15
						VN-02-03-E-17_SED_15-19
						VN-02-03-E-17_SED_19-22
						VN-02-03-E-17_SED_22-25
						VN-02-03-E-17_SED_25-27
	Intertidal Sediment	Unconsolidated	VN-02-04-B	1 foot	Frozen Core	VN-02-04-B-17_SED_00-01
						VN-02-04-B-17_SED_01-03
						VN-02-04-B-17_SED_03-05
						VN-02-04-B-17_SED_05-07
						VN-02-04-B-17_SED_07-10
	Intertidal Sediment	Consolidated	VN-02-04-C	2 feet	Lithology/ Stratigraphy Based	VN-02-04-C-17_SED_00-01
						VN-02-04-C-17_SED_01-03
						VN-02-04-C-17_SED_03-05
						VN-02-04-C-17_SED_05-07
						VN-02-04-C-17_SED_07-10
						VN-02-04-C-17_SED_10-15
						VN-02-04-C-17_SED_15-20
						VN-02-04-C-17_SED_20-24
						VN-02-04-C-17_SED_24-29
	Intertidal Sediment	Consolidated	VN-03-01-B	2 feet	Lithology/ Stratigraphy Based	VN-03-01-B-17_SED_00-01
						VN-03-01-B-17_SED_01-03
						VN-03-01-B-17_SED_03-05
						VN-03-01-B-17_SED_05-07
						VN-03-01-B-17_SED_07-10
						VN-03-01-B-17_SED_10-15
						VN-03-01-B-17_SED_15-21
						VN-03-01-B-17_SED_21-27
	Intertidal Sediment	Unconsolidated	VN-03-01-D	1 foot	Frozen Core	VN-03-01-D-17_SED_00-01
						VN-03-01-D-17_SED_01-03
						VN-03-01-D-17_SED_03-05
						VN-03-01-D-17_SED_05-07
						VN-03-01-D-17_SED_07-10

TABLE A-1

CORE PROCESSING INTERVAL SCHEMES
Penobscot River Phase III Engineering Study
Penobscot River Estuary, Maine

River Reach	Zone	Core Designation	Station ID	Planned Core length	Interval Scheme	Sample ID
Verona Northeast	Subtidal Sediment	Consolidated	VN-04-01-D	2 feet	Lithology/ Stratigraphy Based	VN-04-01-D-17_SED_00-01
						VN-04-01-D-17_SED_01-03
						VN-04-01-D-17_SED_03-05
						VN-04-01-D-17_SED_05-07
						VN-04-01-D-17_SED_07-10
						VN-04-01-D-17_SED_10-15
						VN-04-01-D-17_SED_15-17
						VN-04-01-D-17_SED_17-20
						VN-04-01-D-17_SED_20-22
						VN-04-01-D-17_SED_22-23
						VN-04-01-D-17_SED_23-25
						VN-04-01-D-17_SED_25-27
						VN-04-01-D-17_SED_27-30
						VN-04-01-D-17_SED_30-36
	Subtidal Sediment	Unconsolidated	VN-04-01-E	1 foot	Frozen Core	VN-04-01-E-17_SED_00-01
						VN-04-01-E-17_SED_01-03
						VN-04-01-E-17_SED_03-05
						VN-04-01-E-17_SED_05-07
						VN-04-01-E-17_SED_07-10
	Subtidal Sediment	Consolidated	VN-04-02-A	2 feet	Pre-determined	VN-04-02-A-17_SED_00-01
						VN-04-02-A-17_SED_01-03
						VN-04-02-A-17_SED_03-05
						VN-04-02-A-17_SED_05-07
						VN-04-02-A-17_SED_07-10
						VN-04-02-A-17_SED_10-15
						VN-04-02-A-17_SED_15-20
						VN-04-02-A-17_SED_20-25
						VN-04-02-A-17_SED_25-31
	Subtidal Sediment	Unconsolidated	VN-04-02-C	1 foot	Frozen Core	VN-04-02-C-17_SED_00-01
						VN-04-02-C-17_SED_01-03
						VN-04-02-C-17_SED_03-05
						VN-04-02-C-17_SED_05-07
						VN-04-02-C-17_SED_07-10
	Subtidal Sediment	Consolidated	VN-05-01-D	8 feet	Lithology/ Stratigraphy Based	VN-05-01-D-17_SED_00-01
						VN-05-01-D-17_SED_01-02
						VN-05-01-D-17_SED_02-03
						VN-05-01-D-17_SED_03-05
						VN-05-01-D-17_SED_05-07
						VN-05-01-D-17_SED_07-10
						VN-05-01-D-17_SED_10-11
						VN-05-01-D-17_SED_11-15
						VN-05-01-D-17_SED_15-17
						VN-05-01-D-17_SED_17-20
						VN-05-01-D-17_SED_20-25
						VN-05-01-D-17_SED_25-30
						VN-05-01-D-17_SED_30-35
						VN-05-01-D-17_SED_35-40
						VN-05-01-D-17_SED_40-45
						VN-05-01-D-17_SED_45-50
						VN-05-01-D-17_SED_50-52
						VN-05-01-D-17_SED_52-60
						VN-05-01-D-17_SED_60-65
						VN-05-01-D-17_SED_65-70
						VN-05-01-D-17_SED_70-75
	Intertidal Sediment	Consolidated	VN-08-01-B	2 feet	Lithology/ Stratigraphy Based	VN-08-01-B-17_SED_00-01
						VN-08-01-B-17_SED_01-03
						VN-08-01-B-17_SED_03-05
						VN-08-01-B-17_SED_05-07
						VN-08-01-B-17_SED_07-10
						VN-08-01-B-17_SED_10-13
						VN-08-01-B-17_SED_13-18
						VN-08-01-B-17_SED_18-21
	Intertidal Sediment	Unconsolidated	VN-08-01-E	1 foot	Frozen Core	VN-08-01-E-17_SED_00-01
						VN-08-01-E-17_SED_01-03
						VN-08-01-E-17_SED_03-05
						VN-08-01-E-17_SED_05-07

TABLE A-1

CORE PROCESSING INTERVAL SCHEMES
Penobscot River Phase III Engineering Study
Penobscot River Estuary, Maine

River Reach	Zone	Core Designation	Station ID	Planned Core length	Interval Scheme	Sample ID
Verona West	Subtidal Sediment	Consolidated	VW-02-01-B	8 feet	Lithology/ Stratigraphy Based	VW-02-01-B-17_SED_00-01
						VW-02-01-B-17_SED_01-03
						VW-02-01-B-17_SED_03-05
						VW-02-01-B-17_SED_05-07
						VW-02-01-B-17_SED_07-09
						VW-02-01-B-17_SED_09-11
						VW-02-01-B-17_SED_11-13
						VW-02-01-B-17_SED_13-15
						VW-02-01-B-17_SED_15-20
						VW-02-01-B-17_SED_20-25
						VW-02-01-B-17_SED_25-30
						VW-02-01-B-17_SED_30-35
						VW-02-01-B-17_SED_35-40
						VW-02-01-B-17_SED_40-45
						VW-02-01-B-17_SED_45-50
						VW-02-01-B-17_SED_50-55
						VW-02-01-B-17_SED_55-60
						VW-02-01-B-17_SED_60-65
						VW-02-01-B-17_SED_65-70
						VW-02-01-B-17_SED_70-75
						VW-02-01-B-17_SED_75-80
	Subtidal Sediment	Unconsolidated	VW-02-01-E	1 foot	Frozen Core	VW-02-01-E-17_SED_00-01
						VW-02-01-E-17_SED_01-03
						VW-02-01-E-17_SED_03-05
	Subtidal Sediment	Consolidated	VW-14-01-E	2 feet	Lithology/ Stratigraphy Based	VW-14-01-E-17_SED_00-01
						VW-14-01-E-17_SED_01-03
						VW-14-01-E-17_SED_03-05
						VW-14-01-E-17_SED_05-07
						VW-14-01-E-17_SED_07-10
						VW-14-01-E-17_SED_10-12
						VW-14-01-E-17_SED_12-14
						VW-14-01-E-17_SED_14-16
						VW-14-01-E-17_SED_16-18
						VW-14-01-E-17_SED_18-20
	Subtidal Sediment	Unconsolidated	VW-14-01-F	1 foot	Frozen Core	VW-14-01-F-17_SED_00-01
						VW-14-01-F-17_SED_01-03
						VW-14-01-F-17_SED_03-05
						VW-14-01-F-17_SED_05-07
						VW-14-01-F-17_SED_07-10
Winterport	Intertidal Sediment	Consolidated	WP-02-01-B	2 feet	Pre-determined	WP-02-01-B-17_SED_00-01
						WP-02-01-B-17_SED_01-03
						WP-02-01-B-17_SED_03-05
						WP-02-01-B-17_SED_05-07
						WP-02-01-B-17_SED_07-10
						WP-02-01-B-17_SED_10-15
						WP-02-01-B-17_SED_15-20
						WP-02-01-B-17_SED_20-30
	Intertidal Sediment	Unconsolidated	WP-02-01-D	1 foot	Frozen Core	WP-02-01-D-17_SED_00-01
						WP-02-01-D-17_SED_01-03
						WP-02-01-D-17_SED_03-05
						WP-02-01-D-17_SED_05-07
						WP-02-01-D-17_SED_07-10
	Subtidal Sediment	Consolidated	WP-06-02-C	8 feet	Pre-determined	WP-06-02-C-17_SED_00-01
						WP-06-02-C-17_SED_01-03
						WP-06-02-C-17_SED_03-05
						WP-06-02-C-17_SED_05-07
						WP-06-02-C-17_SED_07-10
						WP-06-02-C-17_SED_10-15
						WP-06-02-C-17_SED_15-20
						WP-06-02-C-17_SED_20-30
						WP-06-02-C-17_SED_30-40
						WP-06-02-C-17_SED_40-50
						WP-06-02-C-17_SED_50-60
	Subtidal Sediment	Unconsolidated	WP-06-02-F	1 foot	Frozen Core	WP-06-02-F-17_SED_00-01
						WP-06-02-F-17_SED_01-03
						WP-06-02-F-17_SED_03-05

Prepared by: MKM 1/30/2018
Checked by: DRY 1/30/2018

APPENDIX A-2

SEDIMENT CORE STATION SUMMARIES
(ELECTRONIC DELIVERABLE PROVIDED ON DISK)

APPENDIX A-3

SEDIMENT CORE LITHOLOGY AND ANALYTICAL PROFILE GRAPHS

TABLE A-3

SEDIMENT CORE LITHOLOGY AND ANALYTICAL PROFILE GRAPH SUMMARY[1]
Penobscot River Phase III Engineering Study
Penobscot River Estuary, Maine

Figure Number	Reach	Zone	Station ID	Core ID	Page Number	1-foot Short Core	2-foot Short Core	8-foot Long Core	Collection Method	Core Designation
Figure A.3-1	Orrington	Intertidal	ON-10-01	ON-10-01-C	1	X			Box Core	Unconsolidated
Figure A.3-2	Orrington	Intertidal	ON-10-01	ON-10-01-B	2		X		Vibracore	Consolidated
Figure A.3-3	Orrington	Subtidal	ON-18-01	ON-18-01-F	3	X			Box Core	Unconsolidated
Figure A.3-4	Orrington	Subtidal	ON-18-01	ON-18-01-C	4			X	Vibracore	Consolidated
Figure A.3-5	Orrington	Subtidal	ON-18-02	ON-18-02-E	5	X			Box Core	Unconsolidated
Figure A.3-6	Orrington	Subtidal	ON-18-02	ON-18-02-C	6		X		Vibracore	Consolidated
Figure A.3-7	Orrington	Subtidal	ON-19-01	ON-19-01-A	7		X		Vibracore	Consolidated
Figure A.3-8	Winterport	Intertidal	WP-02-01	WP-02-01-D	8	X			Push Core	Unconsolidated
Figure A.3-9	Winterport	Intertidal	WP-02-01	WP-02-01-B	9		X		Manual Piston Core	Consolidated
Figure A.3-10	Winterport	Subtidal	WP-06-02	WP-06-02-F	10	X			Box Core	Unconsolidated
Figure A.3-11	Winterport	Subtidal	WP-06-02	WP-06-02-C	11			X	Vibracore	Consolidated
Figure A.3-12	Frankfort Flats	Subtidal	FF-04-01	FF-04-01D	12			X	Vibracore	Consolidated
Figure A.3-13	Frankfort Flats	Subtidal	FF-06-01	FF-06-1-A	13		X		Vibracore	Consolidated
Figure A.3-14	Frankfort Flats	Subtidal	FF-07-01	FF-07-01-E	14			X	Vibracore	Consolidated
Figure A.3-15	Frankfort Flats	Subtidal	FF-MU7-GC-1 / FF-07-02	FF-MU7-GC-1 / FF-07-02-B	15			X	Vibracore	Consolidated
Figure A.3-16	Frankfort Flats	Intertidal	FF-08-01	FF-08-01-B	16			X	Vibracore	Consolidated
Figure A.3-17	Frankfort Flats	Intertidal	FF-08-02	FF-08-02-G	17	X			Box Core	Unconsolidated
Figure A.3-18	Frankfort Flats	Intertidal	FF-08-02	FF-08-02-J	18			X	Vibracore	Consolidated
Figure A.3-19	Mendall Marsh	Intertidal	MM-04-01	MM-04-01-F	19	X			Push Core	Unconsolidated
Figure A.3-20	Mendall Marsh	Intertidal	MM-04-01	MM-04-01-C	20		X		Manual Piston Core	Consolidated
Figure A.3-21	Bucksport	Intertidal	BU-01-01	BU-01-01-C	21		X		Vibracore	Consolidated
Figure A.3-22	Bucksport	Subtidal	BU-02-01	BU-02-01-E	22	X			Box Core	Unconsolidated
Figure A.3-23	Bucksport	Subtidal	BU-02-01	BU-02-01-D	23		X		Vibracore	Consolidated
Figure A.3-24	Bucksport	Subtidal	BU-05-01	BU-05-01-A	24		X		Vibracore	Consolidated
Figure A.3-25	Bucksport	Intertidal	BU-08-01	BU-08-01-E	25	X			Push Core	Unconsolidated
Figure A.3-26	Bucksport	Intertidal	BU-08-01	BU-08-01-A	26		X		Manual Piston Core	Consolidated
Figure A.3-27	Bucksport	Subtidal	BU-09-01	BU-09-01-C	27			X	Vibracore	Consolidated
Figure A.3-28	Bucksport	Subtidal	BU-10-01	BU-10-01-A	28			X	Vibracore	Consolidated
Figure A.3-29	Bucksport	Subtidal	BU-10-02	BU-10-02-C	29			X	Vibracore	Consolidated
Figure A.3-30	Bucksport Harbor	Intertidal	BH-03-01	BH-03-01-E	30	X			Push Core	Unconsolidated
Figure A.3-31	Bucksport Harbor	Intertidal	BH-03-01	BH-03-01-A	31			X	Manual Piston Core	Consolidated
Figure A.3-32	Verona Northeast	Intertidal	VN-01-01	VN-01-01-B	32	X			Push Core	Unconsolidated
Figure A.3-33	Verona Northeast	Intertidal	VN-01-01	VN-01-01-E	33		X		Manual Piston Core	Consolidated
Figure A.3-34	Verona Northeast	Intertidal	VN-02-01	VN-02-01-A	34	X			Push Core	Unconsolidated
Figure A.3-35	Verona Northeast	Intertidal	VN-02-01	VN-02-01-D	35		X		Manual Piston Core	Consolidated
Figure A.3-36	Verona Northeast	Intertidal	VN-02-03	VN-02-03-A	36	X			Push Core	Unconsolidated
Figure A.3-37	Verona Northeast	Intertidal	VN-02-03	VN-02-03-E	37		X		Manual Piston Core	Consolidated
Figure A.3-38	Verona Northeast	Intertidal	VN-02-04	VN-02-04-B	38	X			Push Core	Unconsolidated
Figure A.3-39	Verona Northeast	Intertidal	VN-02-04	VN-02-04-C	39		X		Manual Piston Core	Consolidated

TABLE A-3

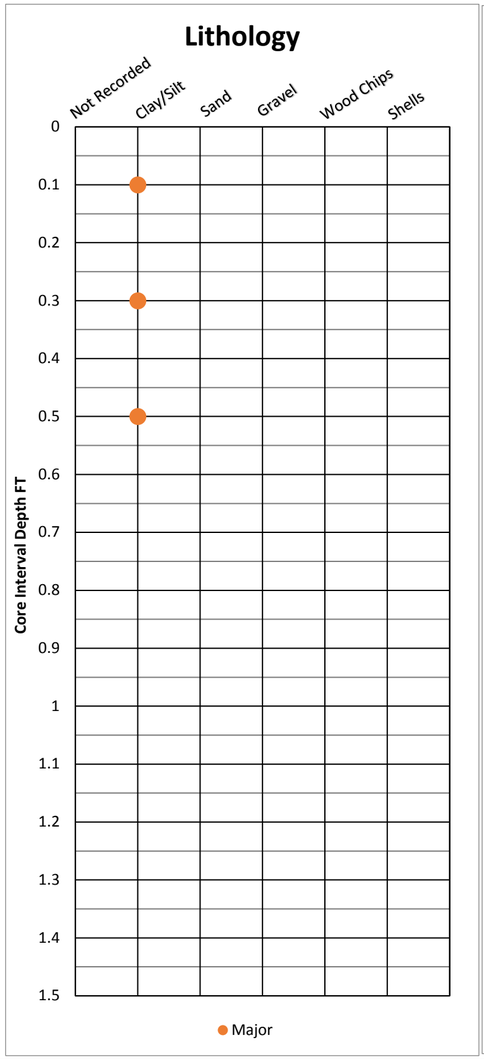
SEDIMENT CORE LITHOLOGY AND ANALYTICAL PROFILE GRAPH SUMMARY[1]
Penobscot River Phase III Engineering Study
Penobscot River Estuary, Maine

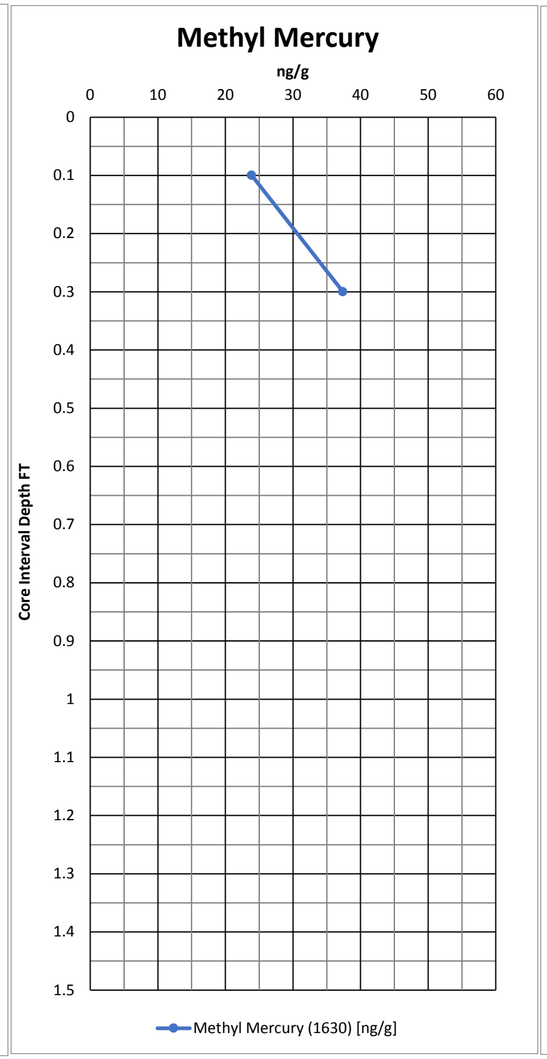
Figure Number	Reach	Zone	Station ID	Core ID	Page Number	1-foot Short Core	2-foot Short Core	8-foot Long Core	Collection Method	Core Designation
Figure A.3-40	Verona Northeast	Intertidal	VN-03-01	VN-03-01-D	40	X			Push Core	Unconsolidated
Figure A.3-41	Verona Northeast	Intertidal	VN-03-01	VN-03-01-B	41		X		Manual Piston Core	Consolidated
Figure A.3-42	Verona Northeast	Subtidal	VN-04-01	VN-04-01-E	42	X			Push Core	Unconsolidated
Figure A.3-43	Verona Northeast	Subtidal	VN-04-01	VN-04-01-D	43		X		Manual Piston Core	Consolidated
Figure A.3-44	Verona Northeast	Subtidal	VN-04-02	VN-04-02-C	44	X			Push Core	Unconsolidated
Figure A.3-45	Verona Northeast	Subtidal	VN-04-02	VN-04-02-A	45		X		Manual Piston Core	Consolidated
Figure A.3-46	Verona Northeast	Subtidal	VN-05-01	VN-05-01-D	46			X	Vibracore	Consolidated
Figure A.3-47	Verona Northeast	Intertidal	VN-08-01	VN-08-01-E	47	X			Push Core	Unconsolidated
Figure A.3-48	Verona Northeast	Intertidal	VN-08-01	VN-08-01-B	48		X		Manual Piston Core	Consolidated
Figure A.3-49	Verona West	Subtidal	VW-02-01	VW-02-01-E	49	X			Box Core	Unconsolidated
Figure A.3-50	Verona West	Subtidal	VW-02-01	VW-02-01-B	50			X	Vibracore	Consolidated
Figure A.3-51	Verona West	Subtidal	VW-14-01	VW-14-01-F	51	X			Box Core	Unconsolidated
Figure A.3-52	Verona West	Subtidal	VW-14-01	VW-14-01-E	52		X		Vibracore	Consolidated
Figure A.3-53	Verona East	Subtidal	VE-05-01	VE-05-01-E	53			X	Vibracore	Consolidated
Figure A.3-54	Verona East	Intertidal	VE-09-01	VE-09-01-E	54	X			Push Core	Unconsolidated
Figure A.3-55	Verona East	Intertidal	VE-09-01	VE-09-01-B	55		X		Manual Piston Core	Consolidated
Figure A.3-56	Verona East	Intertidal	VE-10-01	VE-10-01-E	56	X			Push Core	Unconsolidated
Figure A.3-57	Verona East	Intertidal	VE-10-01	VE-10-01-C	57		X		Manual Piston Core	Consolidated

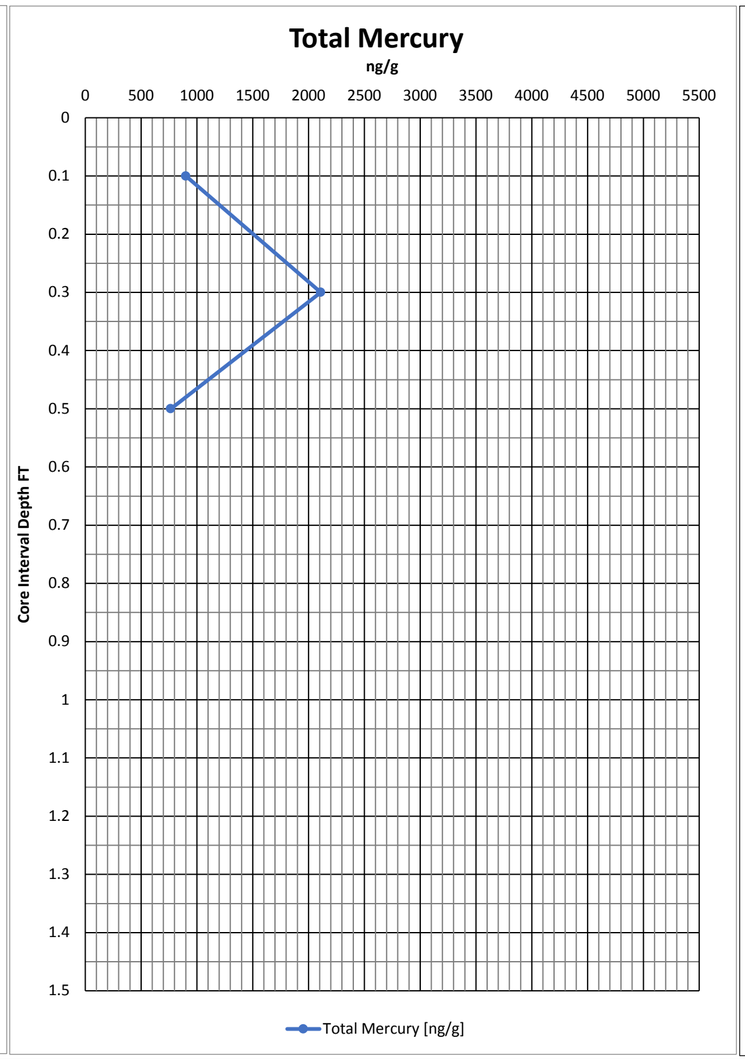
Notes:
1. Depths presented for each data point represent the bottom of the interval sampled.

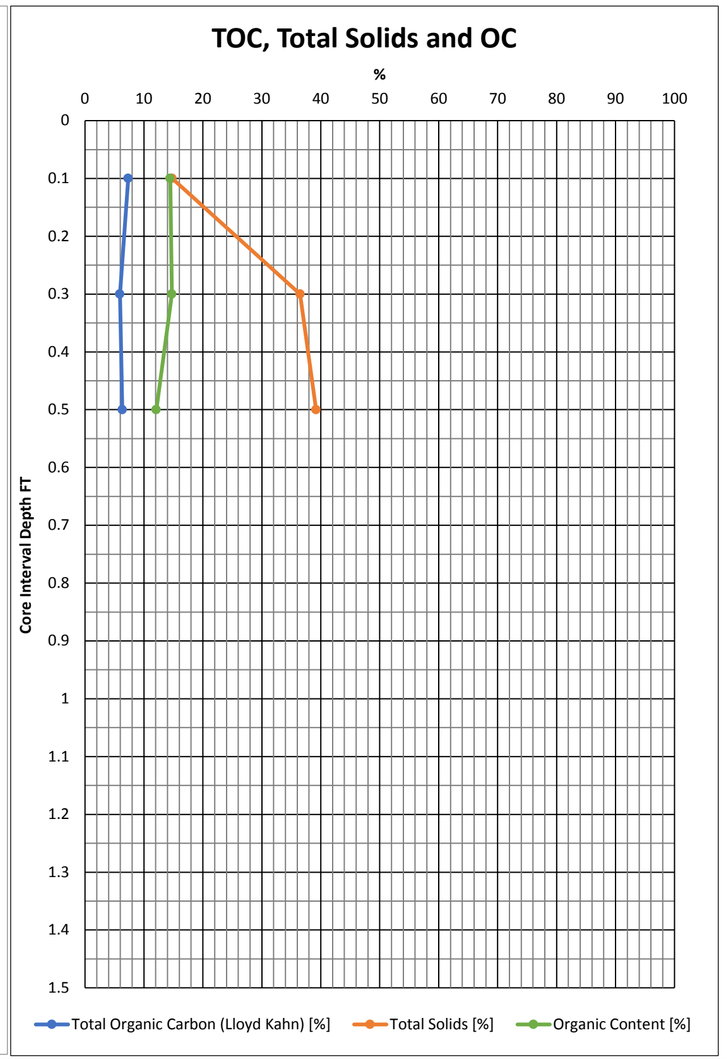
Prepared by: KMC 5/20/2018
Checked by: DRY 5/21/2018

Figure A.3-1
Station ID: ON-10-01
Core ID: ON-10-01-C
Core Designation: Unconsolidated



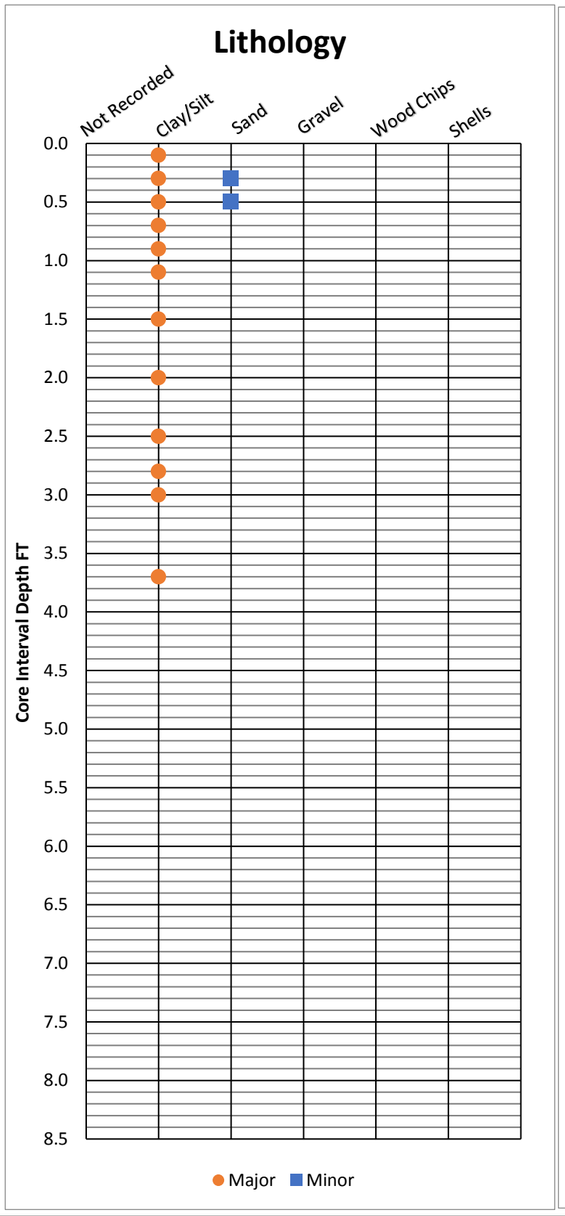


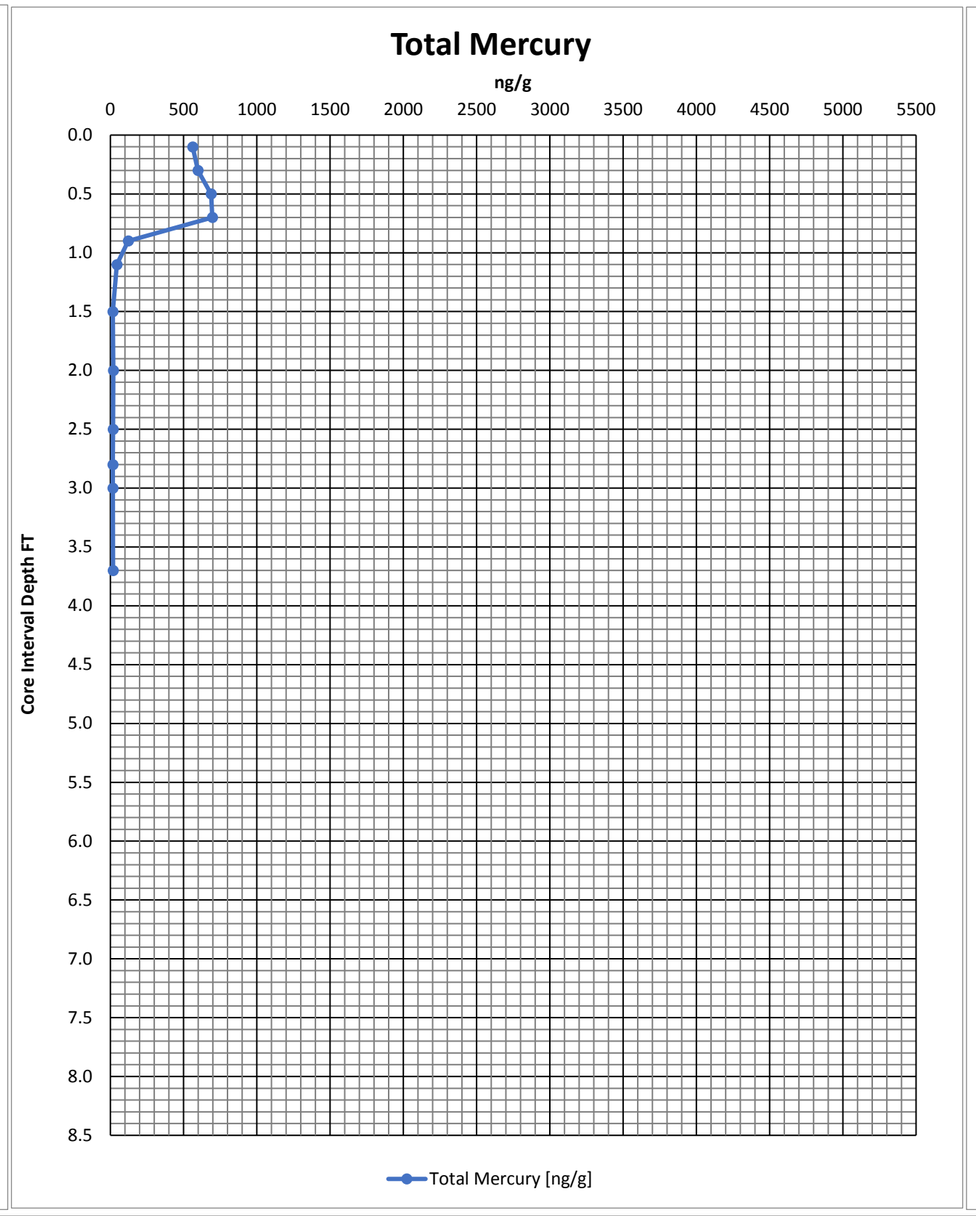


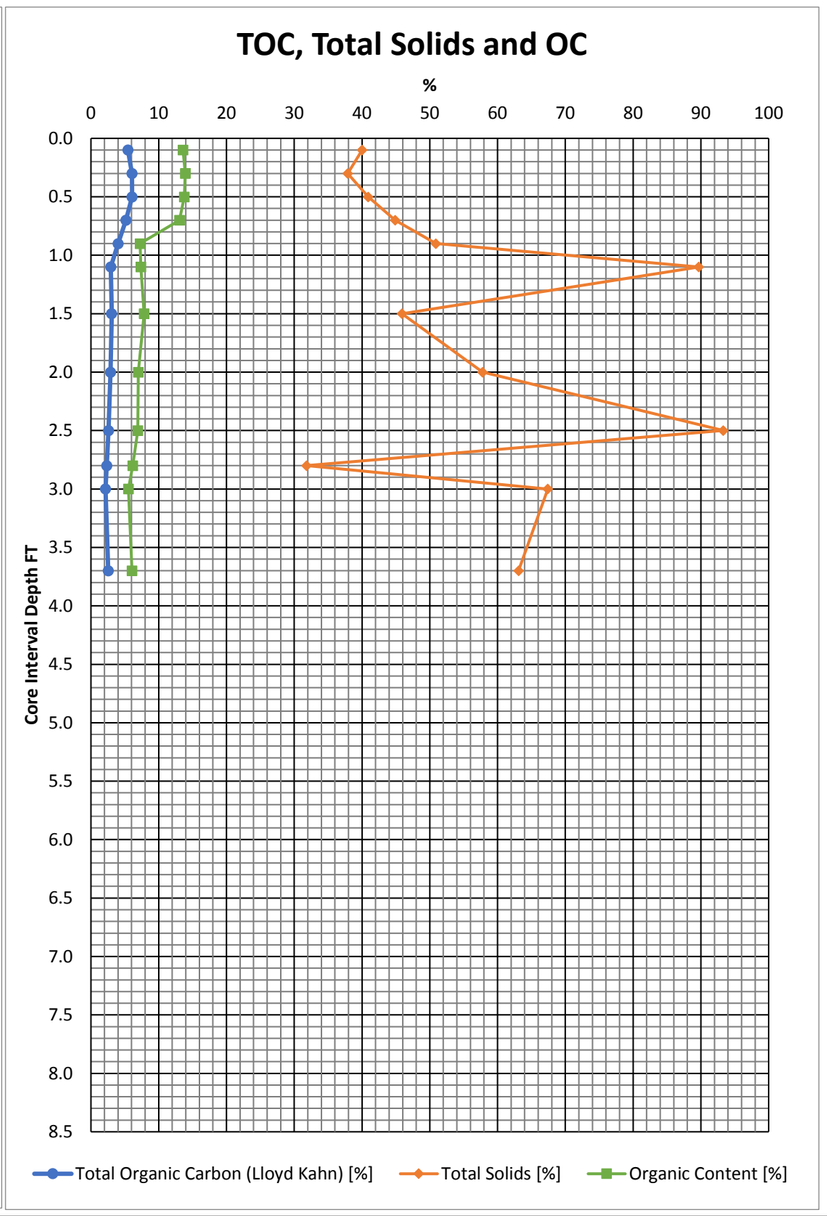


TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

Figure A.3-2
Station ID: ON-10-01
Core ID: ON-10-01-B
Core Designation: Consolidated







TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

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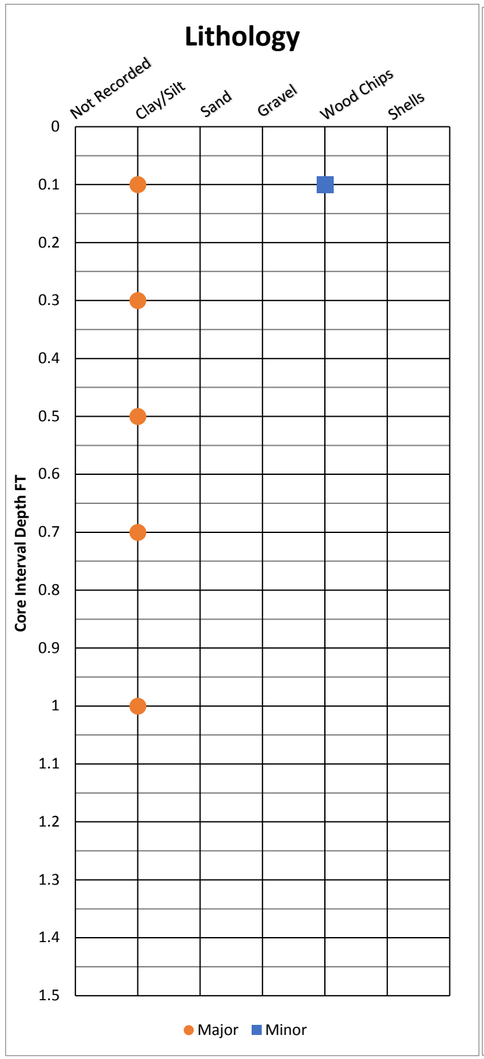
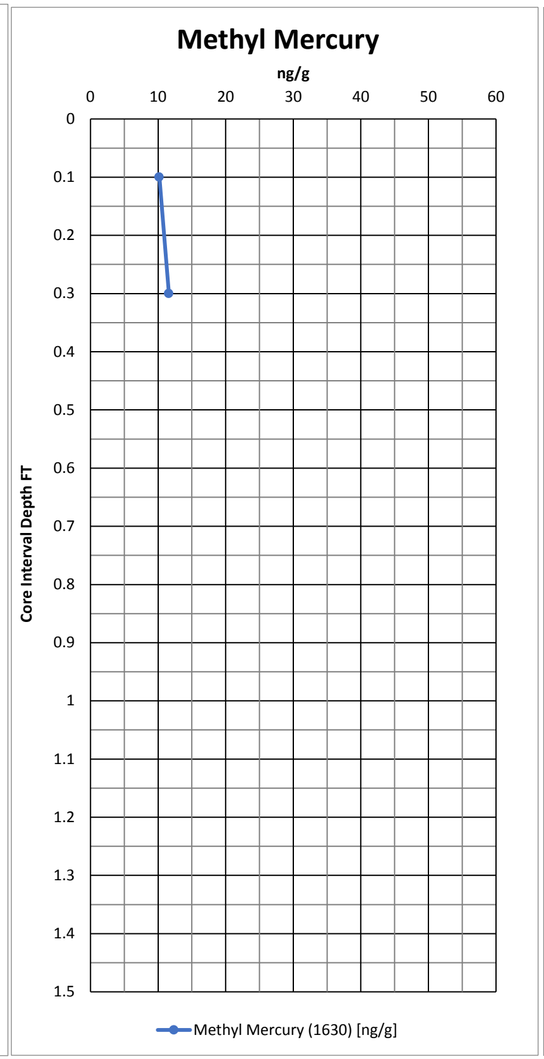
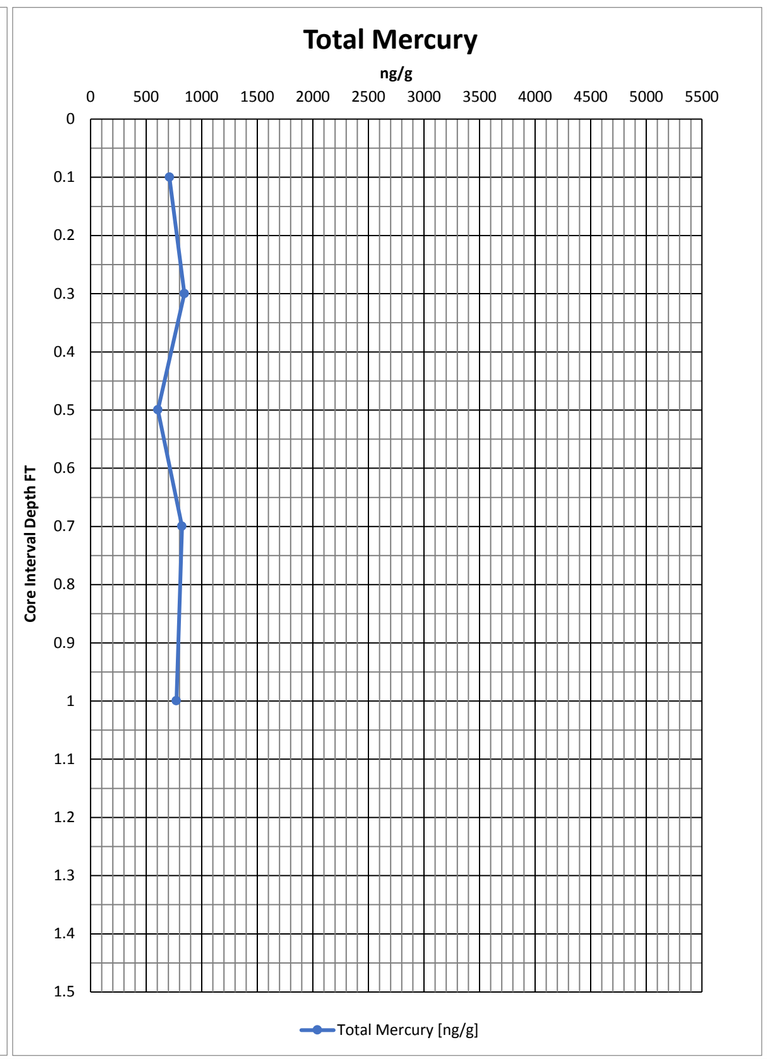
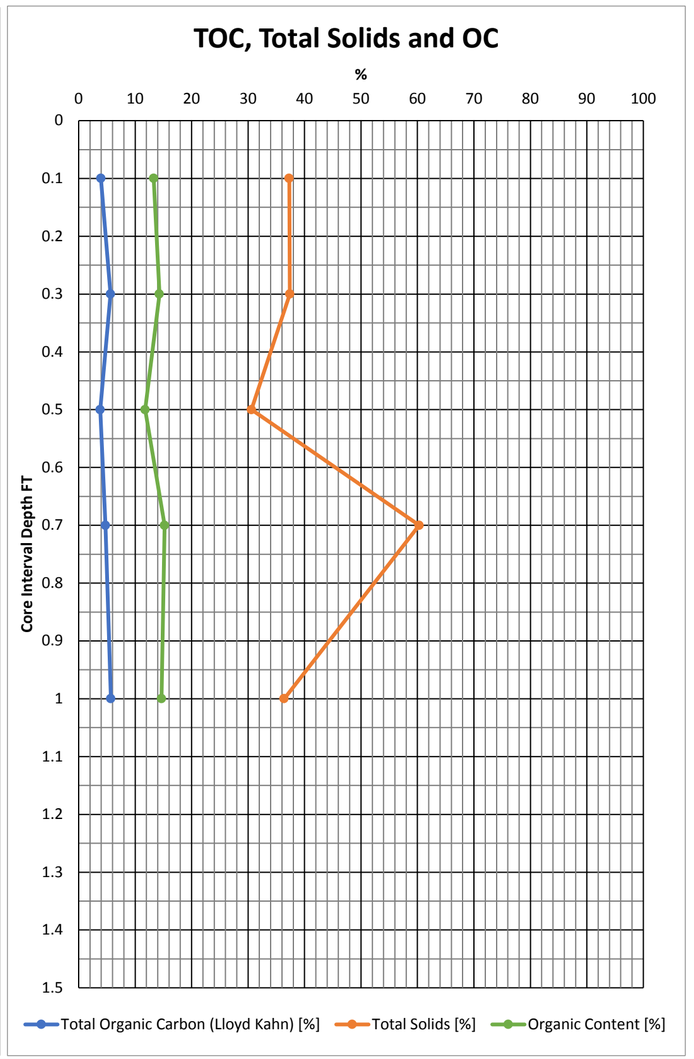
Figure A.3-3
Station ID: ON-18-01
Core ID: ON-18-01-F
Core Designation: Unconsolidated



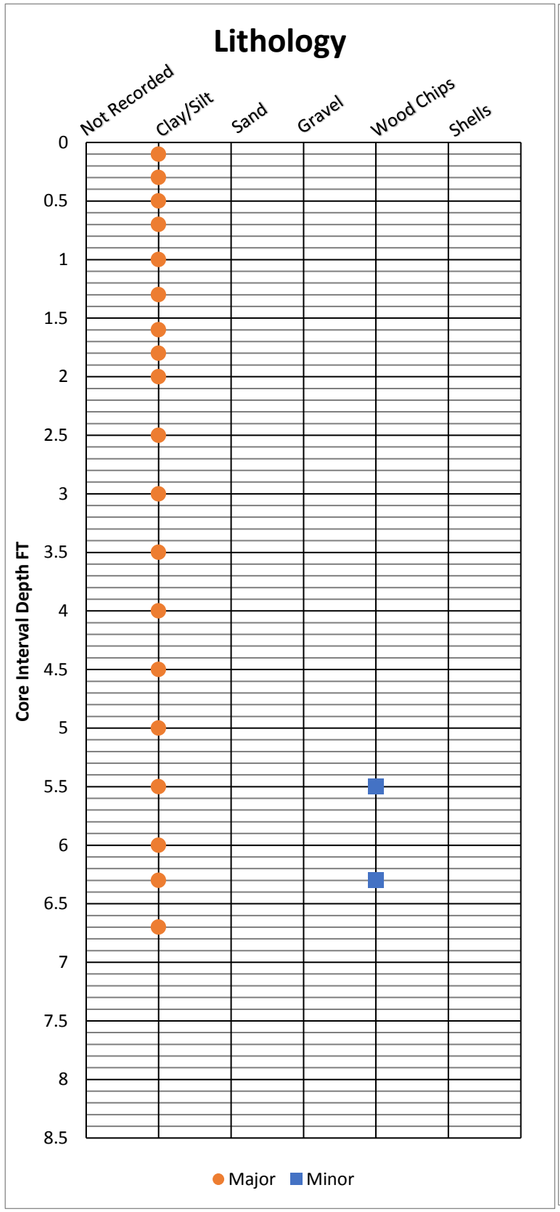


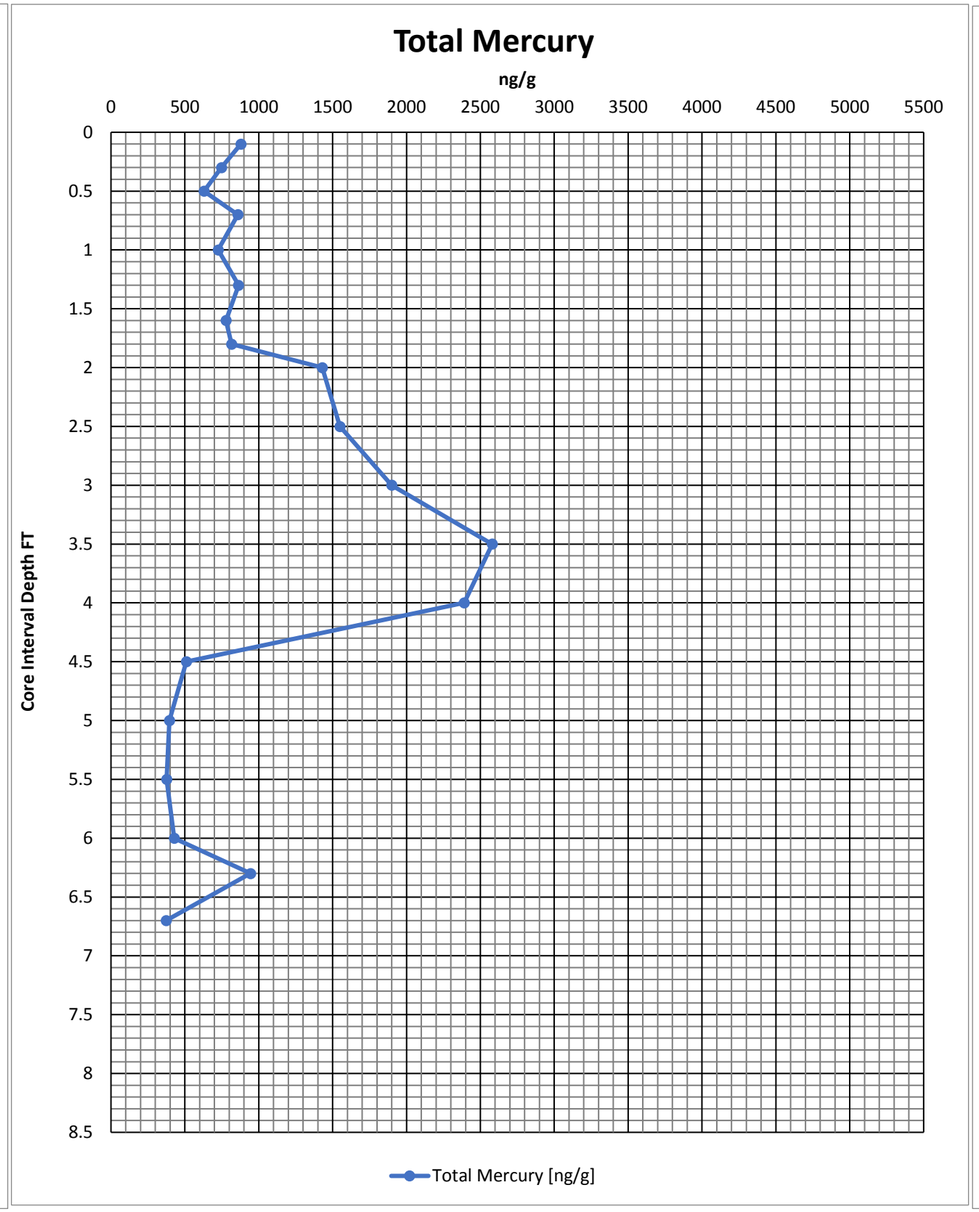


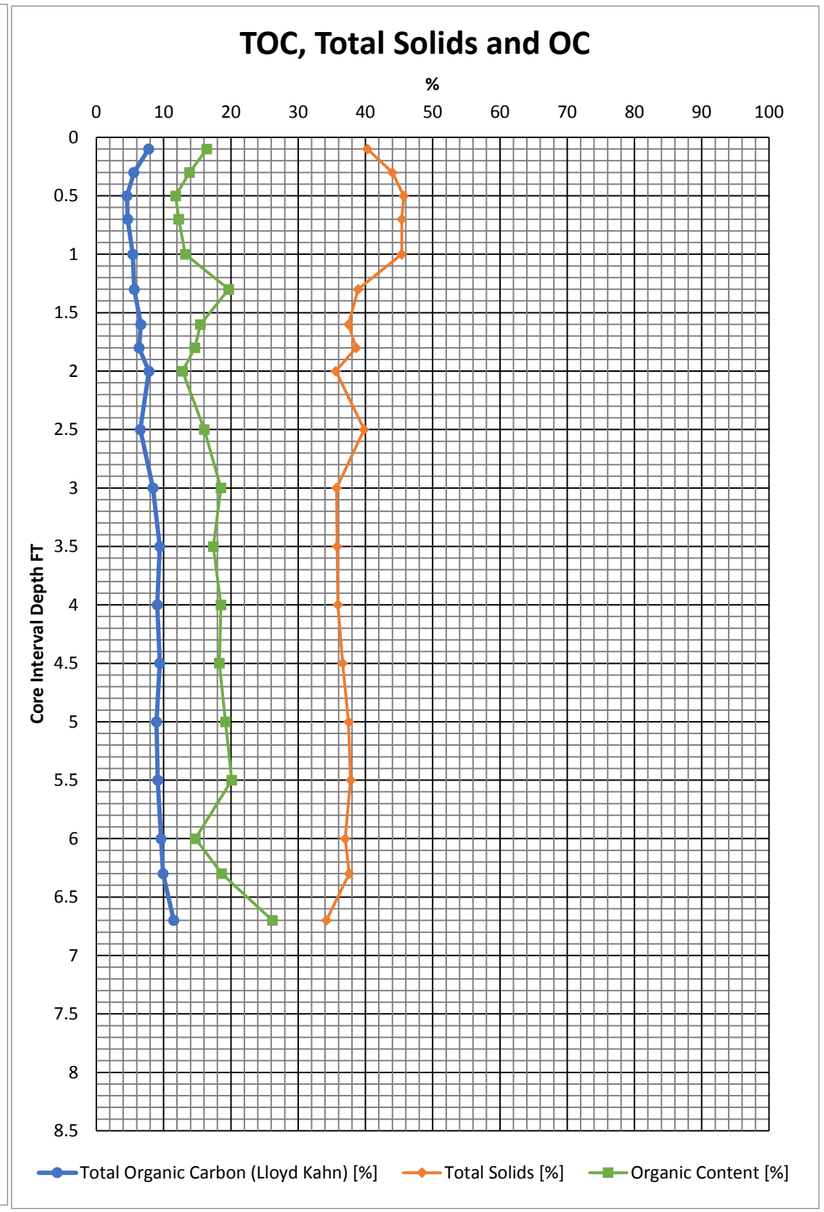


TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

Figure A.3-4
Station ID: ON-18-01
Core ID: ON-18-01-C
Core Designation: Consolidated







TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

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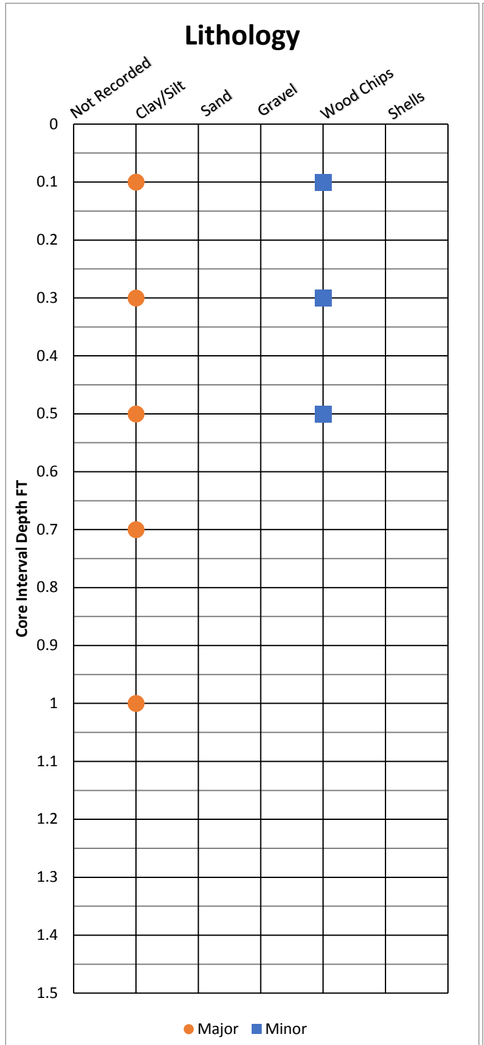
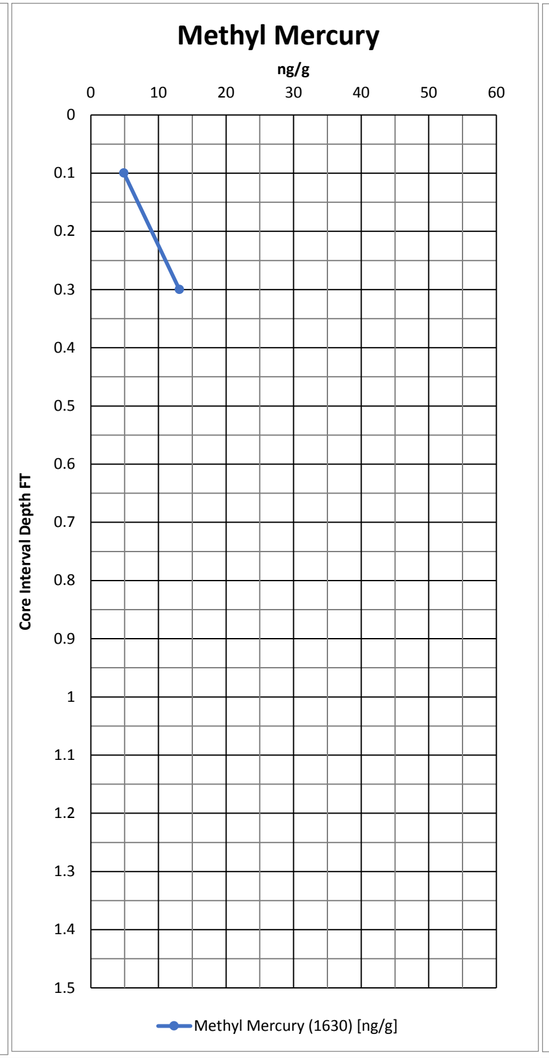
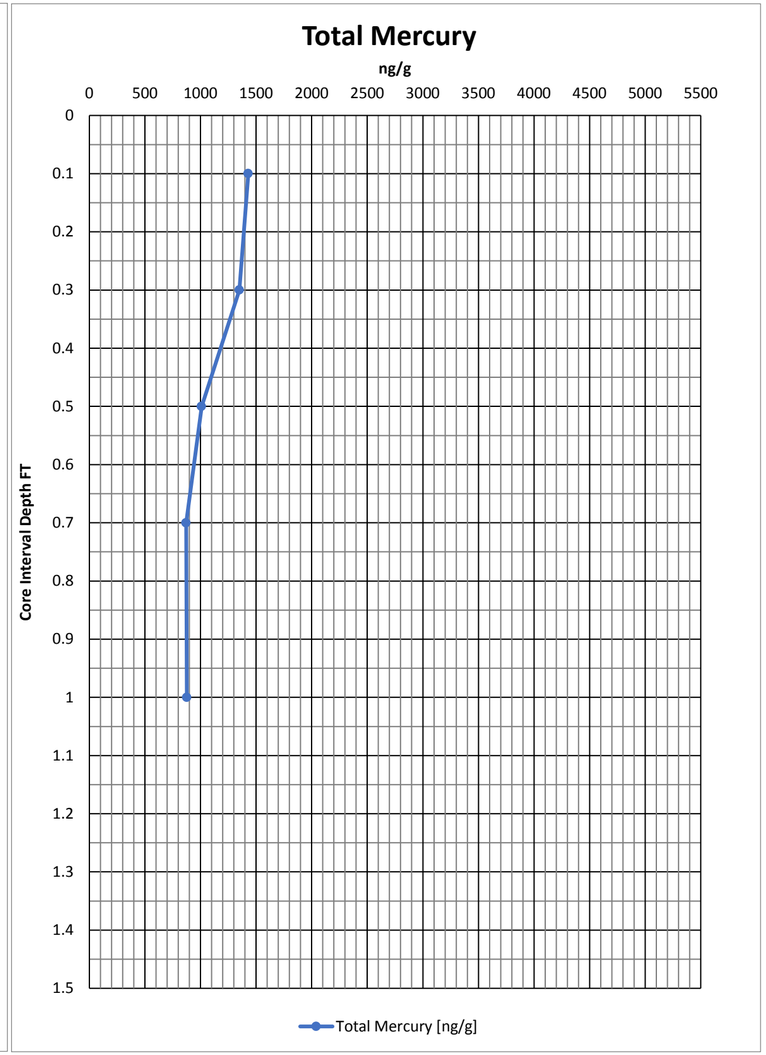
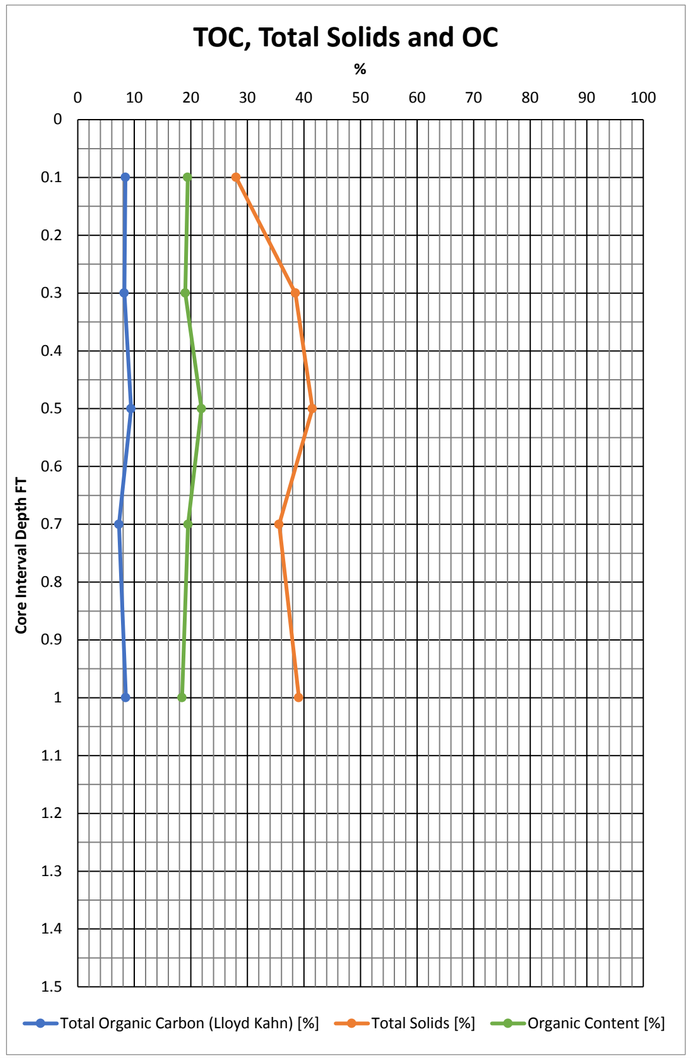
Figure A.3-5
Station ID: ON-18-02
Core ID: ON-18-02-E
Core Designation: Unconsolidated



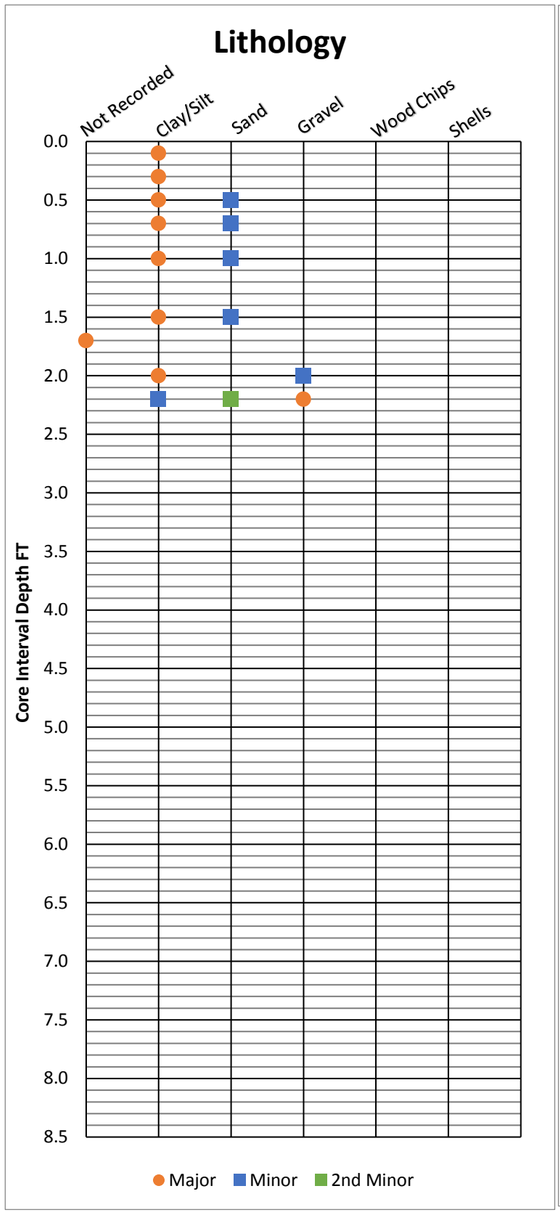


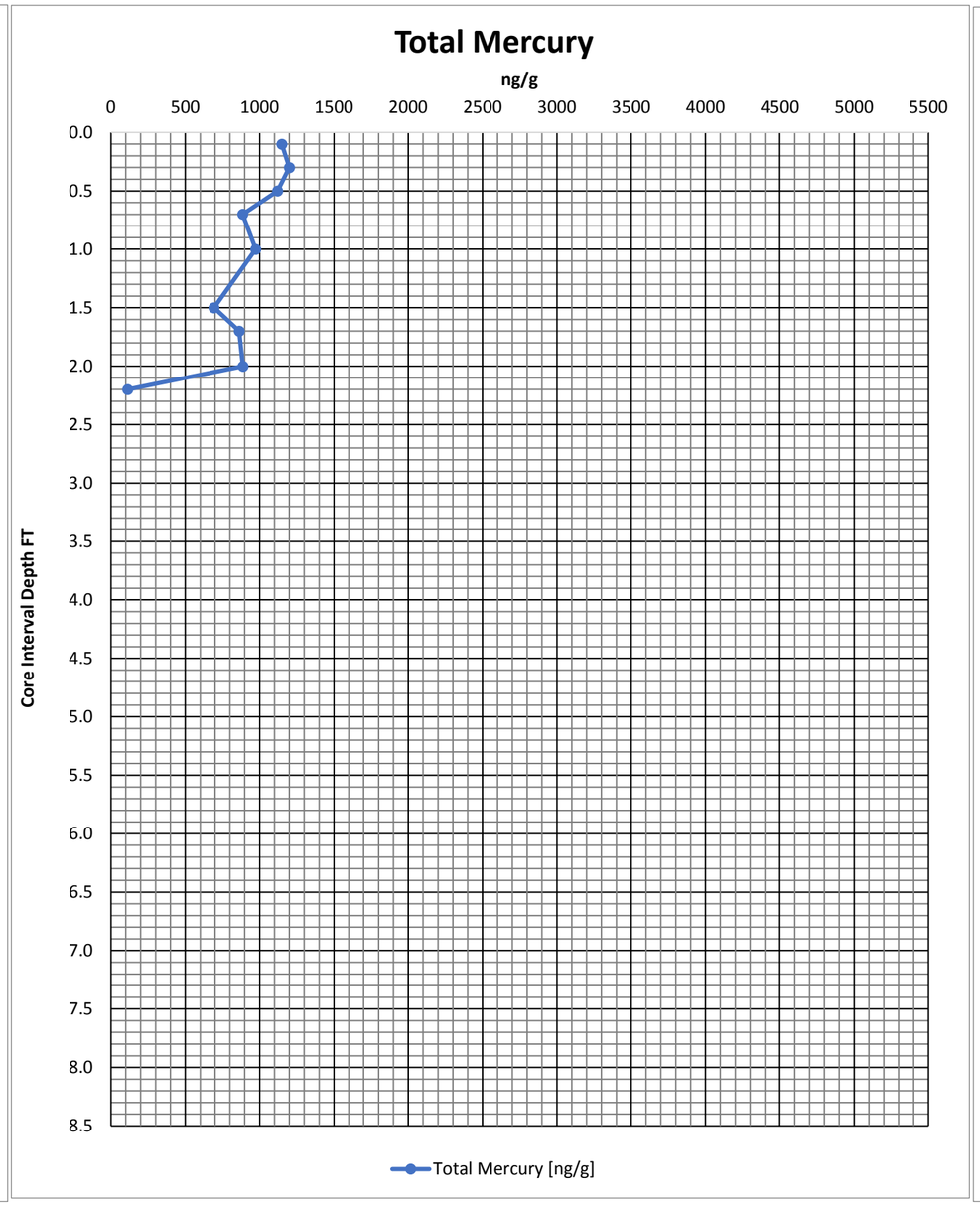


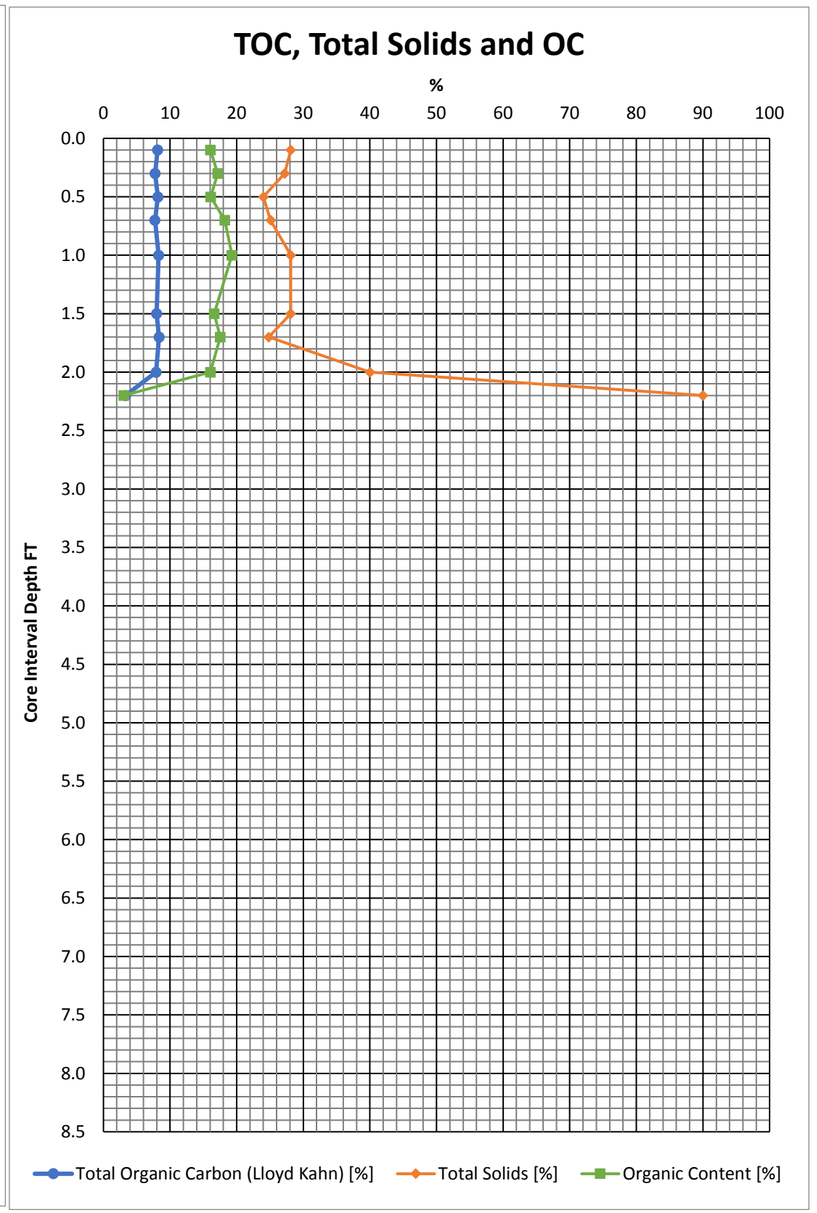


TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

Figure A.3-6
Station ID: ON-18-02
Core ID: ON-18-02-C
Core Designation: Consolidated







TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

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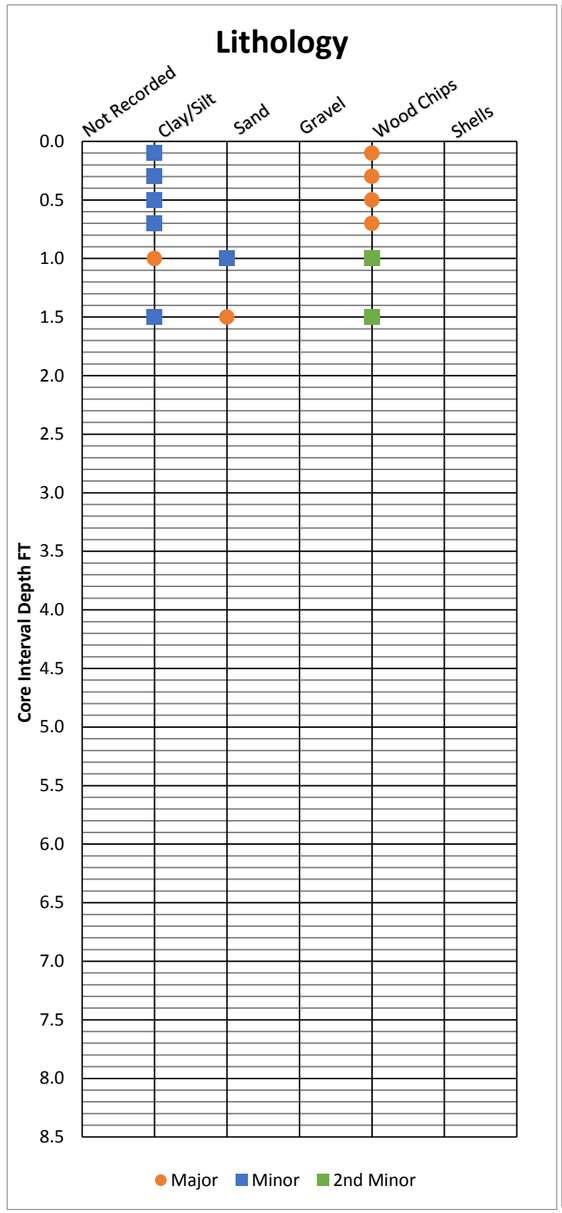
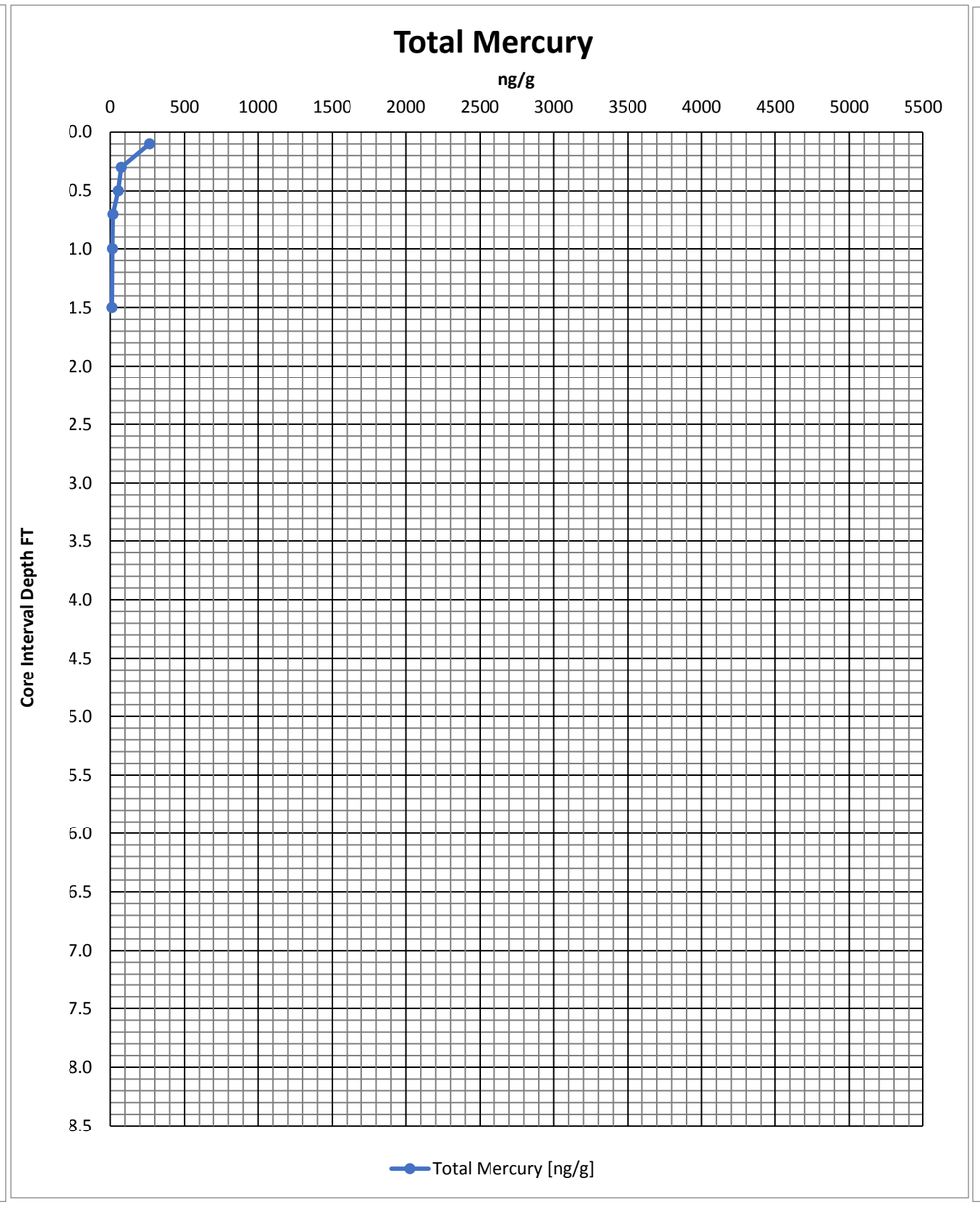
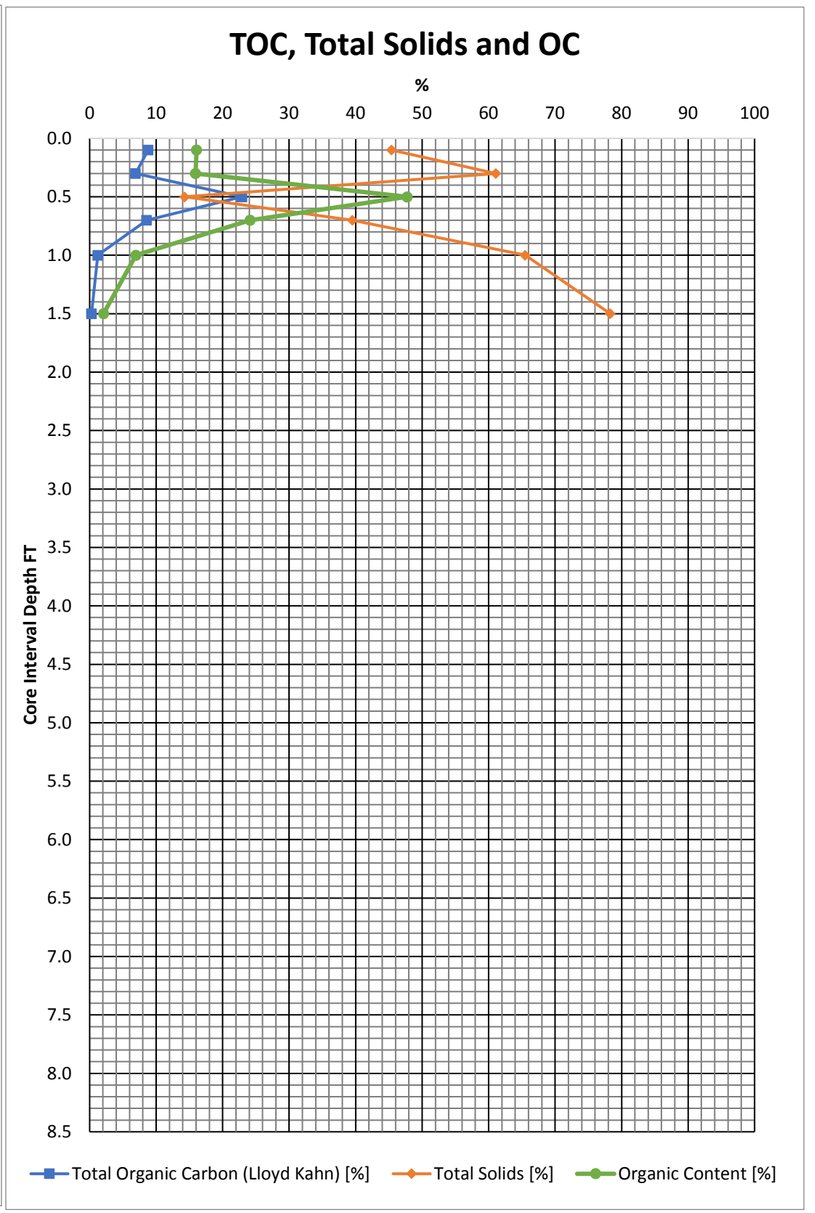
Figure A.3-7
Station ID: ON-19-01
Core ID: ON-19-01-A
Core Designation: Consolidated







TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

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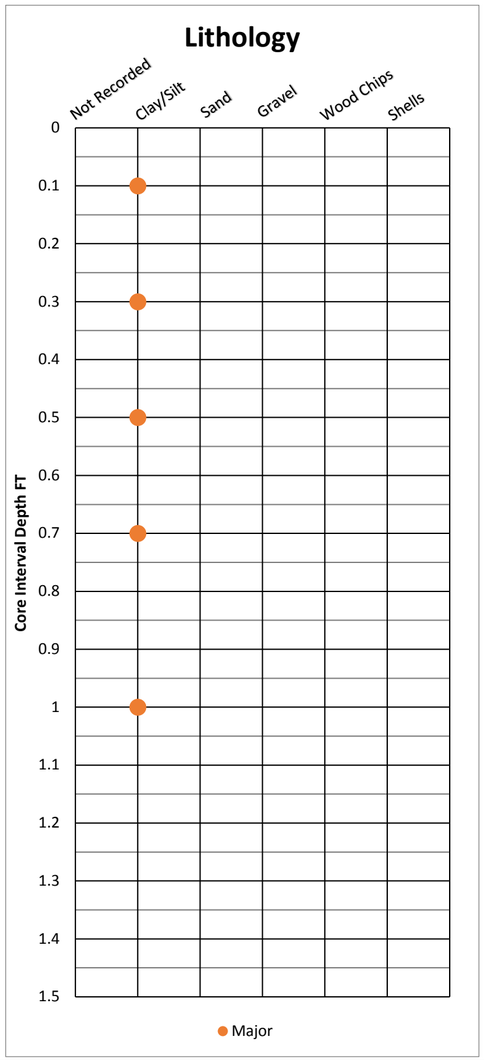
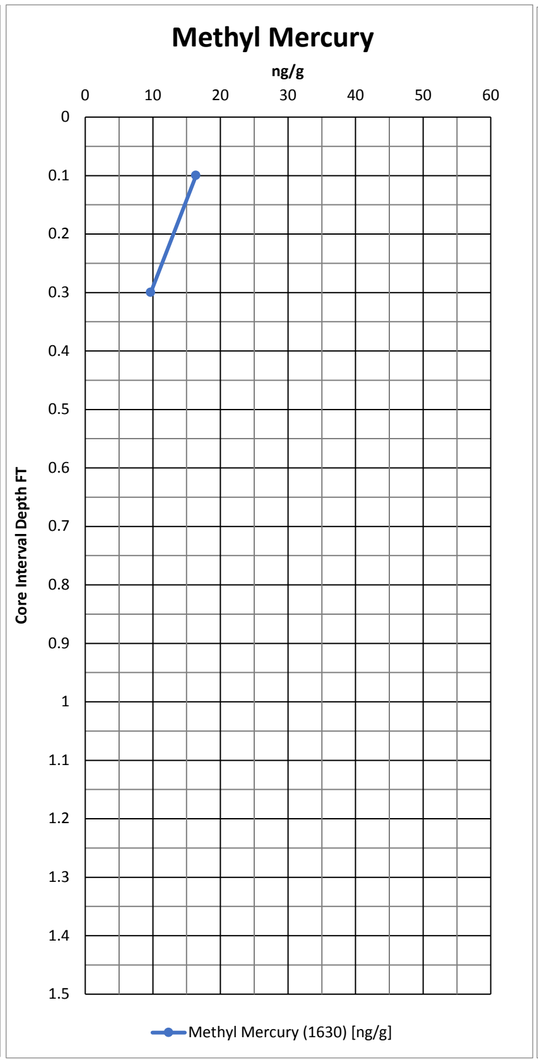
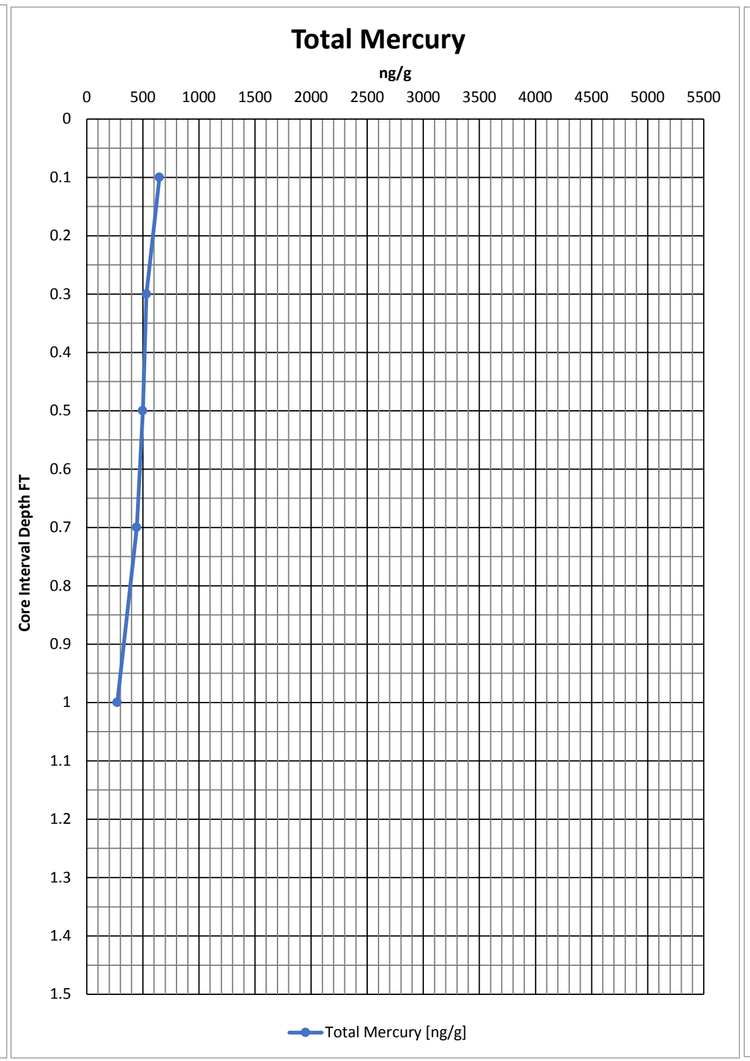
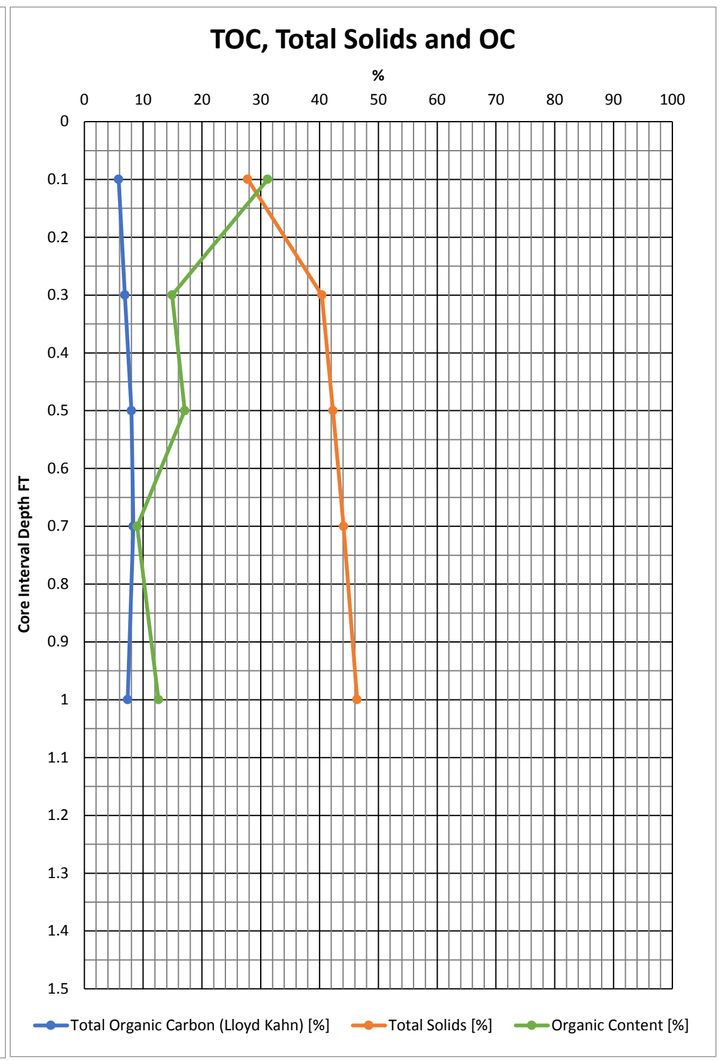
Figure A.3-8
Station ID: WP-02-01
Core ID: WP-02-01-D
Core Designation: Unconsolidated



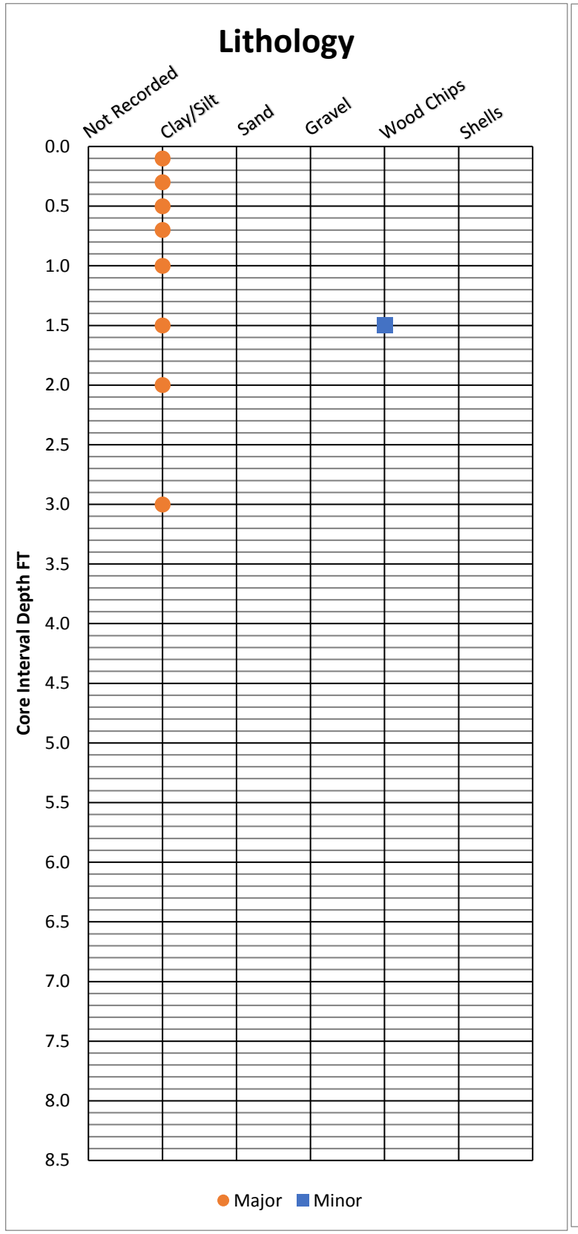


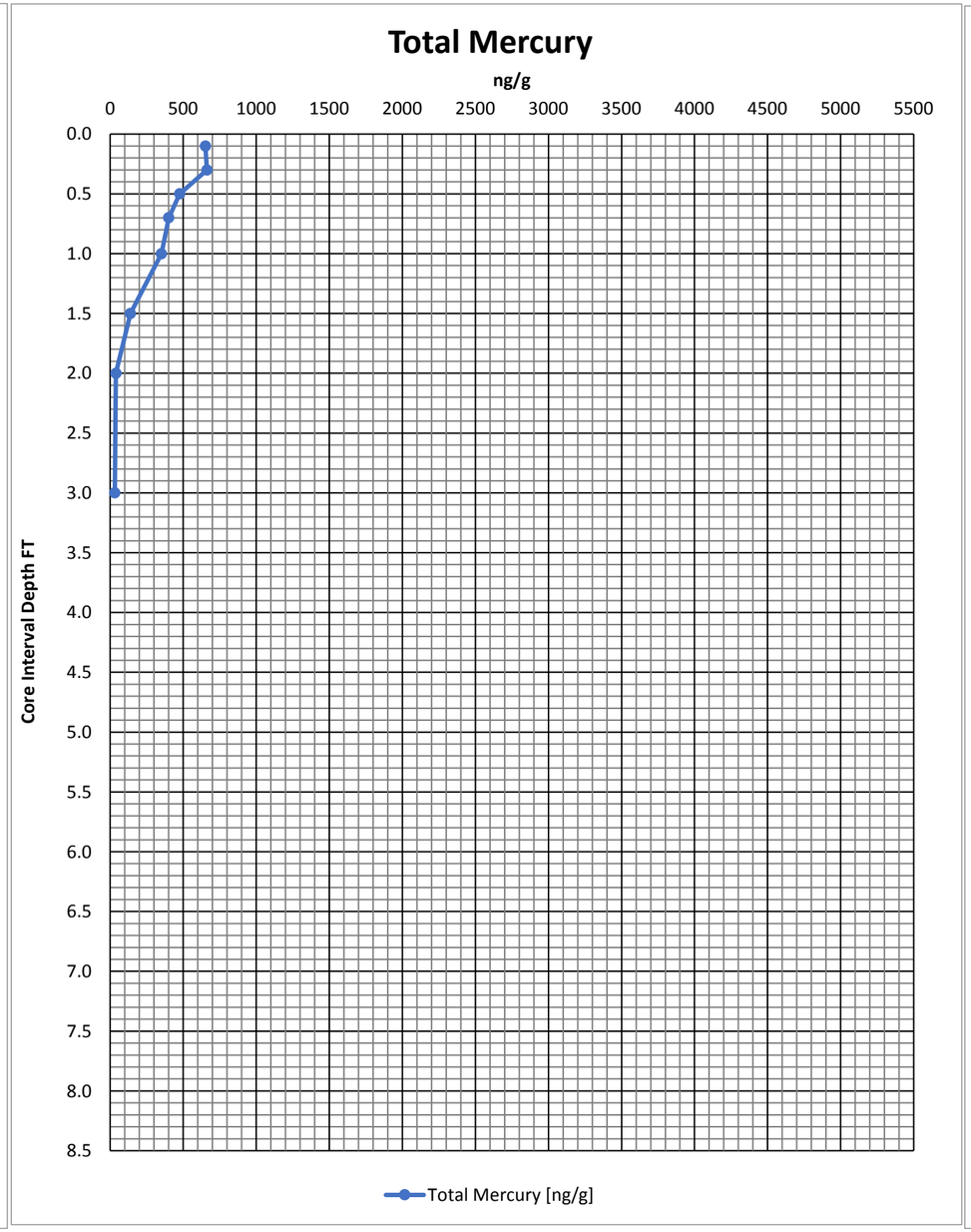


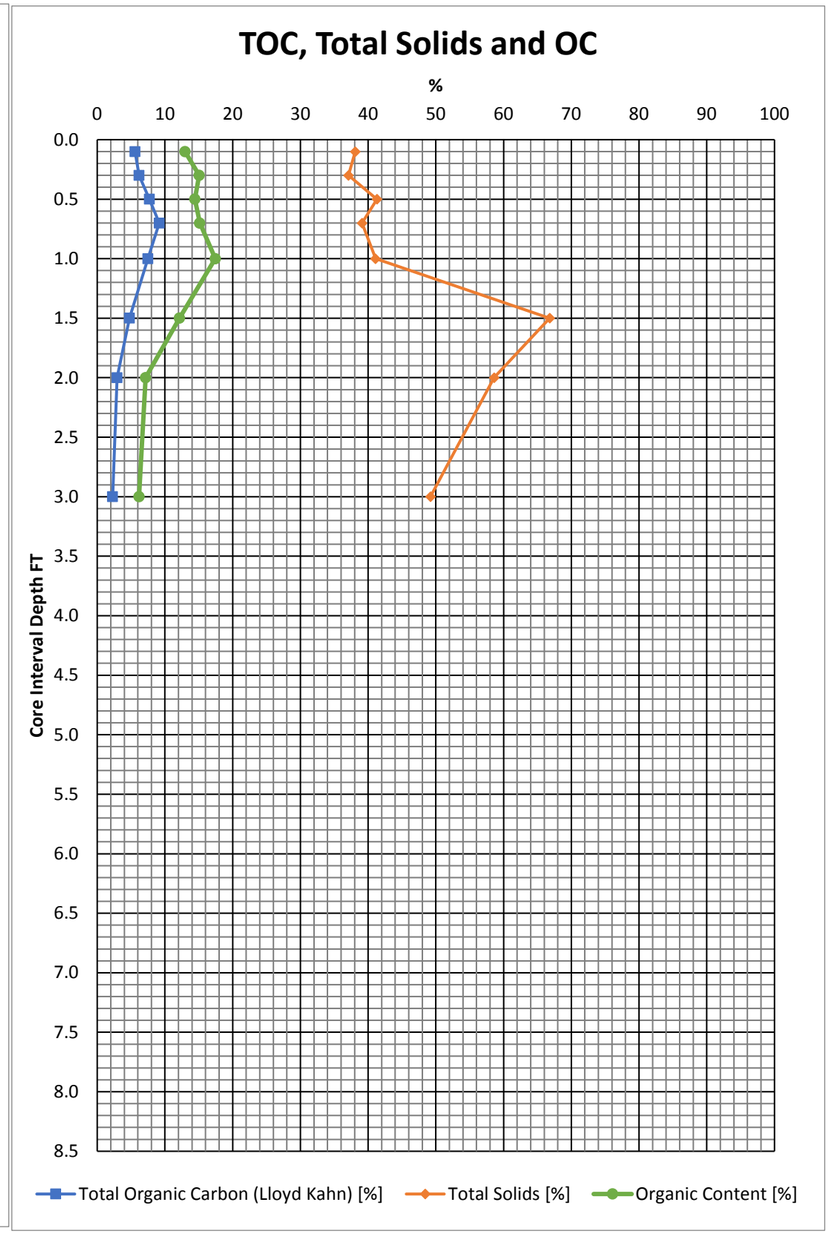


TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

Figure A.3-9
Station ID: WP-02-01
Core ID: WP-02-01-B
Core Designation: Consolidated







TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

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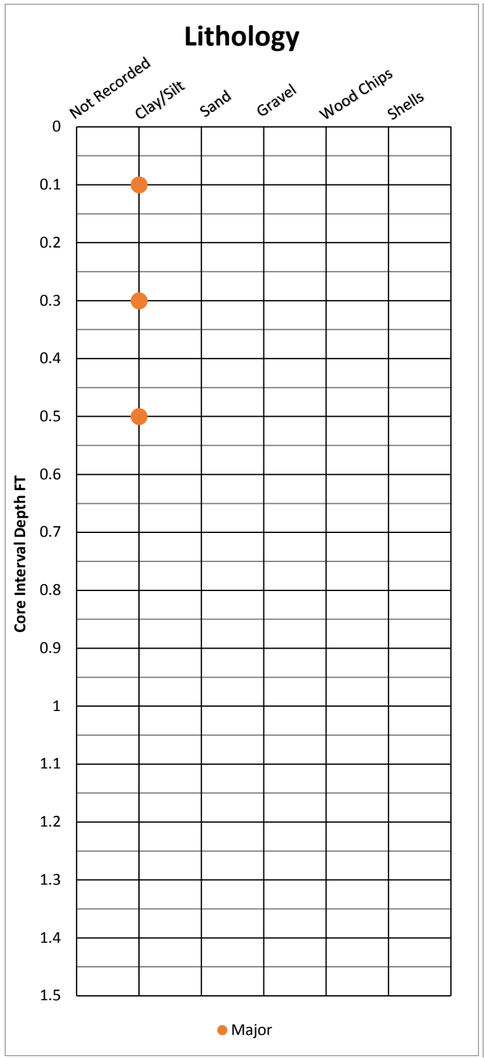
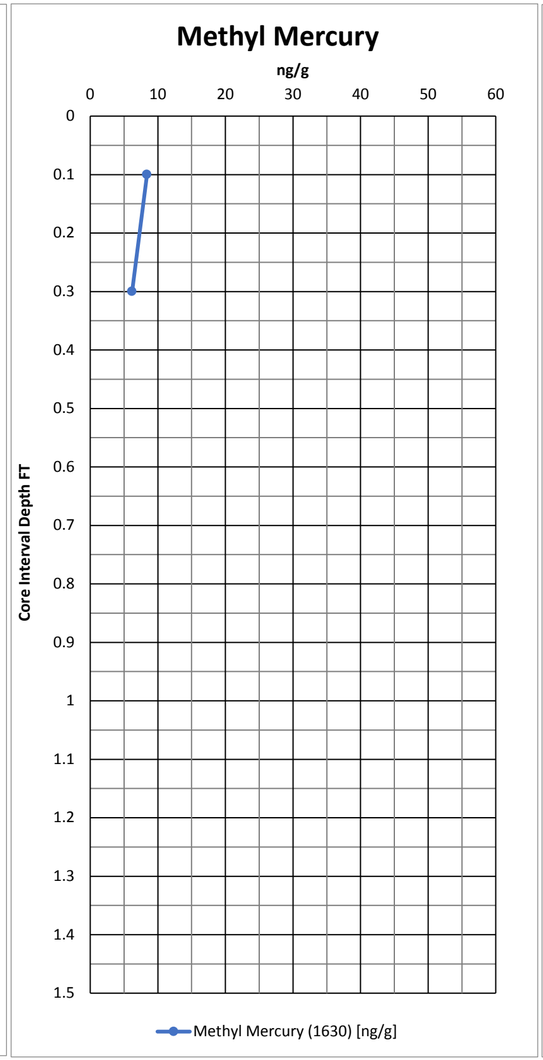
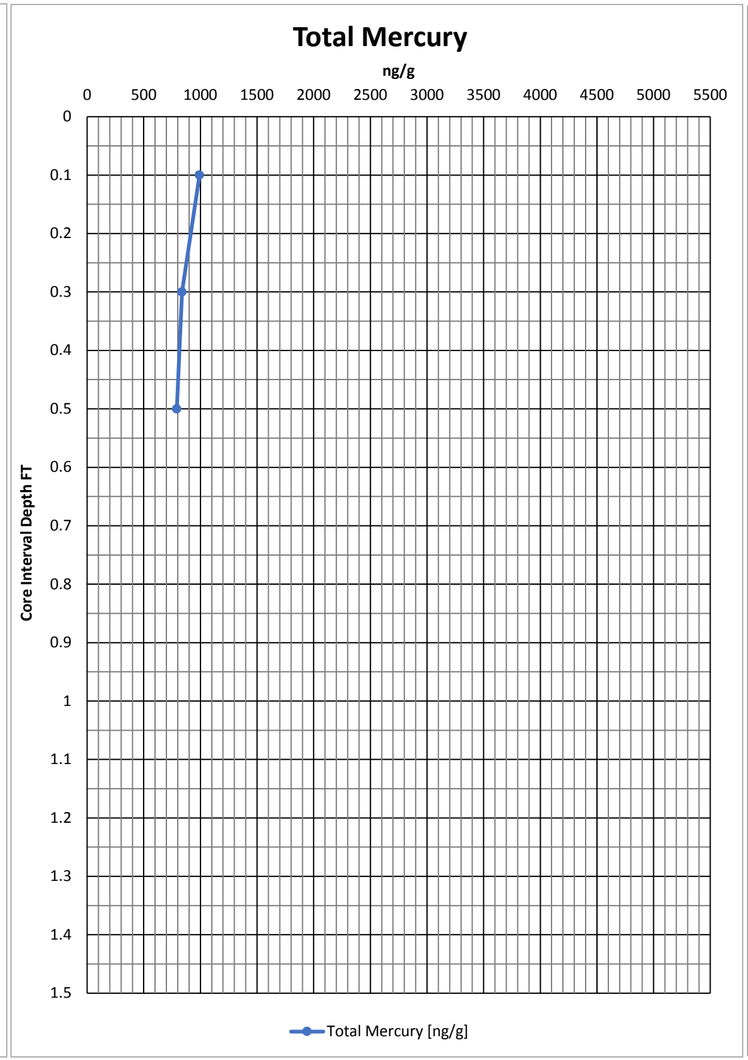
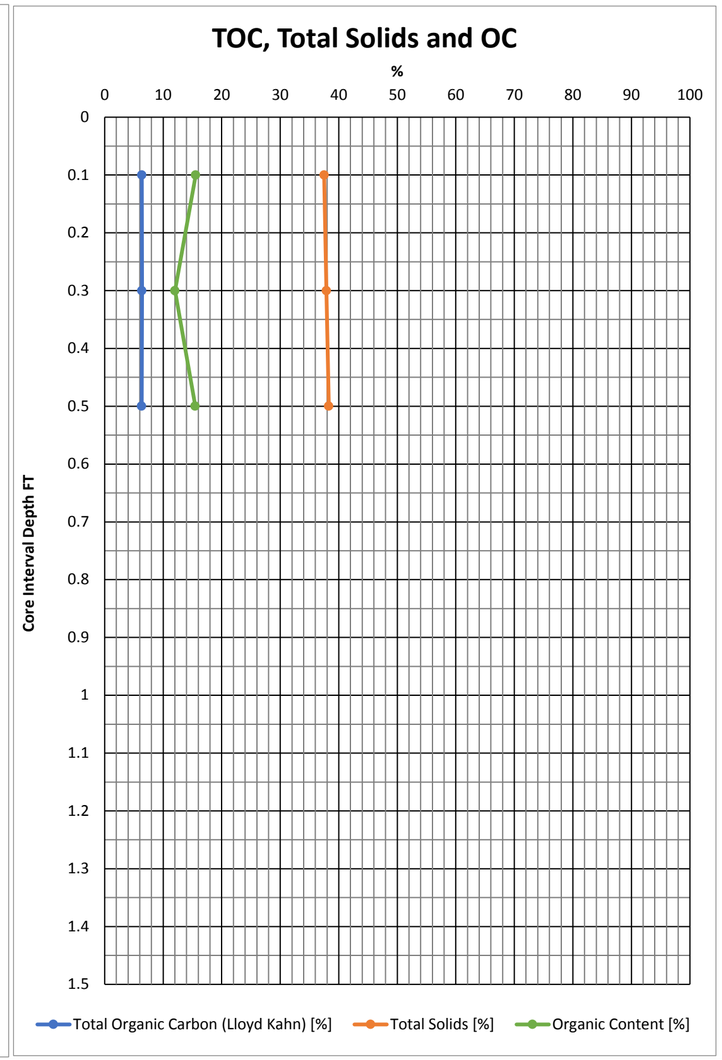
Figure A.3-10
Station ID: WP-06-02
Core ID: WP-06-02-F
Core Designation: Unconsolidated



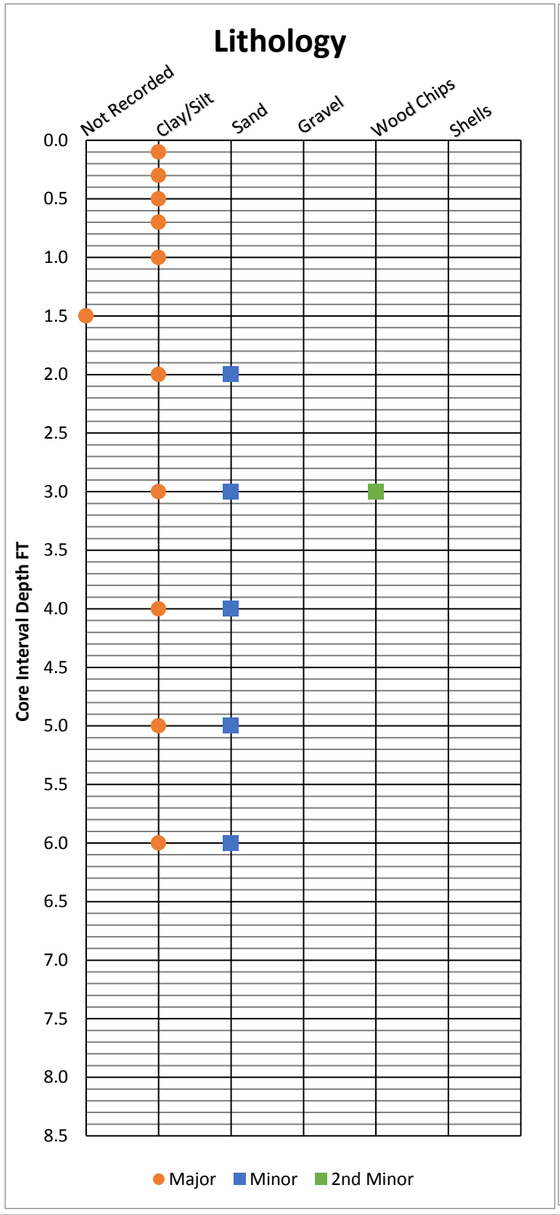


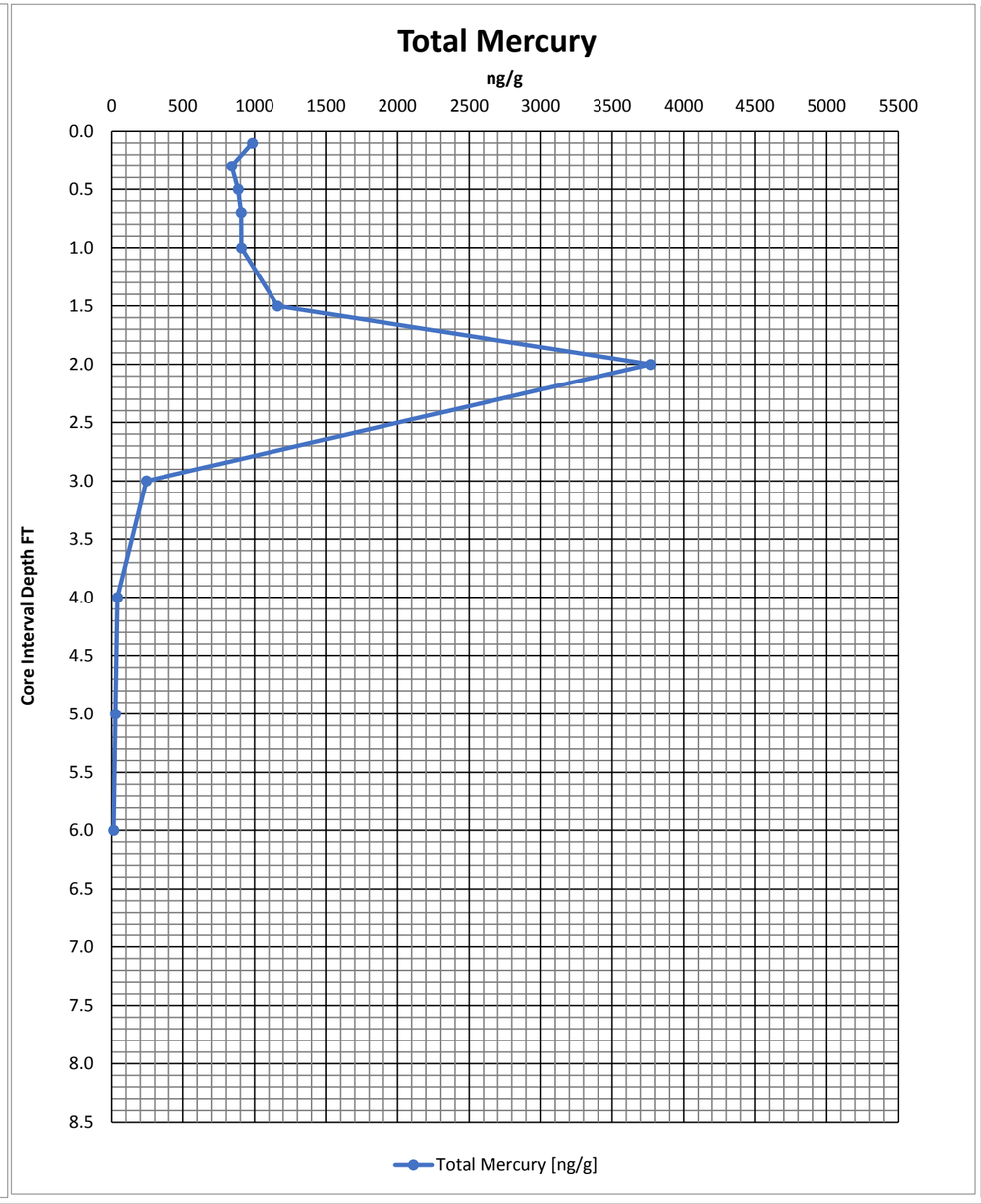


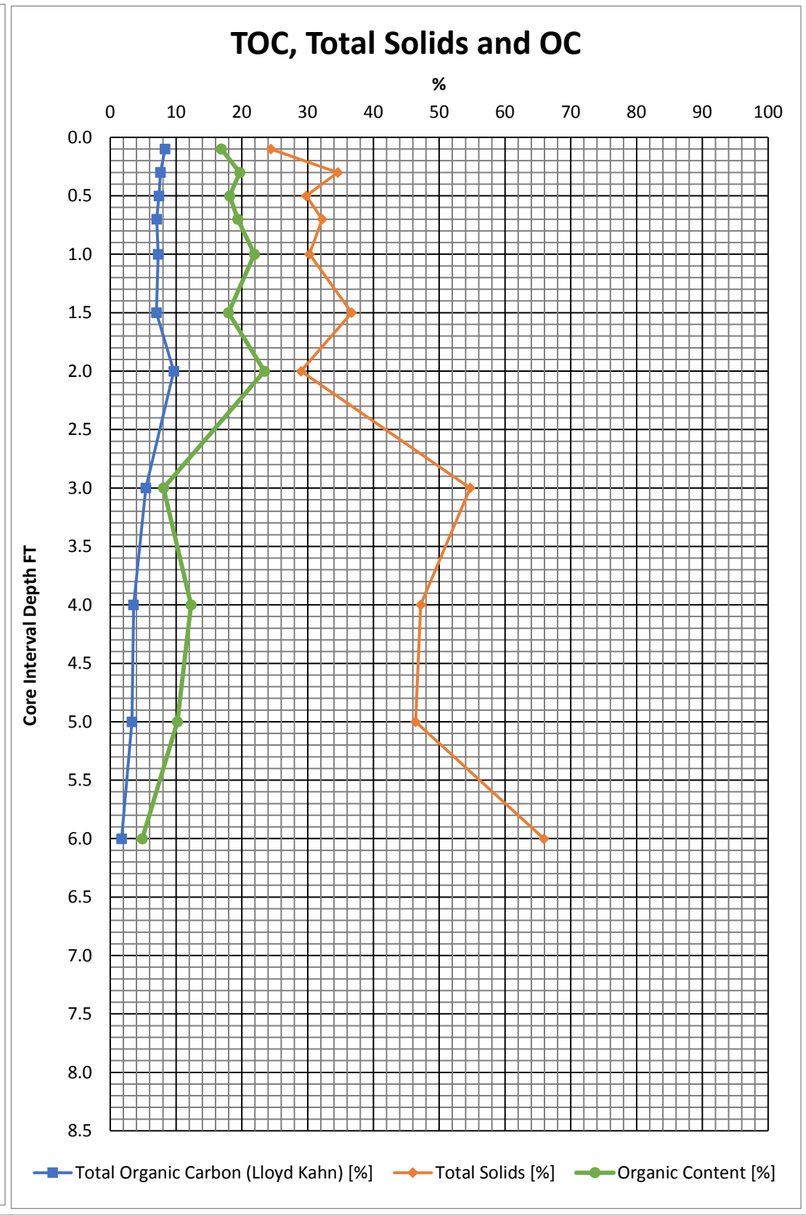


TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

Figure A.3-11
Station ID: WP-06-02
Core ID: WP-06-02-C
Core Designation: Consolidated







TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

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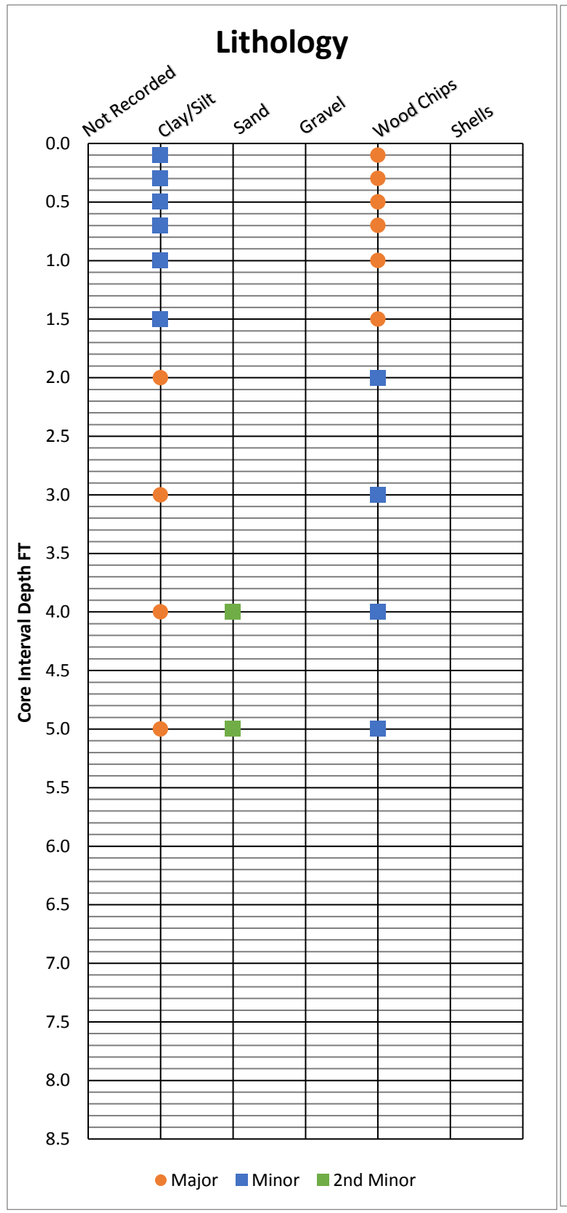
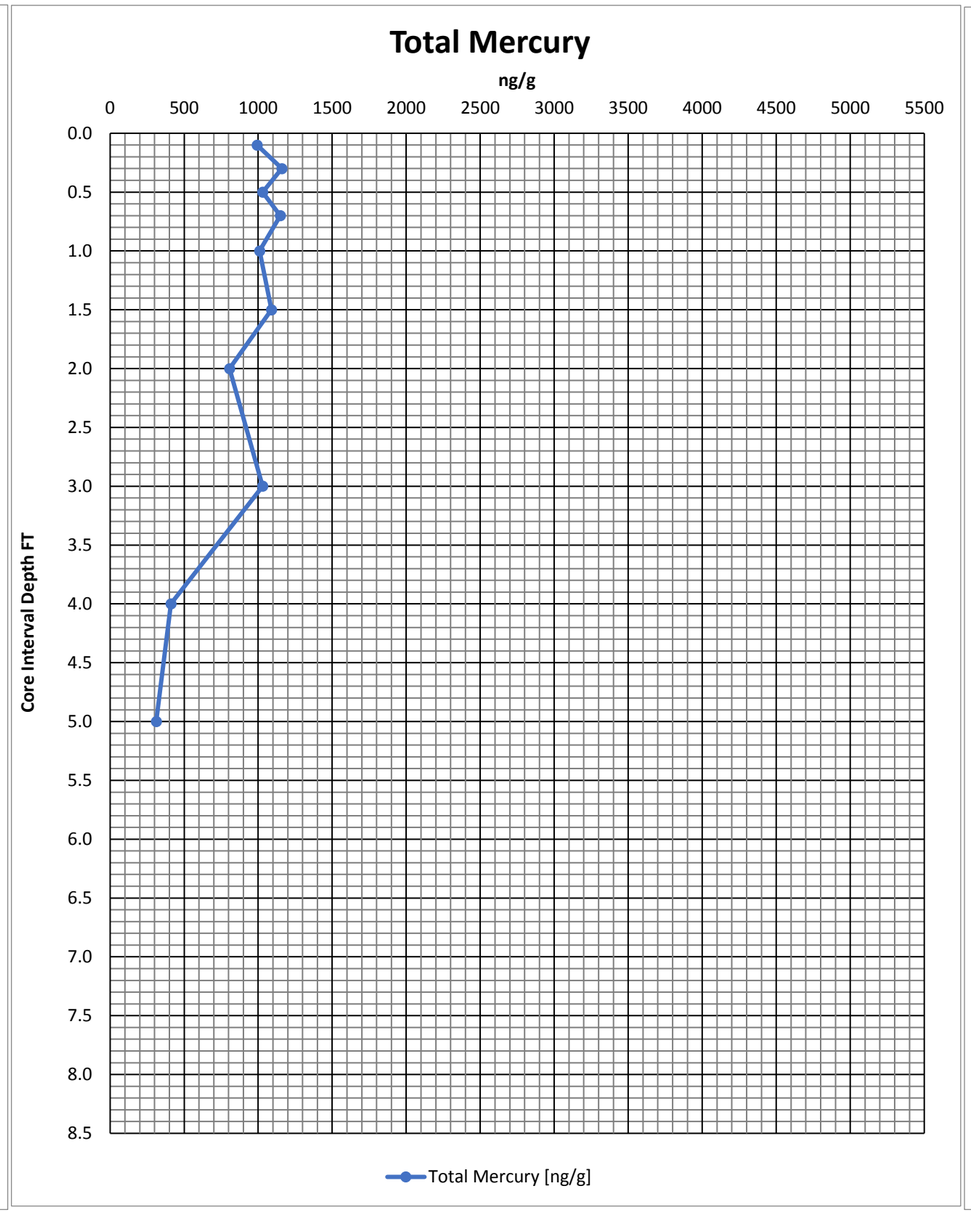
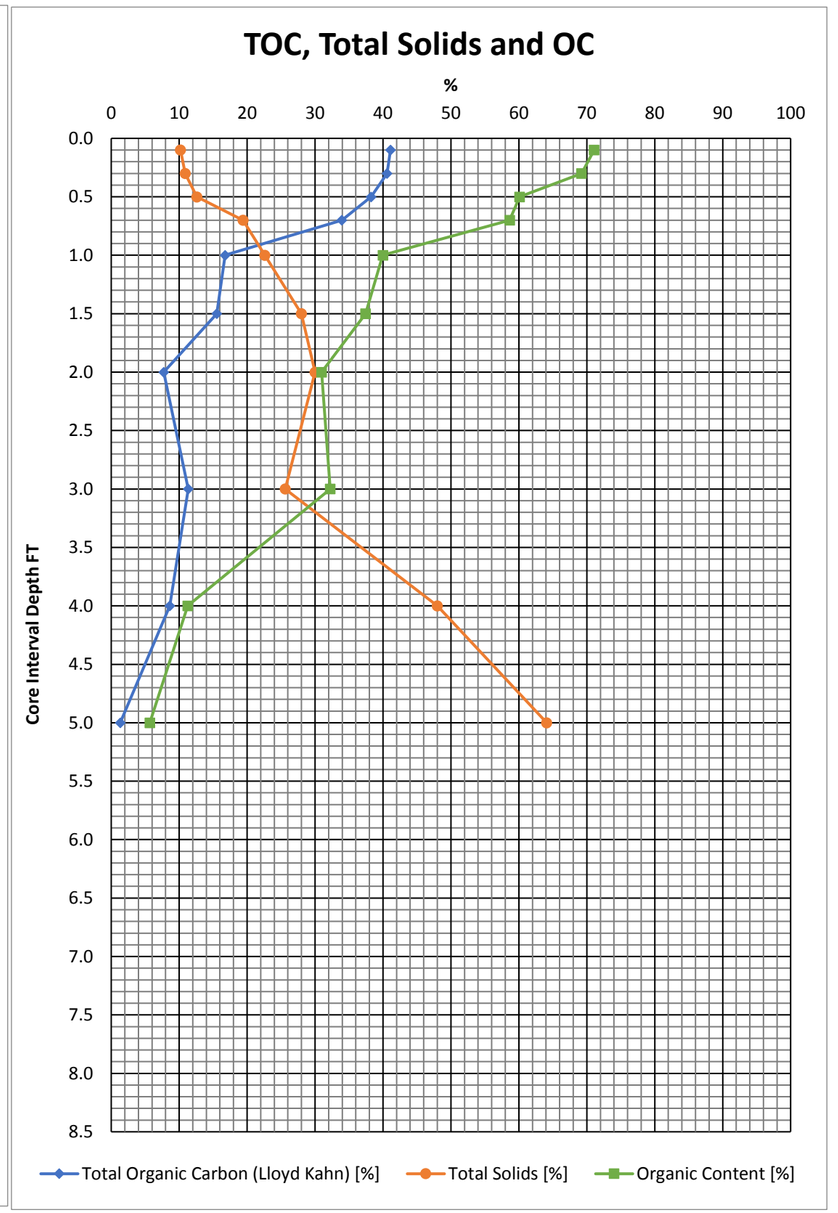
Figure A.3-12
Station ID: FF-04-01
Core ID: FF-04-01-D
Core Designation: Consolidated







TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

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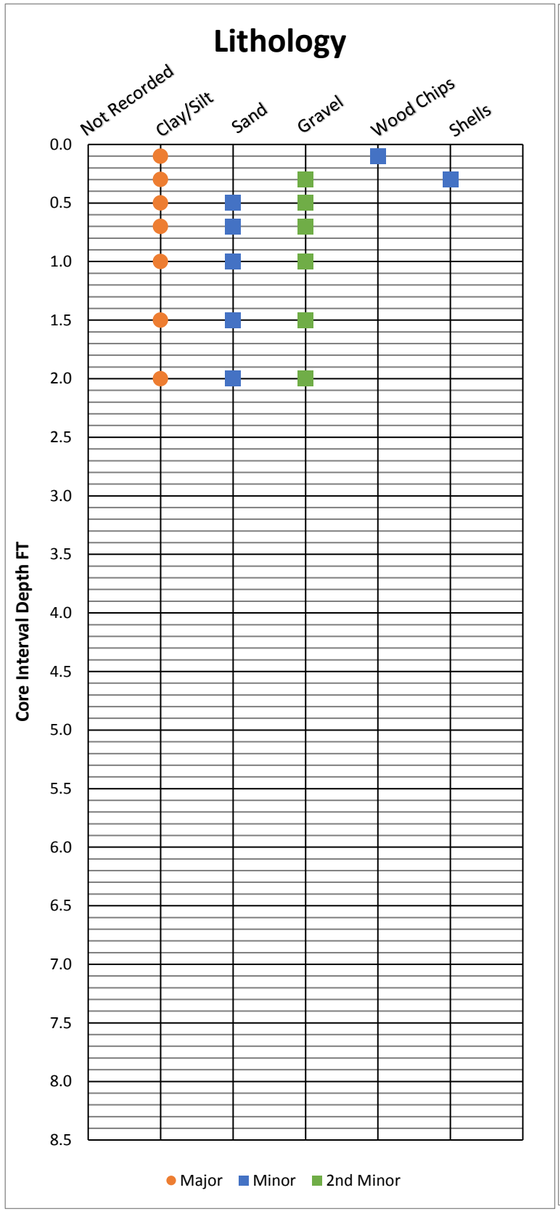
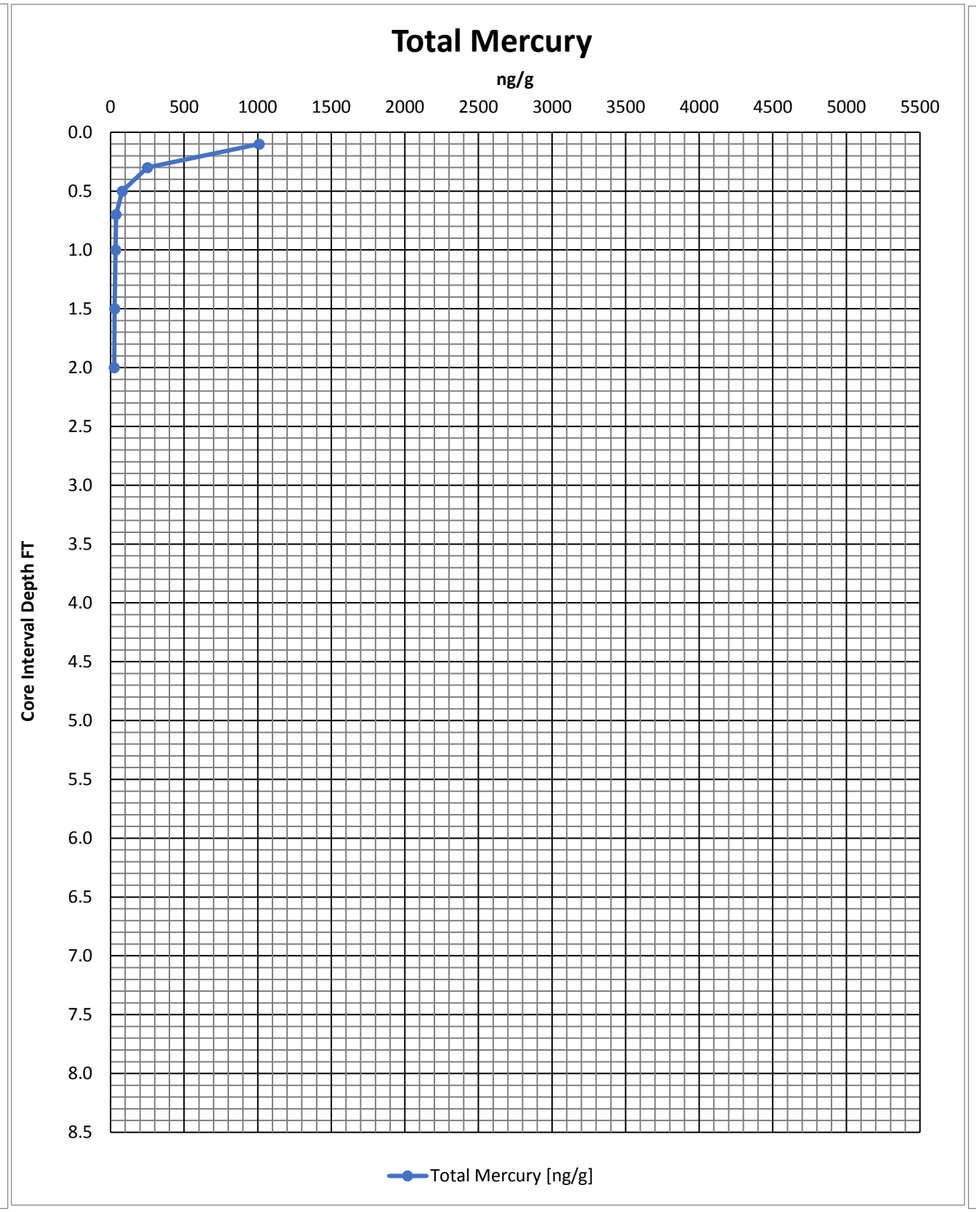
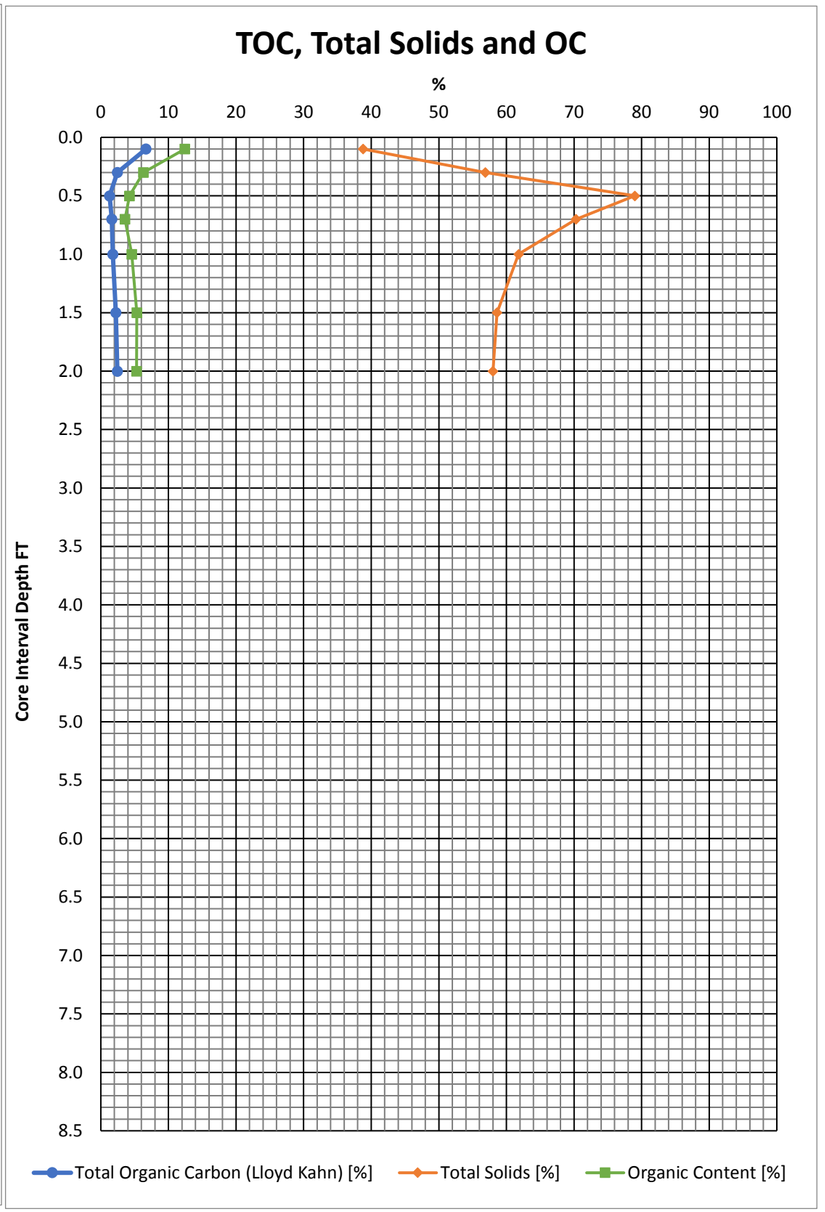
Figure A.3-13
Station ID: FF-06-01
Core ID: FF-06-01-A
Core Designation: Consolidated







TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

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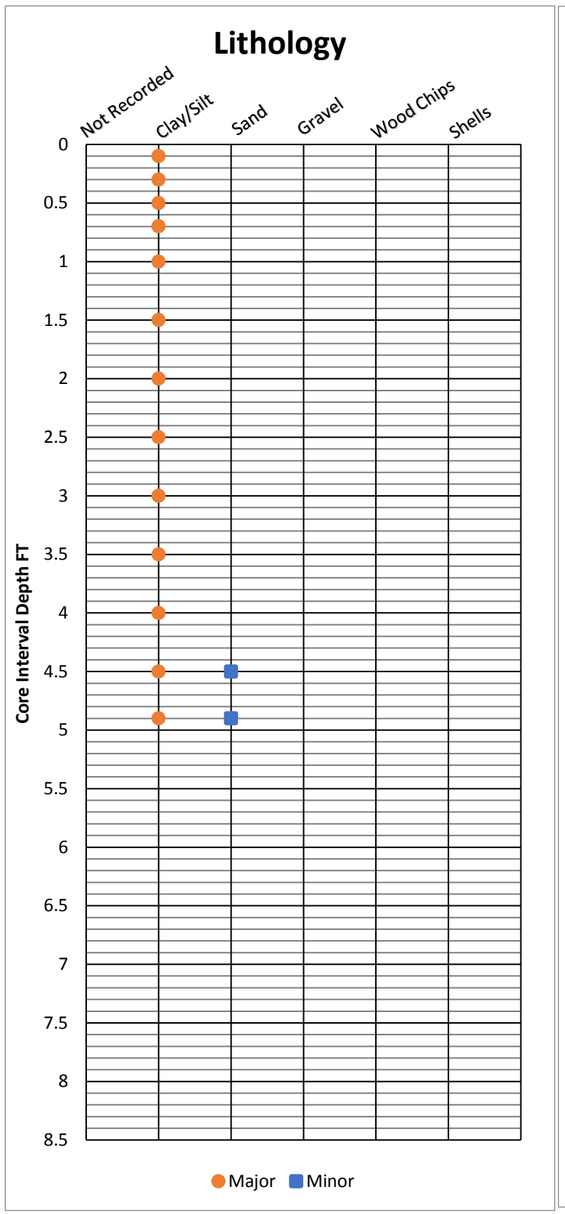
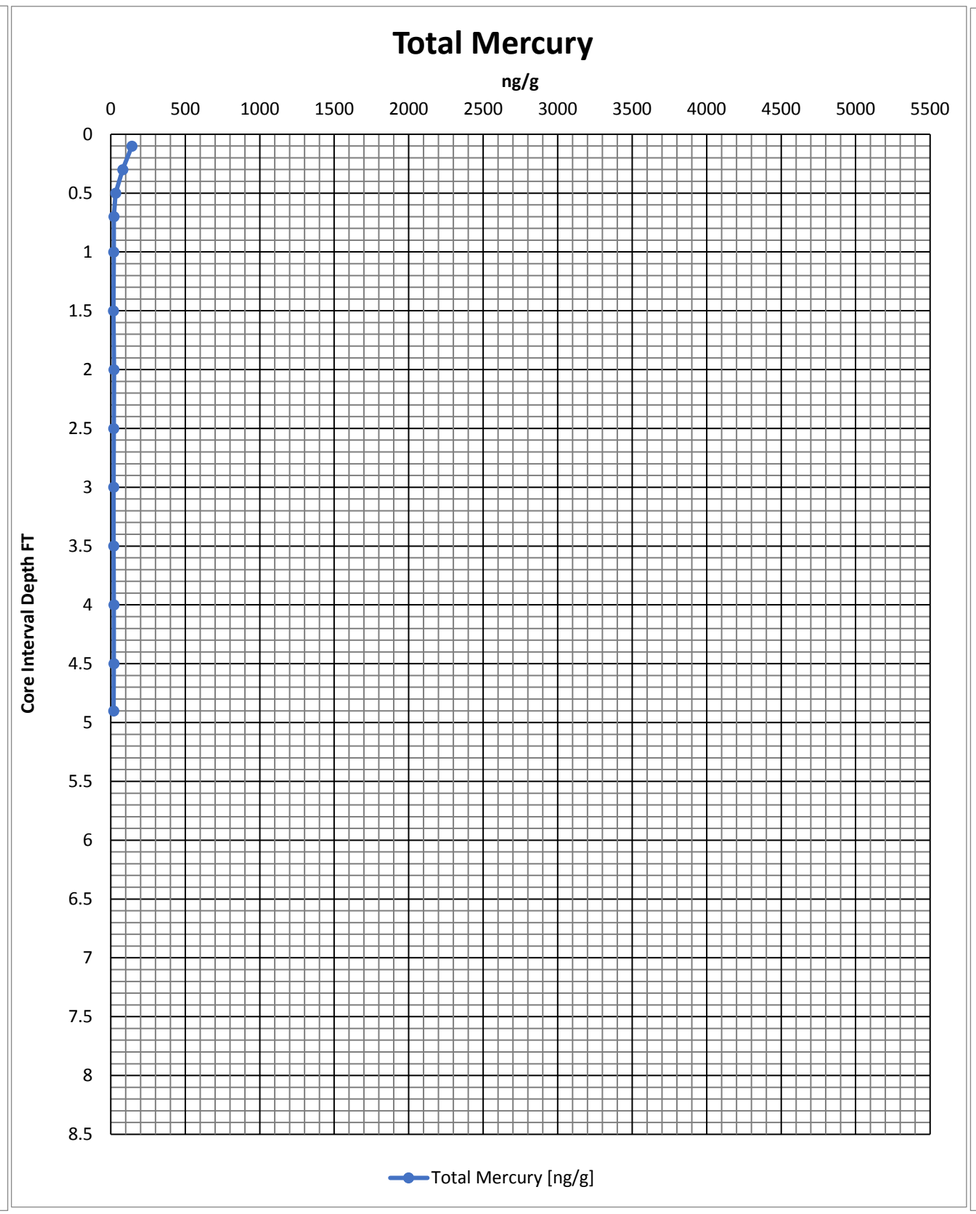
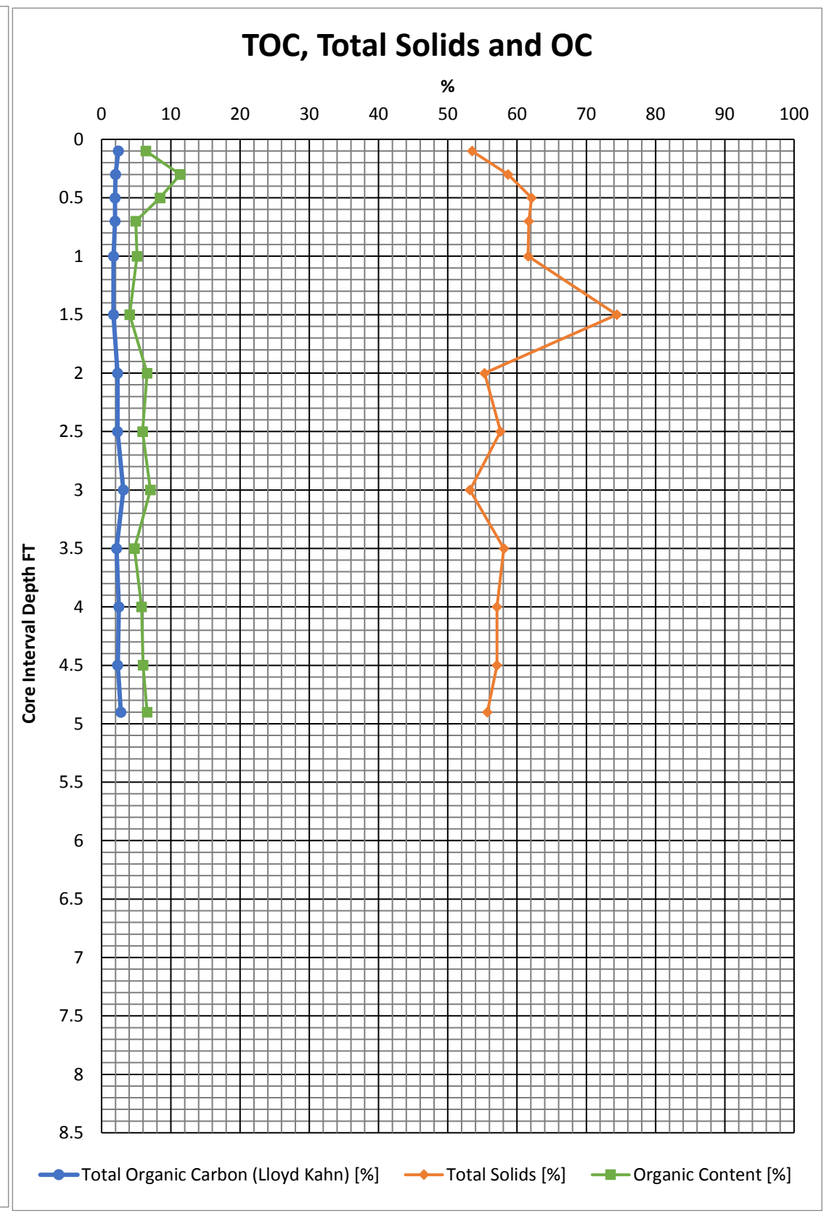
Figure A.3-14
Station ID: FF-07-01
Core ID: FF-07-01-E
Core Designation: Consolidated







TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

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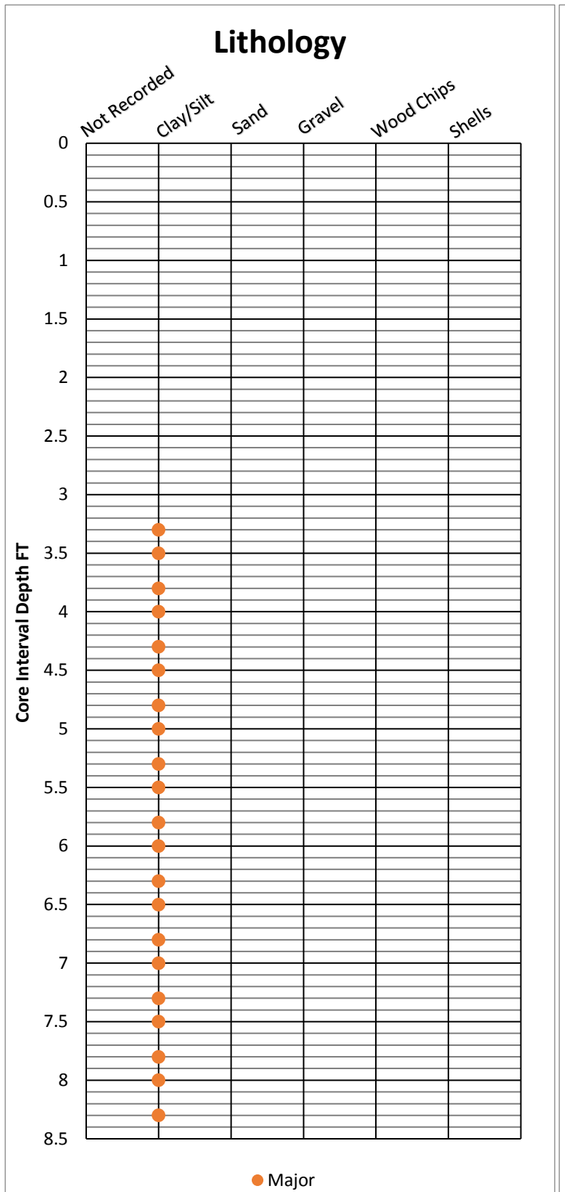
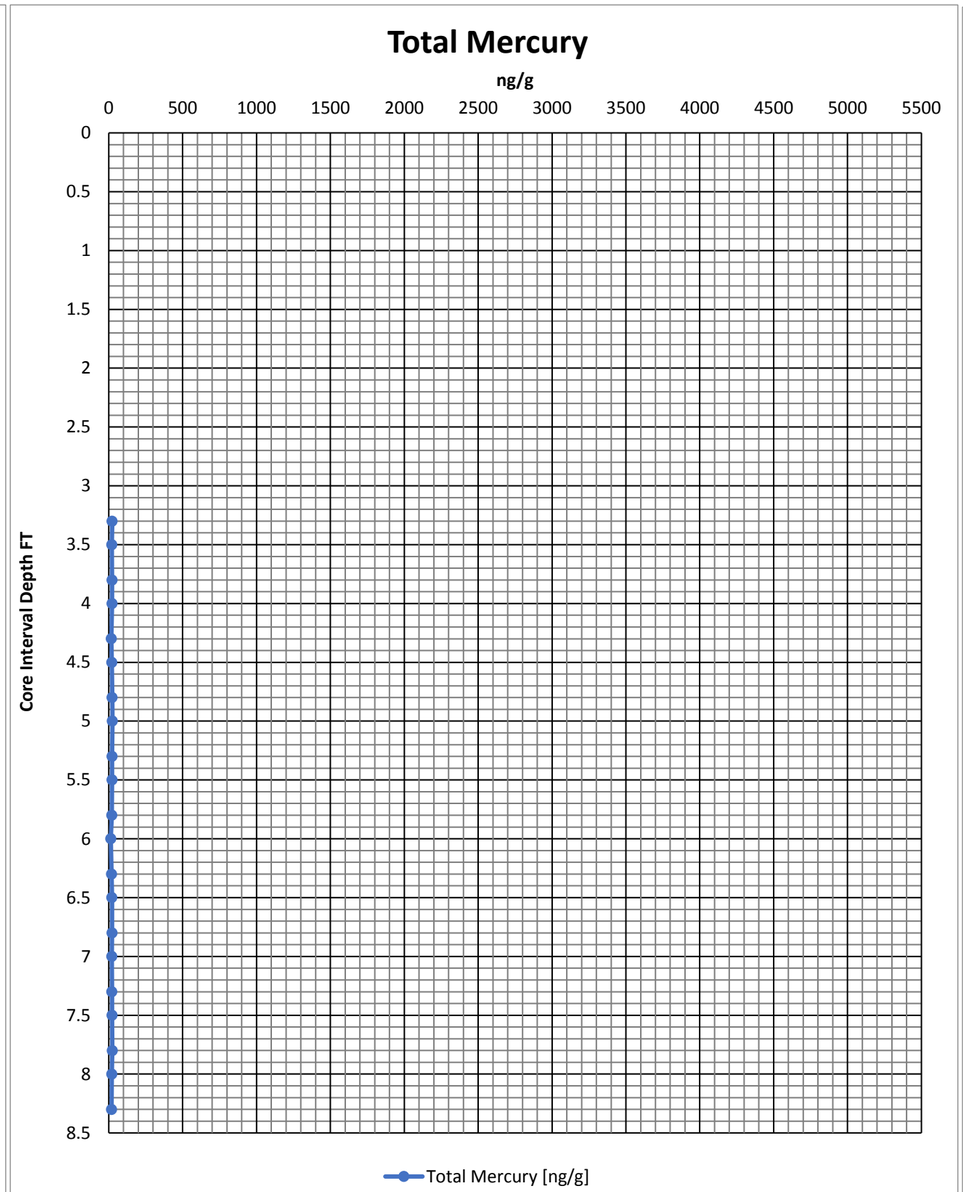
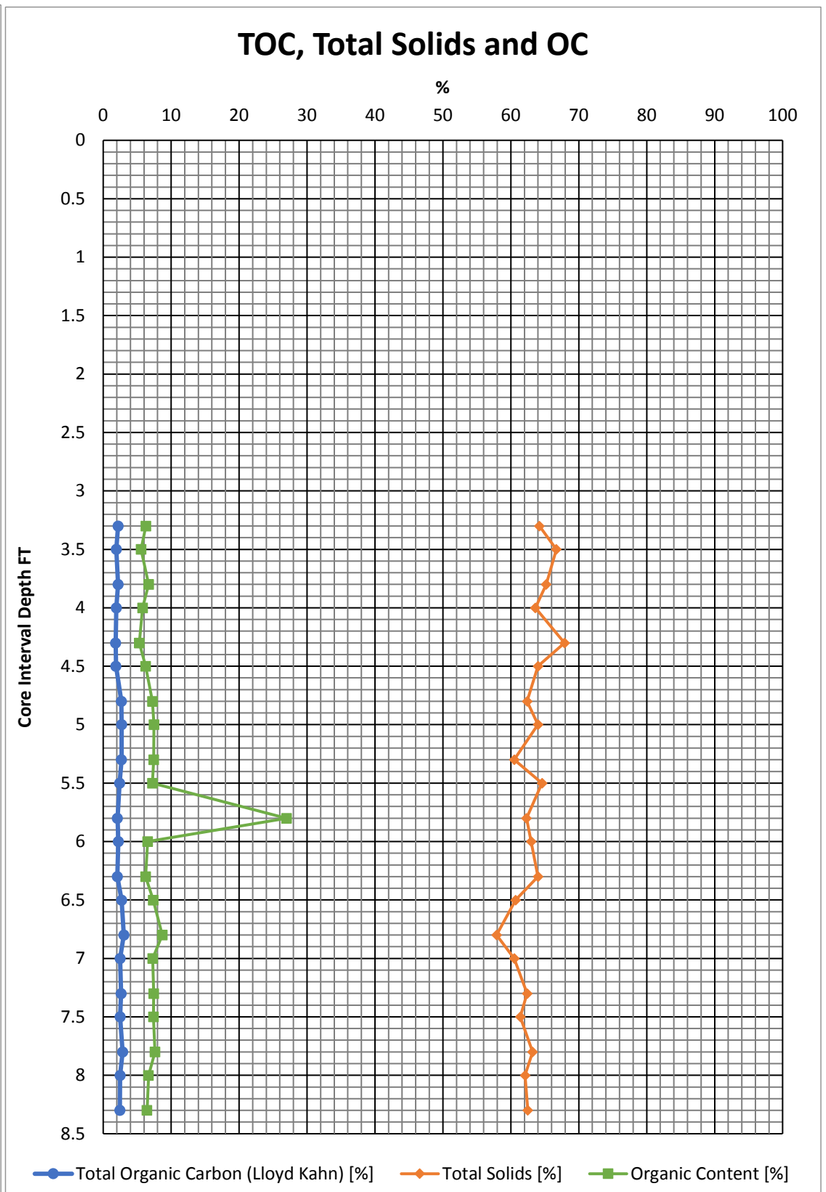
Figure A.3-15
Station ID: FF-07-02
Core ID: FF-07-02-B
Core Designation: Consolidated



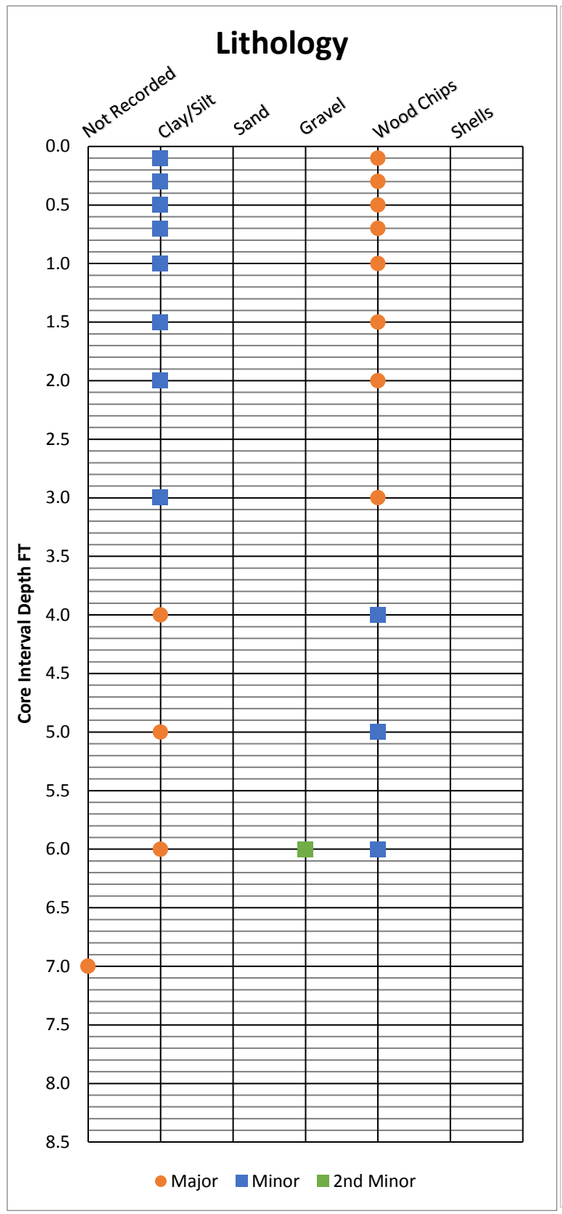


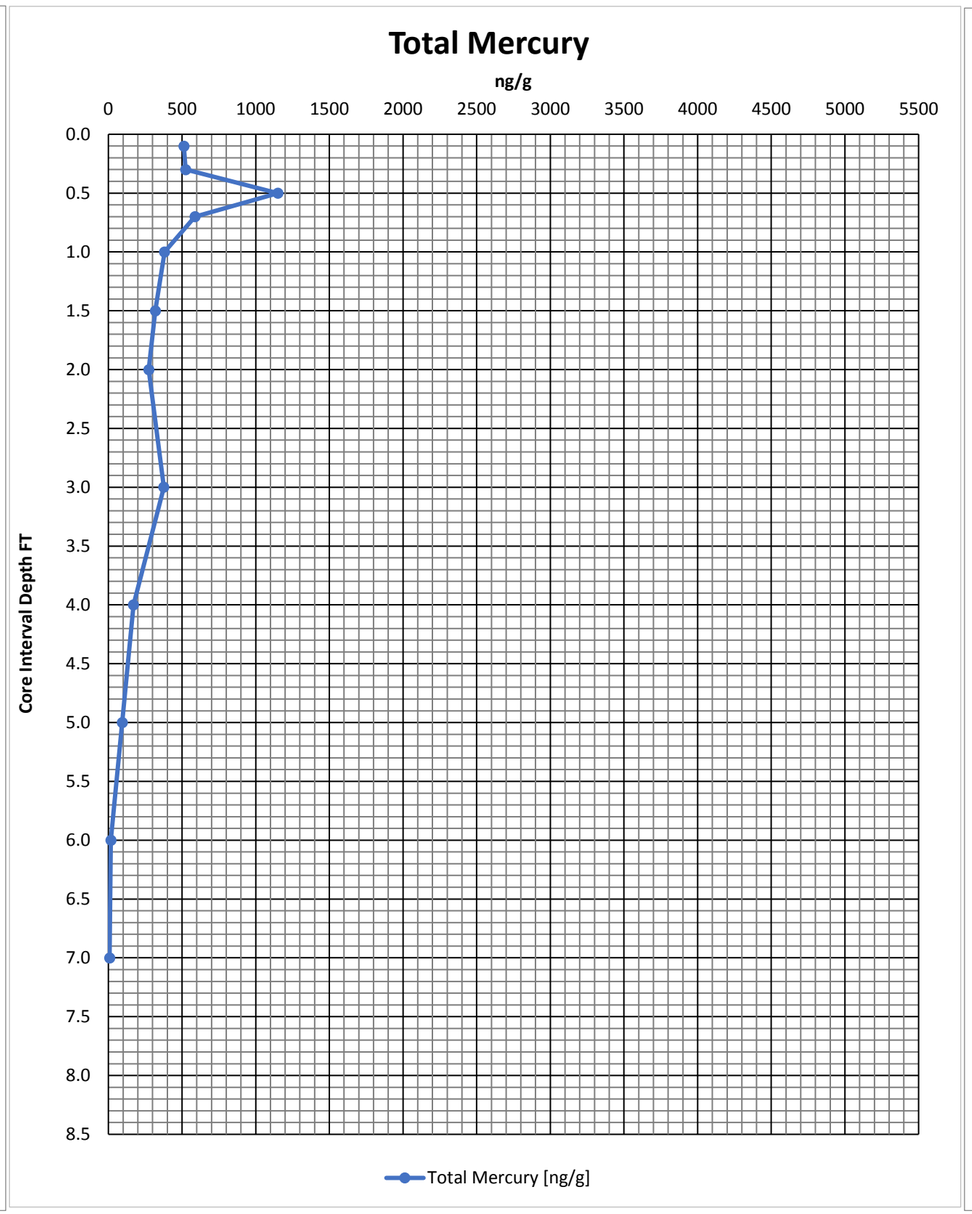


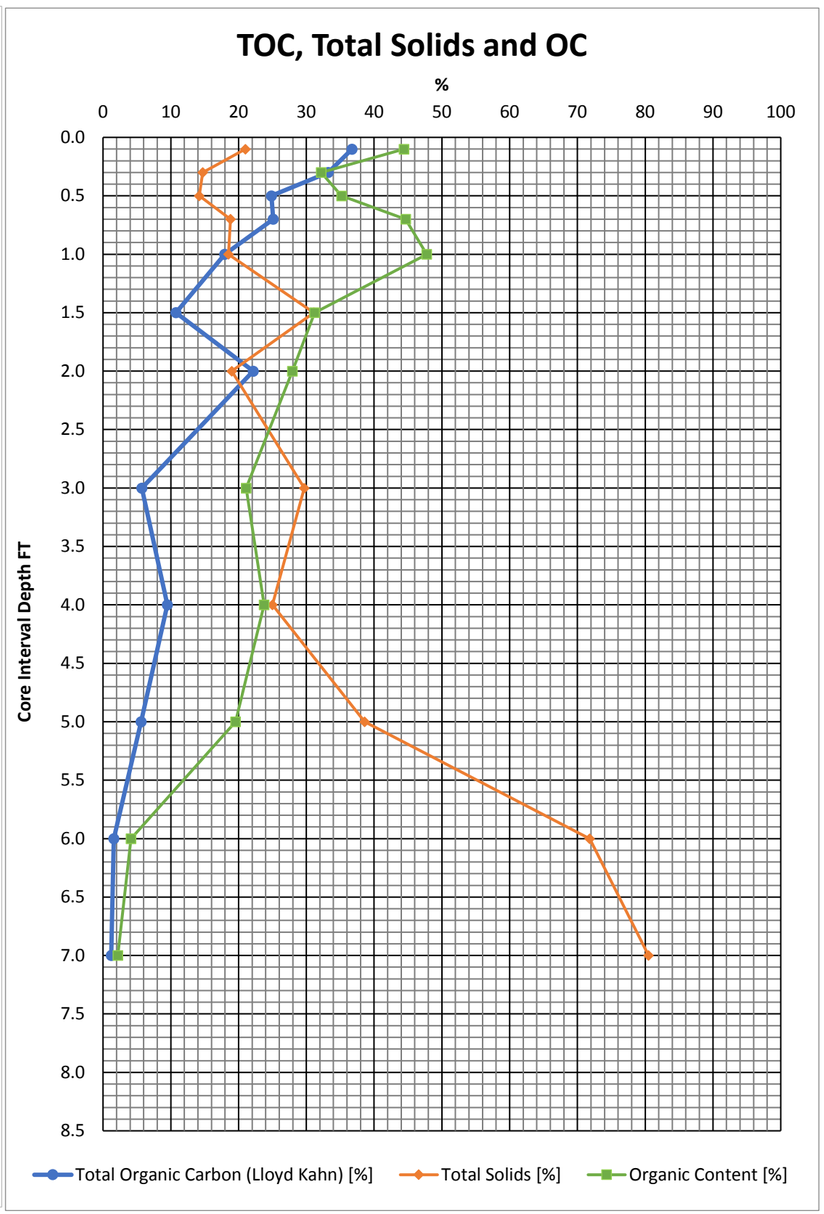
TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

Top of Core is FF-MU-7-GC-2

Figure A.3-16
Core ID: FF-08-01-B
Core ID: FF-08-01-B
Core Designation: Consolidated







TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

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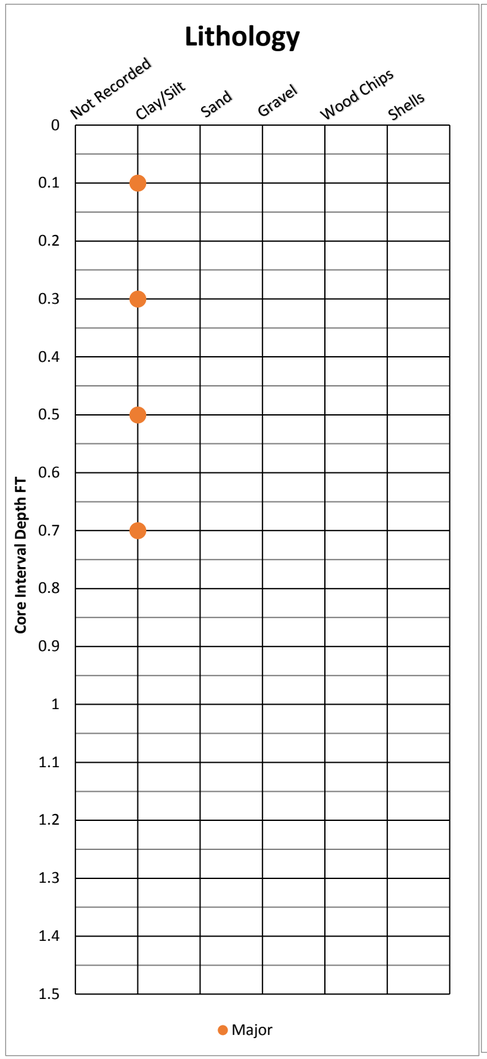
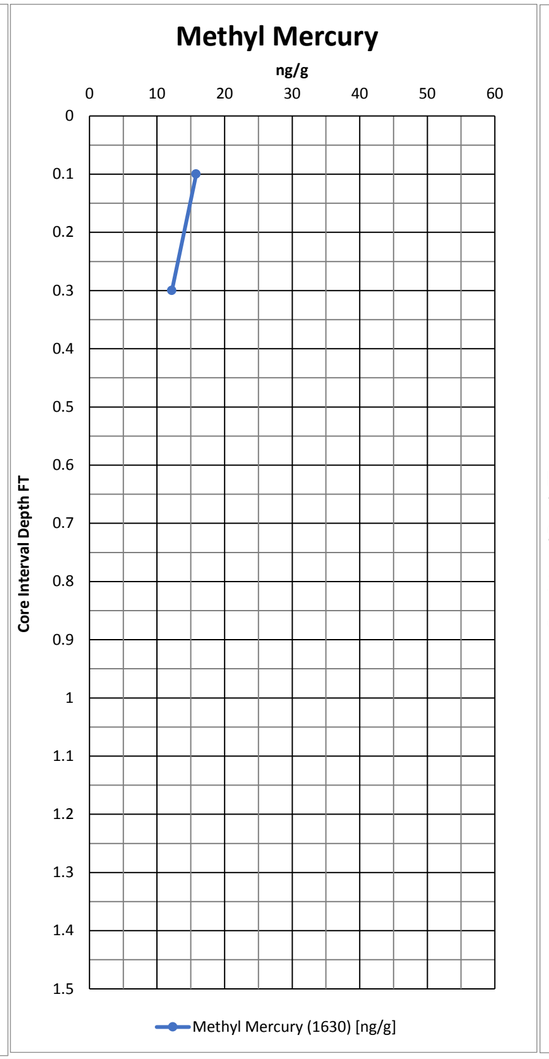
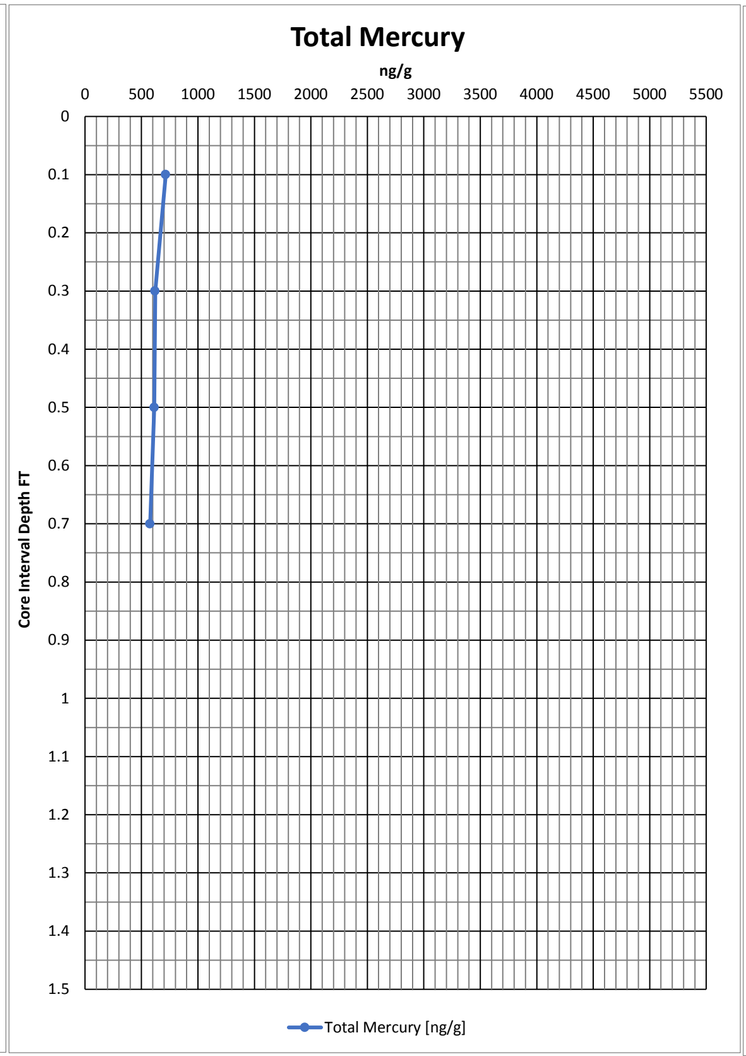
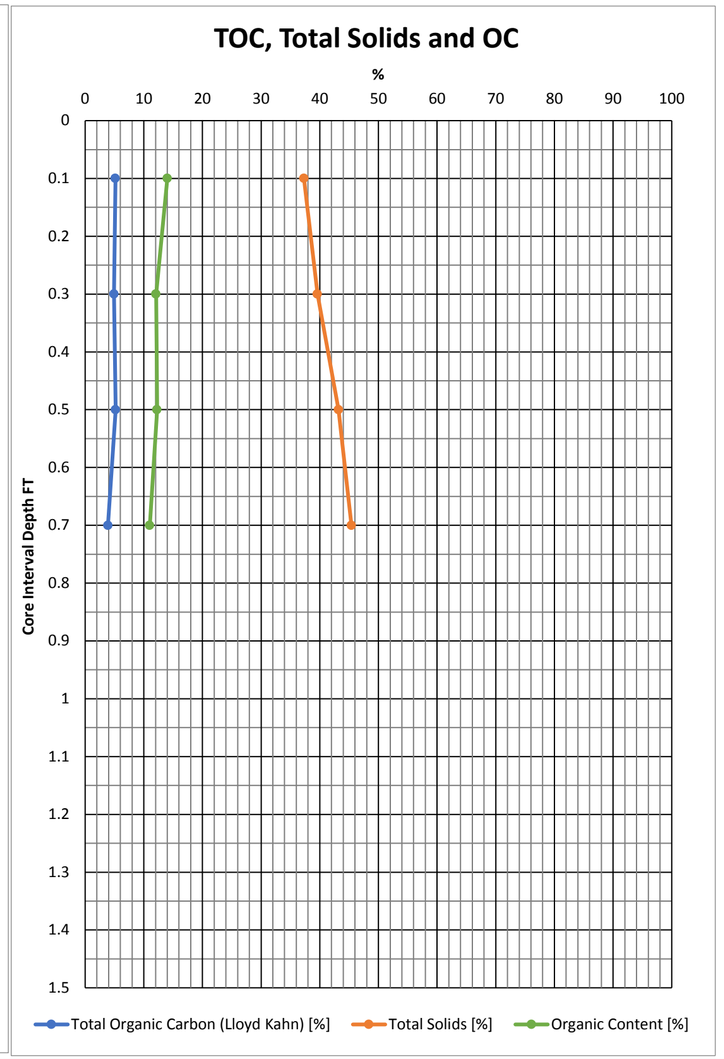
Figure A.3-17
Station ID: FF-08-02
Core ID: FF-08-02-G
Core Designation: Unconsolidated



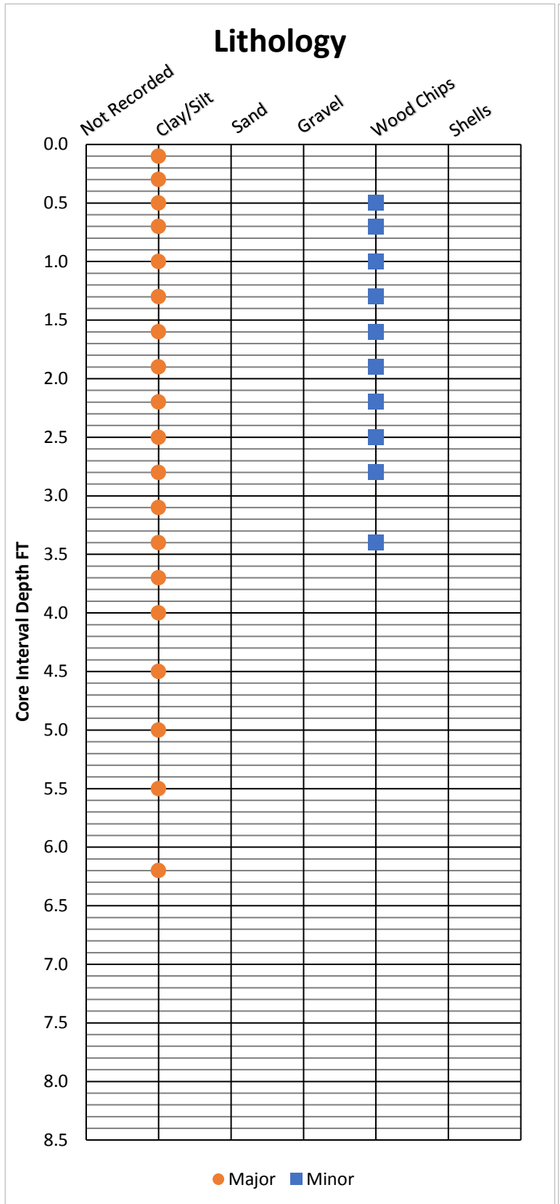


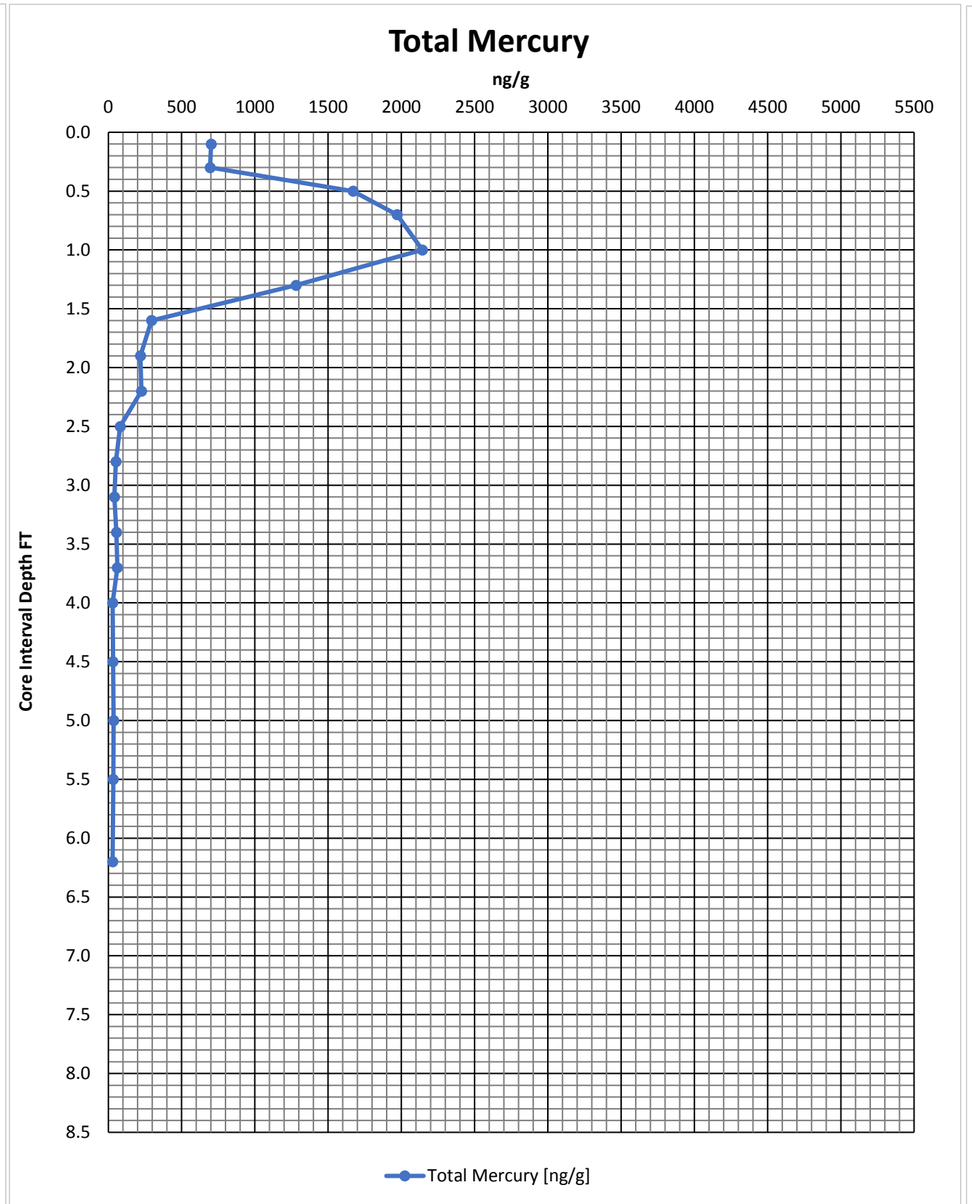


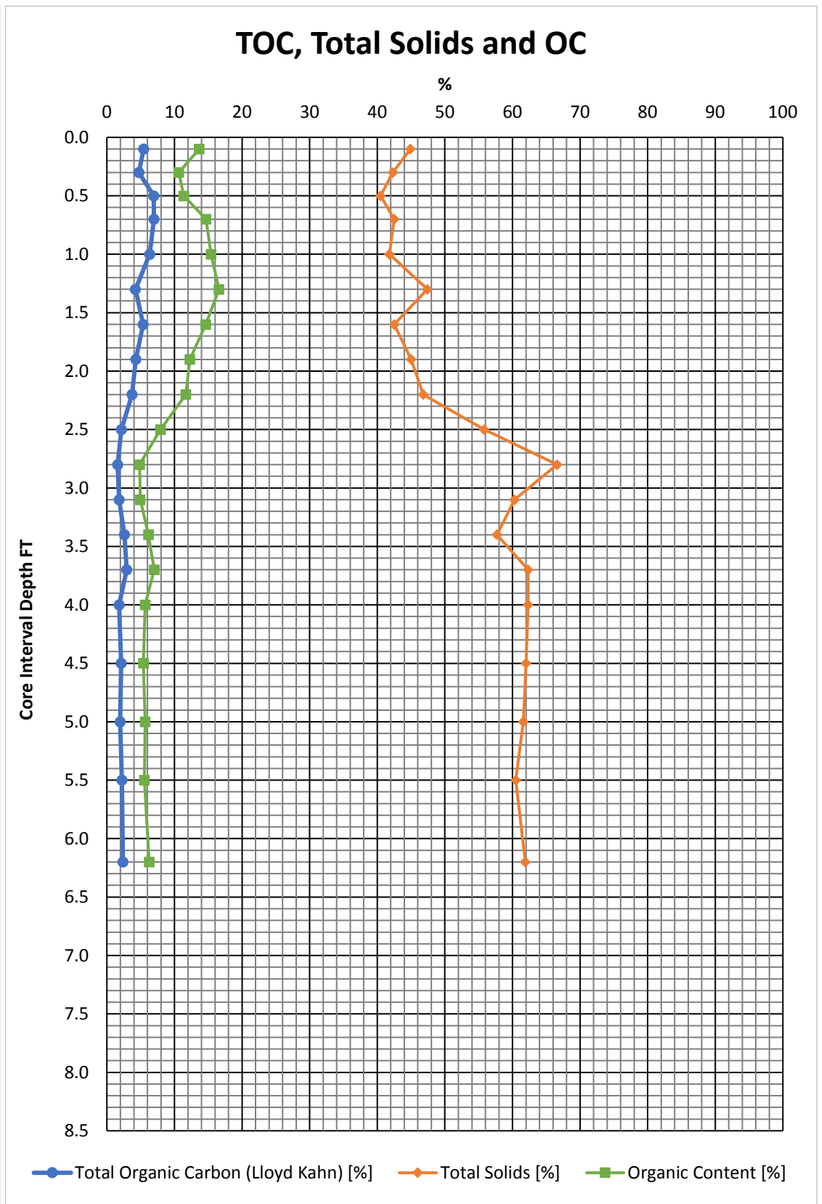


TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

Figure A.3-18
Station ID: FF-08-02-J
Core ID: FF-08-02-J
Core Designation: Consolidated







TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

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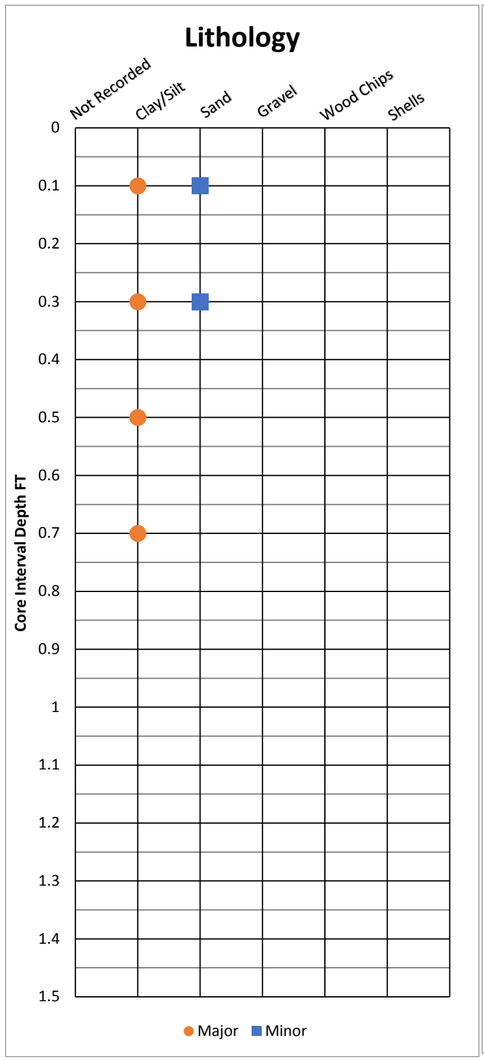
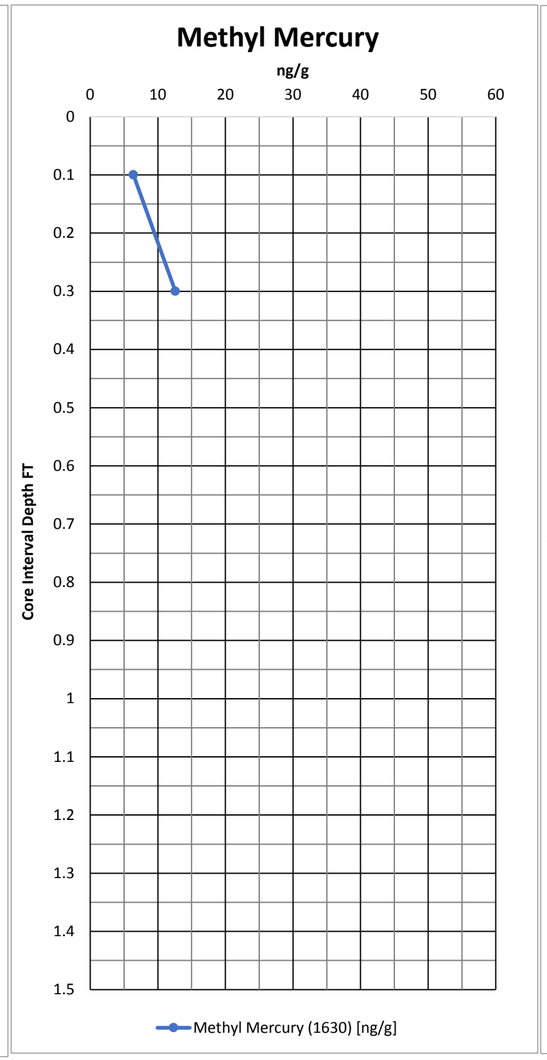
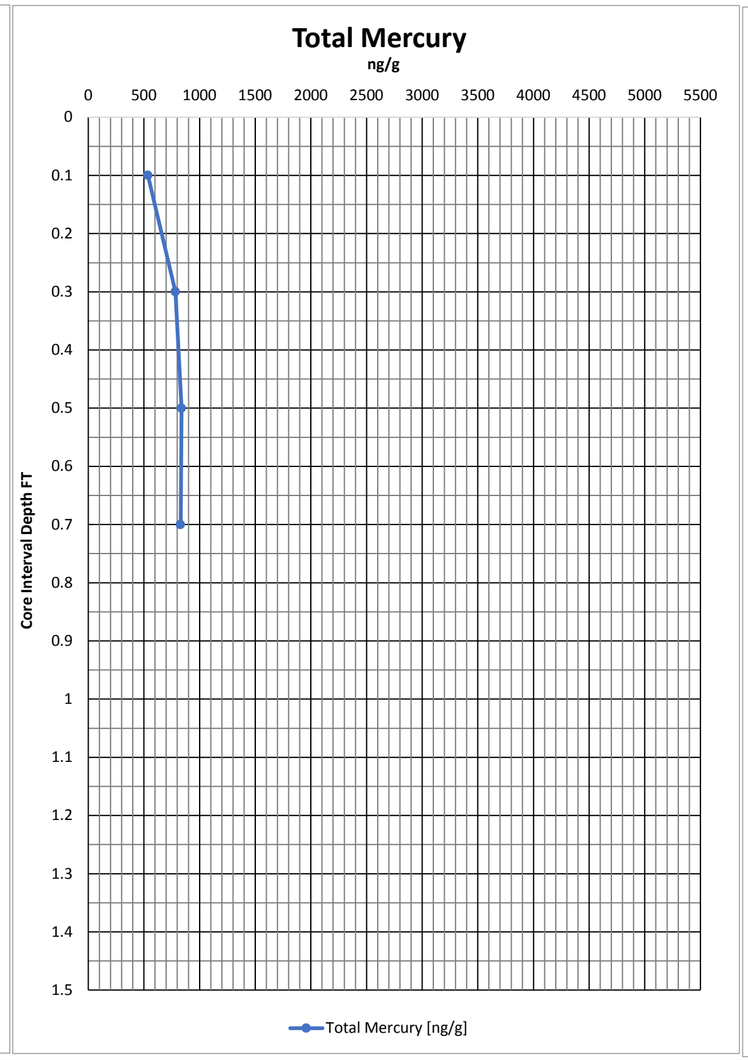
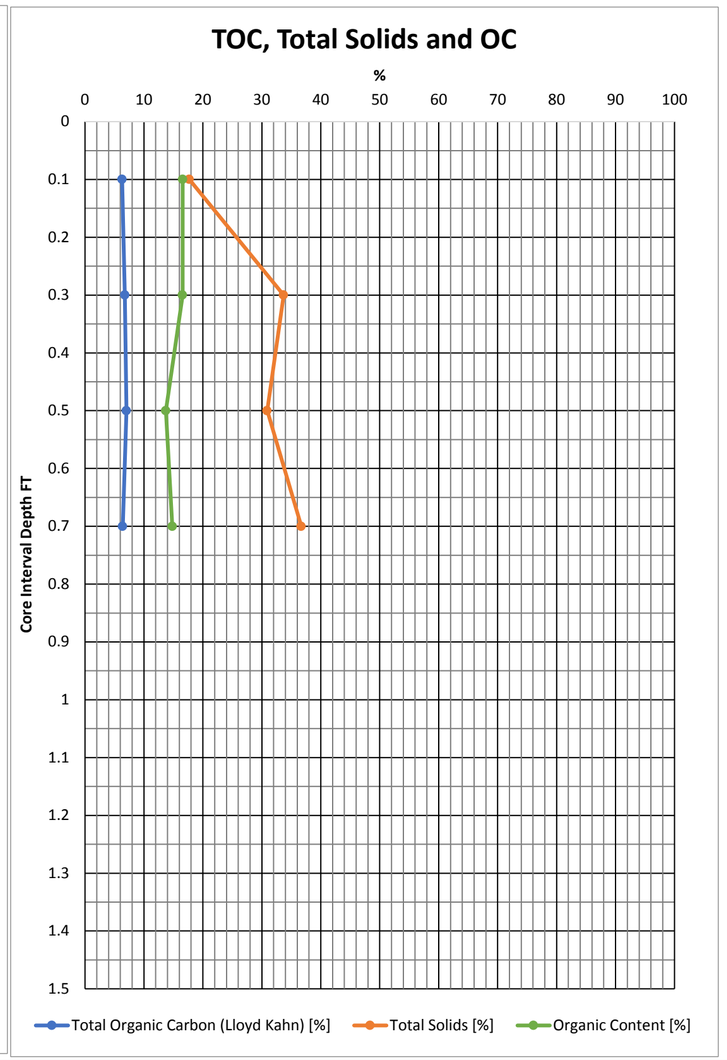
Figure A.3-19
Station ID: MM-04-01
Core ID: MM-04-01-F
Core Designation: Unconsolidated



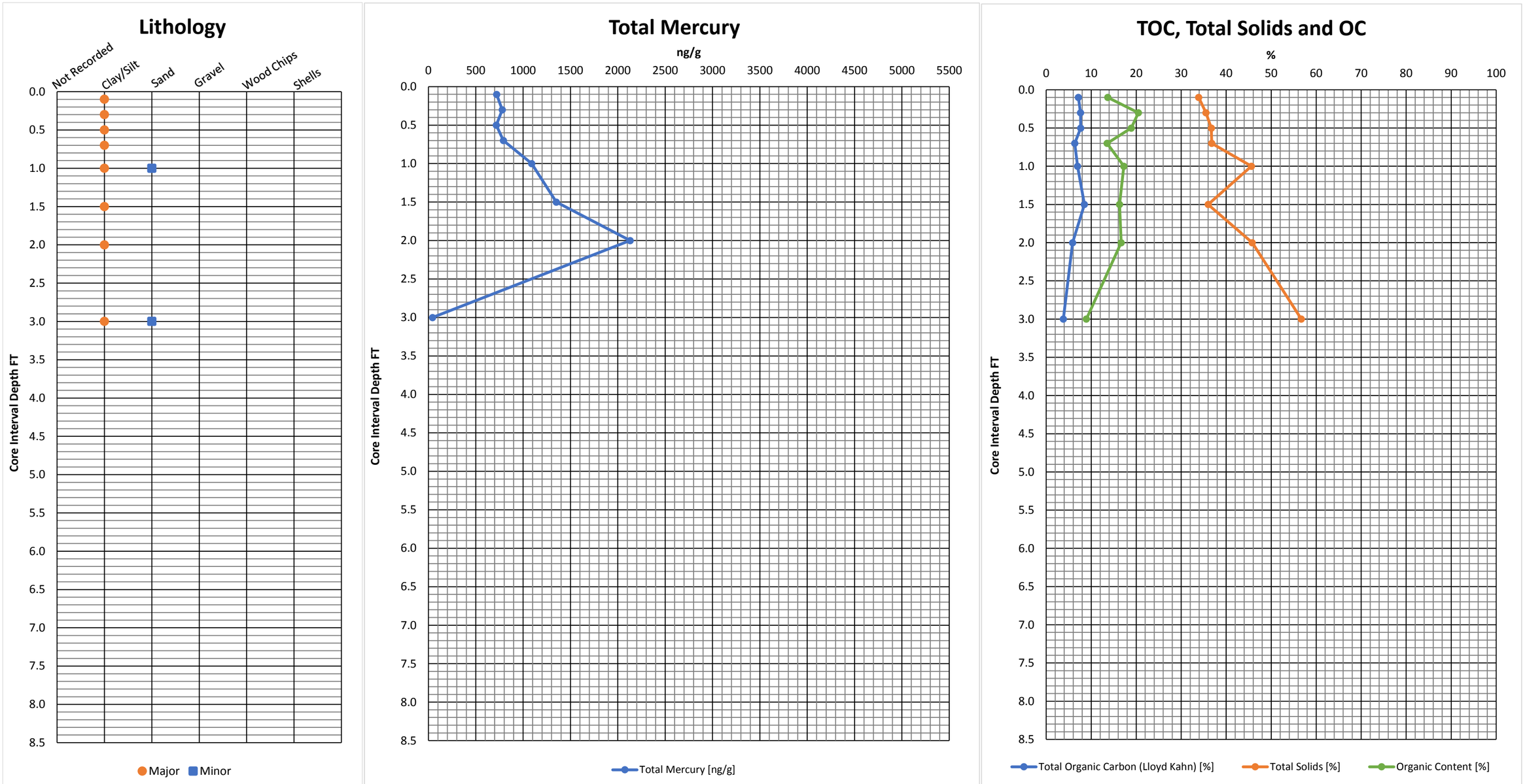






TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

Figure A.3-20
Station ID: MM-04-01
Core ID: MM-04-01-C
Core Designation: Consolidated



TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

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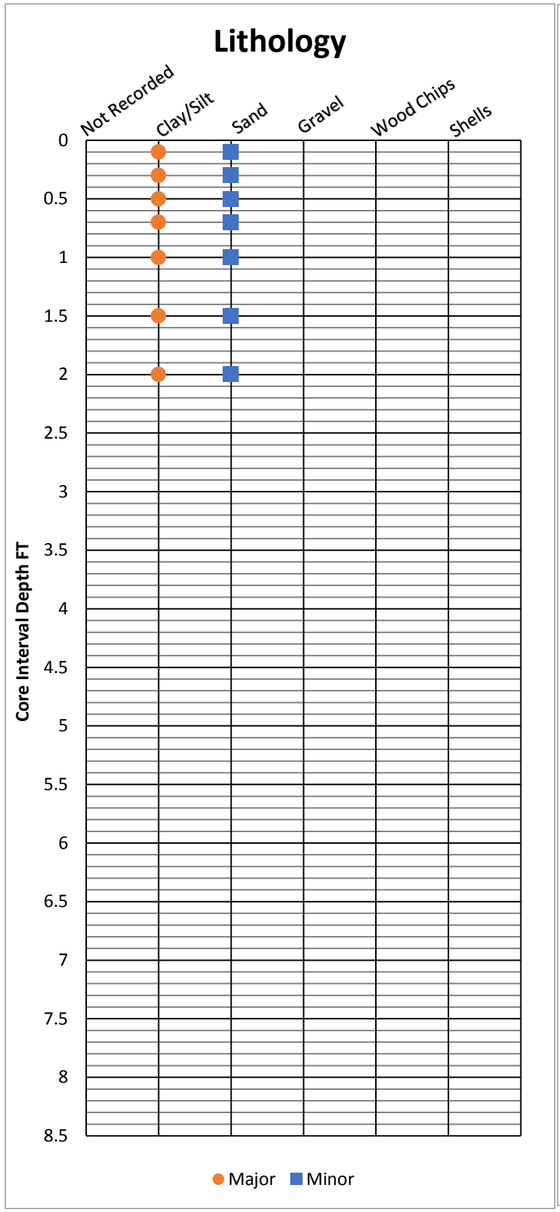
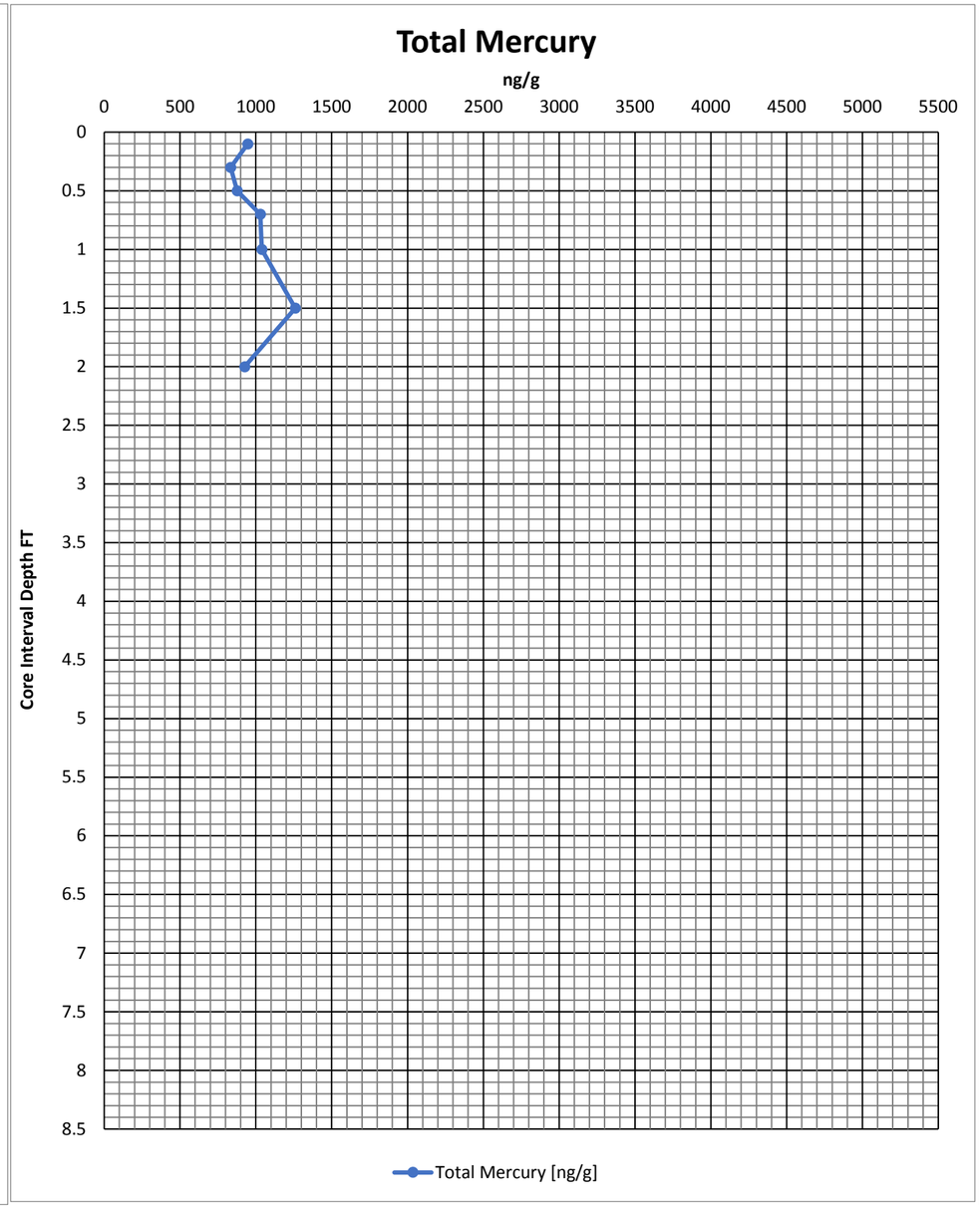
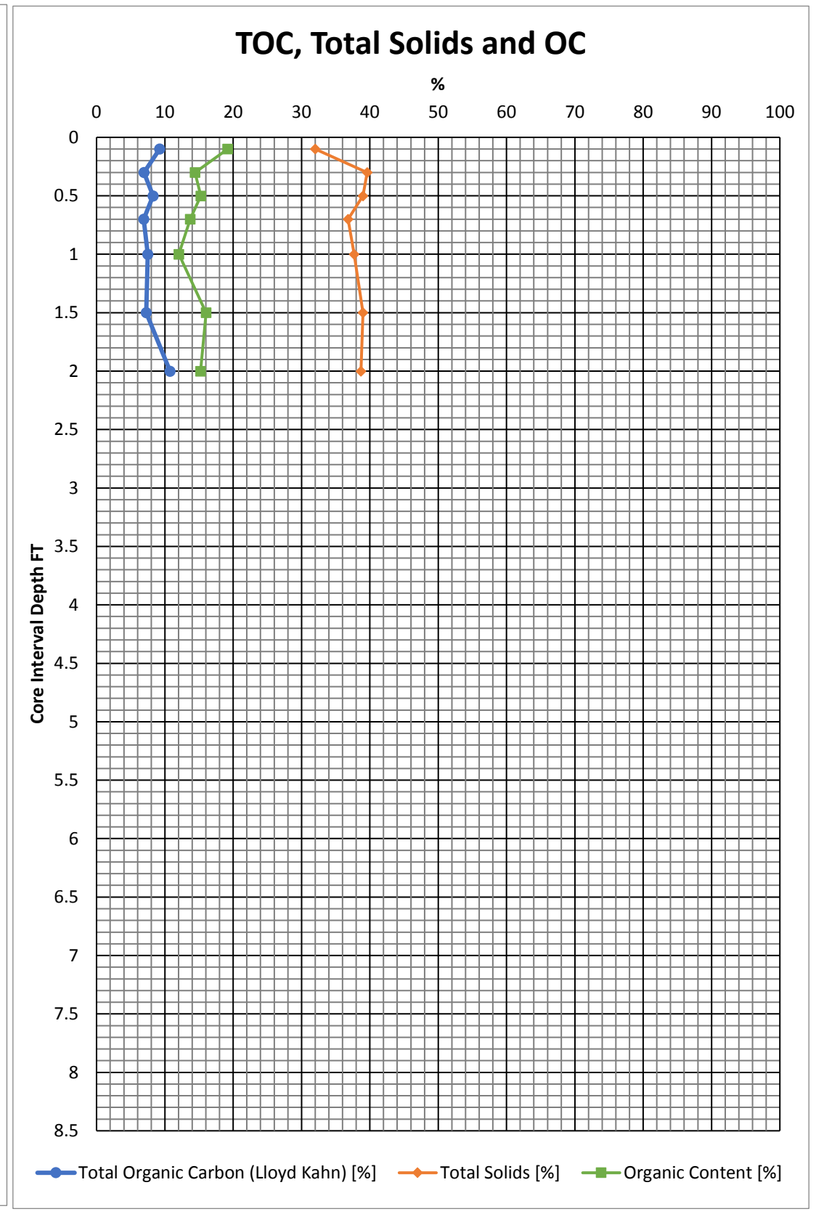
Figure A.3-21
Station ID: BU-01-01
Core ID: BU-01-01-C
Core Designation: Consolidated







TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

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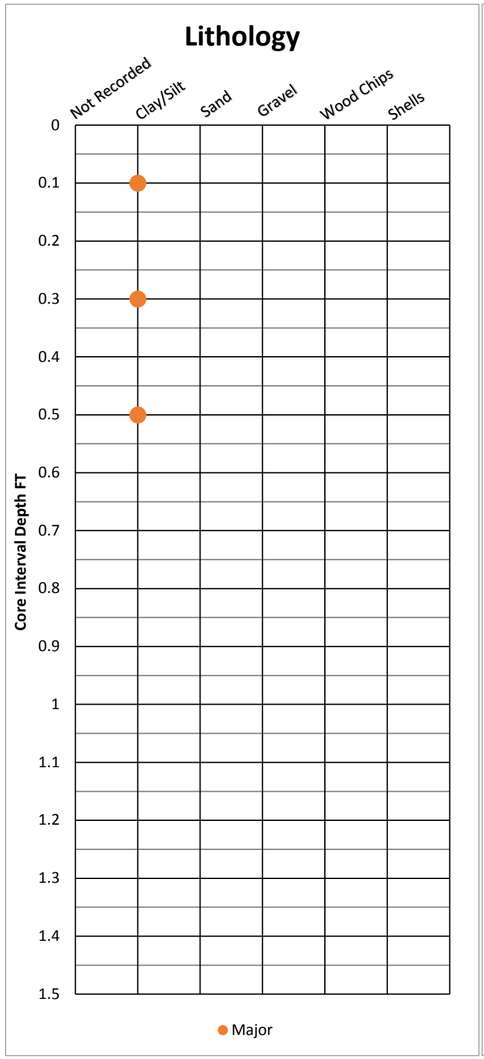
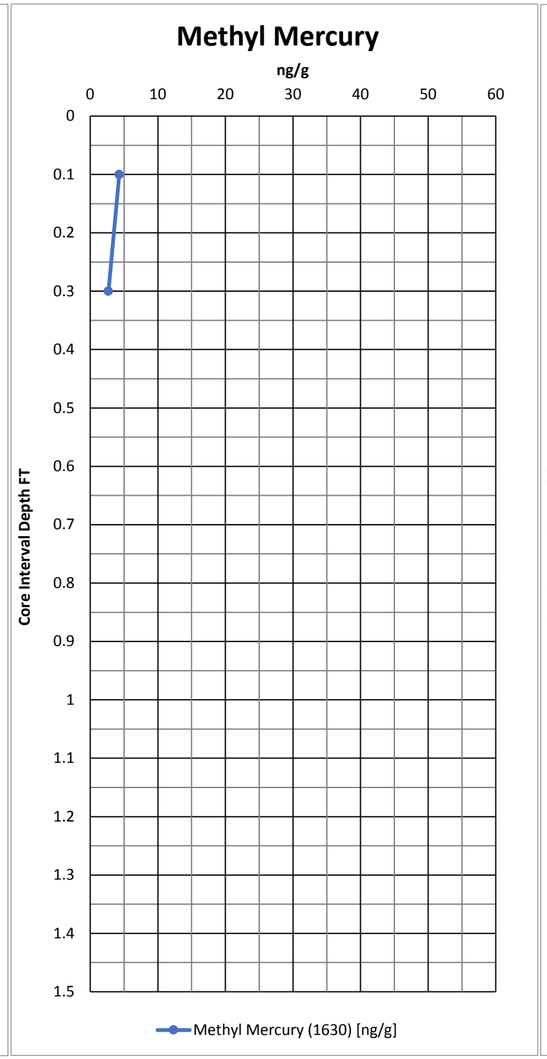
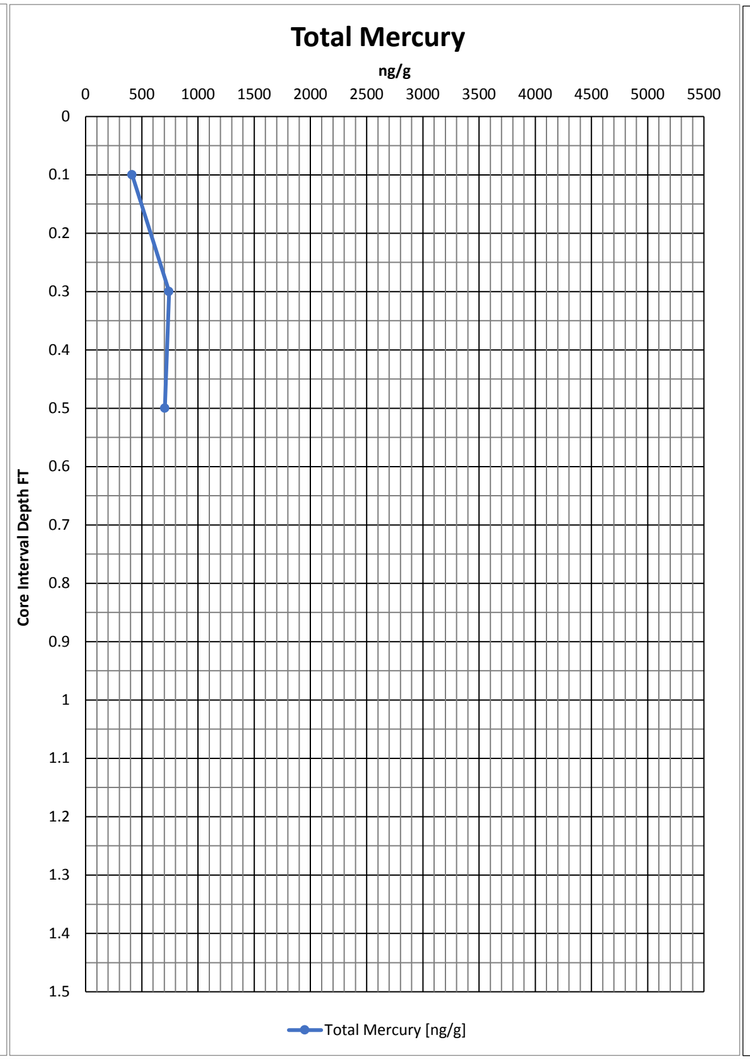
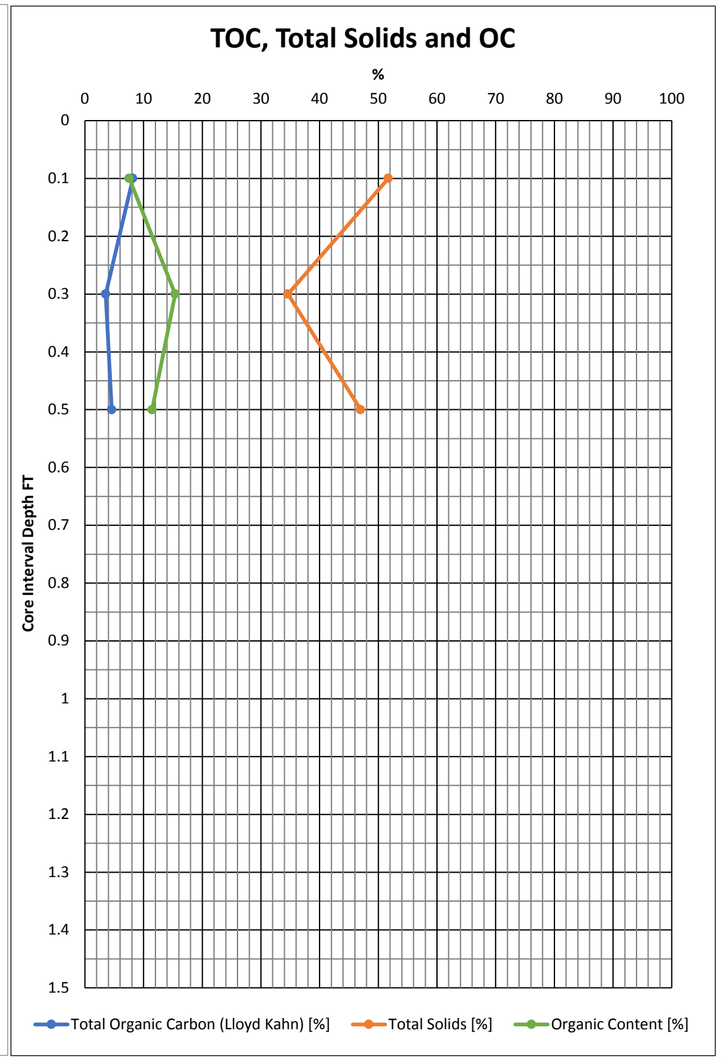
Figure A.3-22
Station ID: BU-02-01
Core ID: BU-02-01-E
Core Designation: Unconsolidated



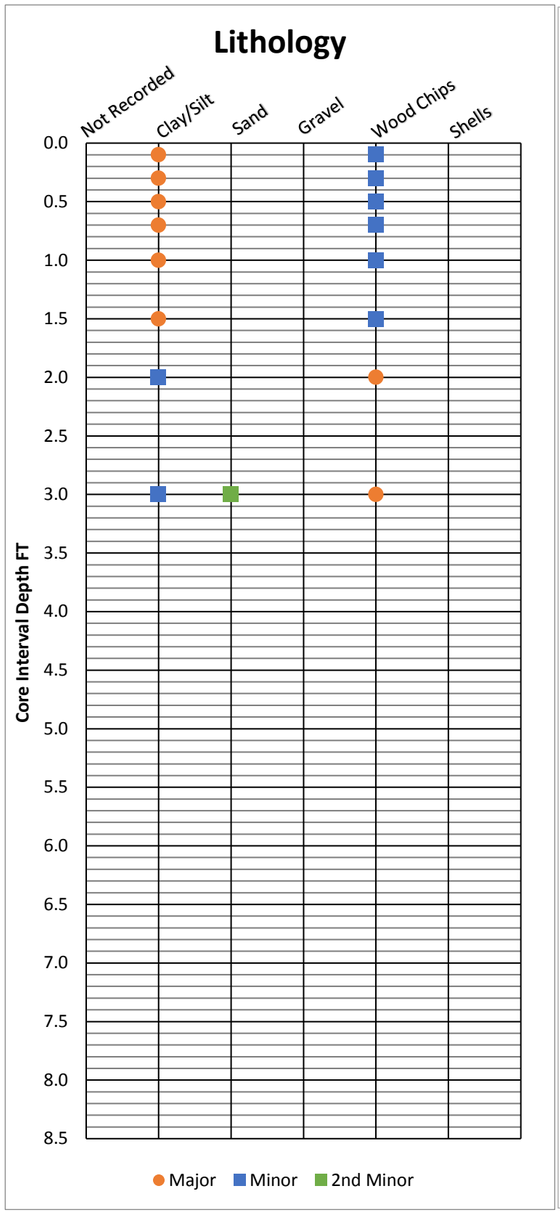


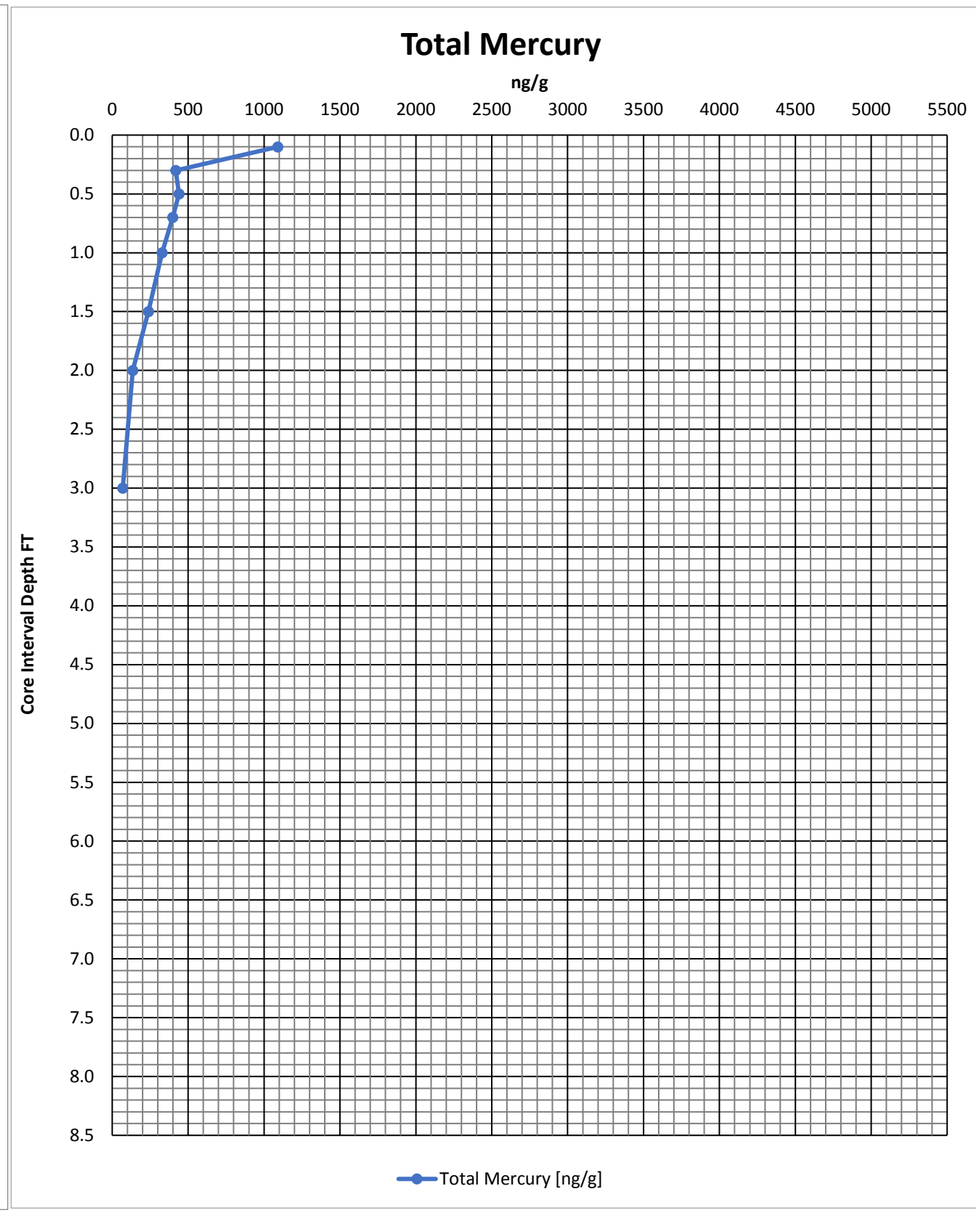


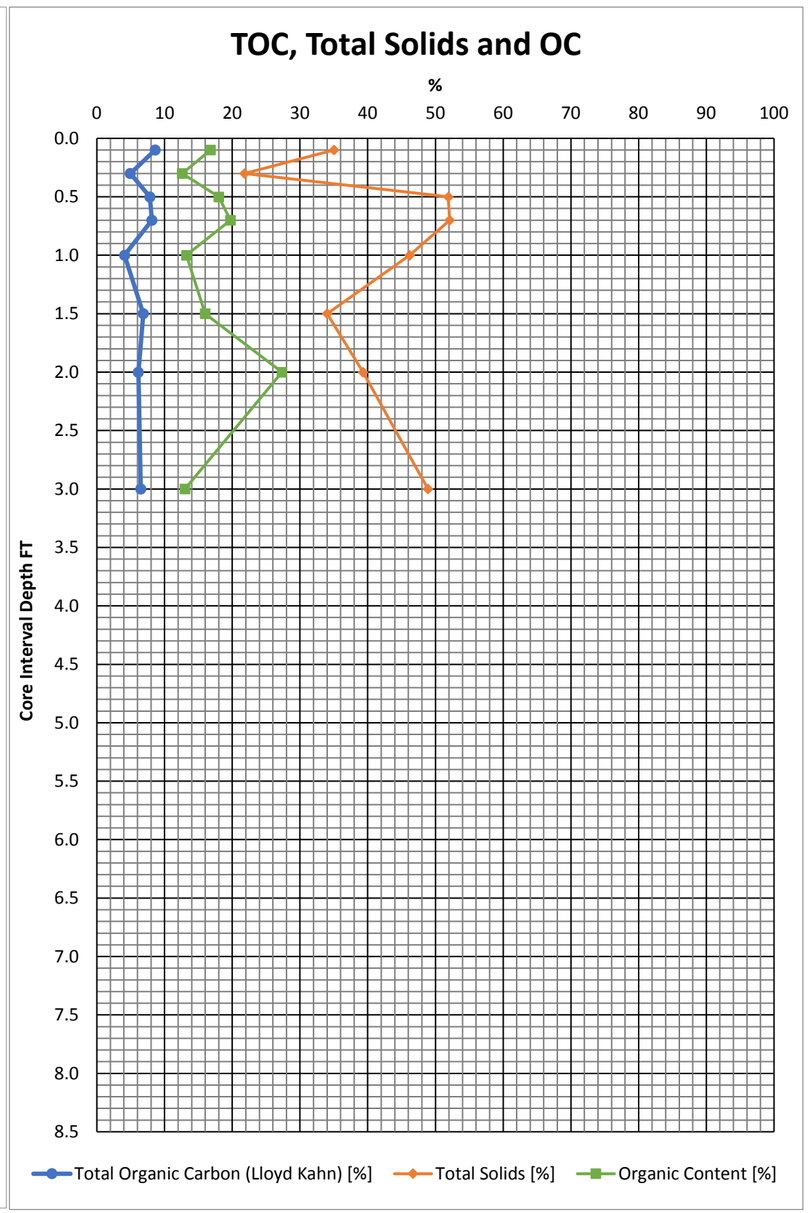


TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

Figure A.3-23
Station ID: BU-02-01
Core ID: BU-02-01-D
Core Designation: Consolidated







TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

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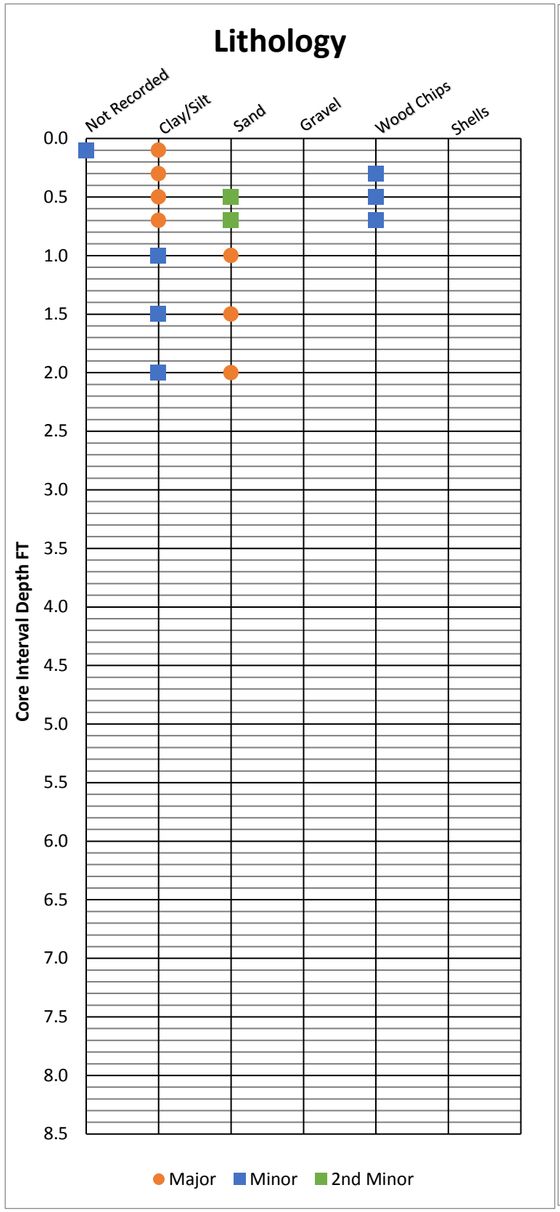
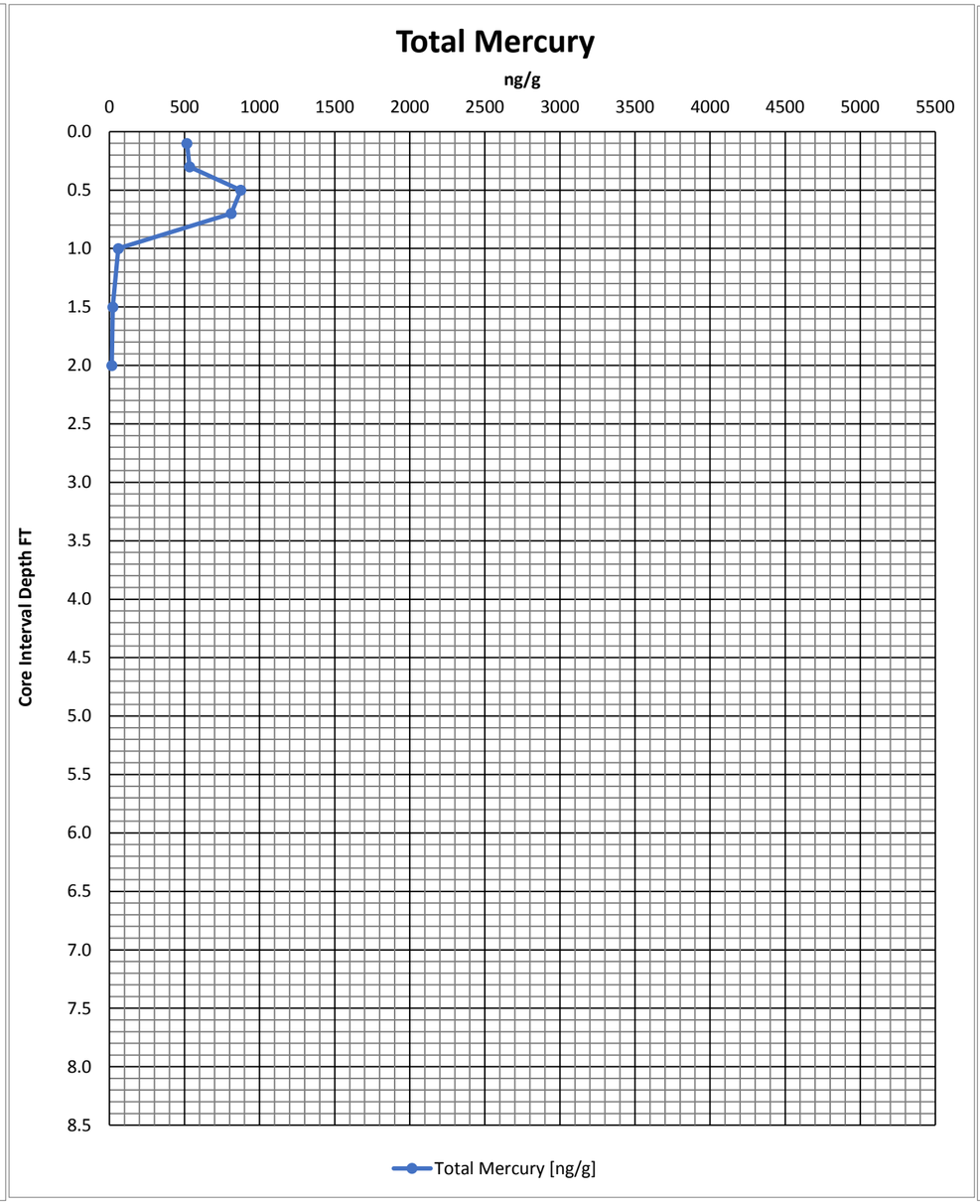
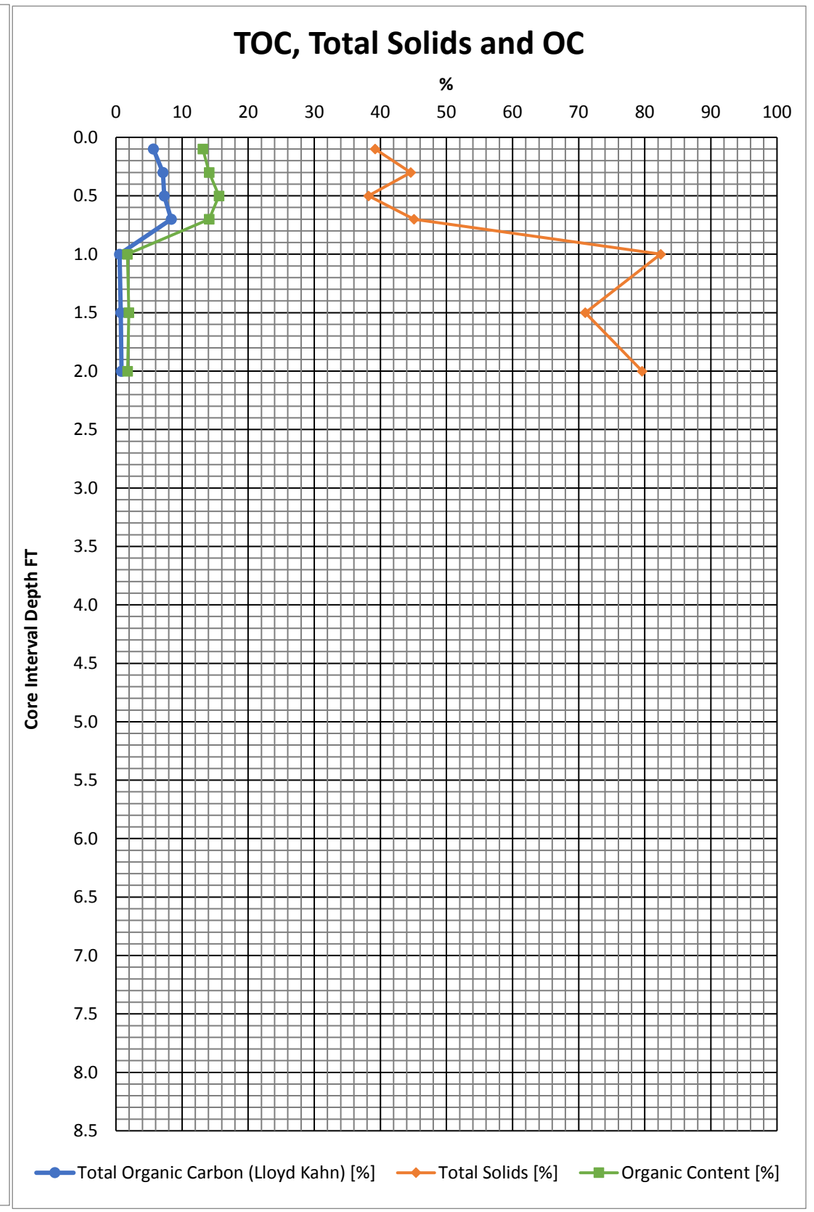
Figure A.3-24
Station ID: BU-05-01
Core ID: BU-05-01-A
Core Designation: Consolidated







TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

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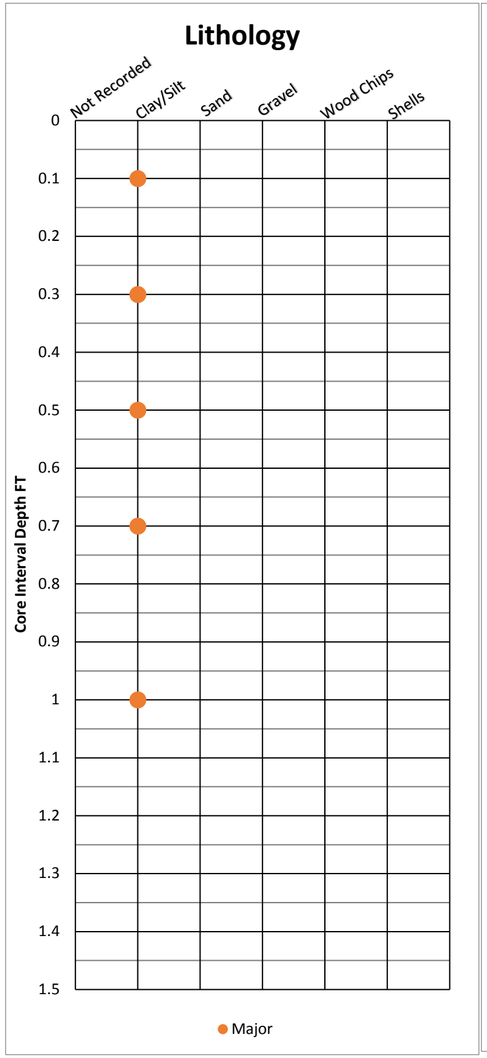
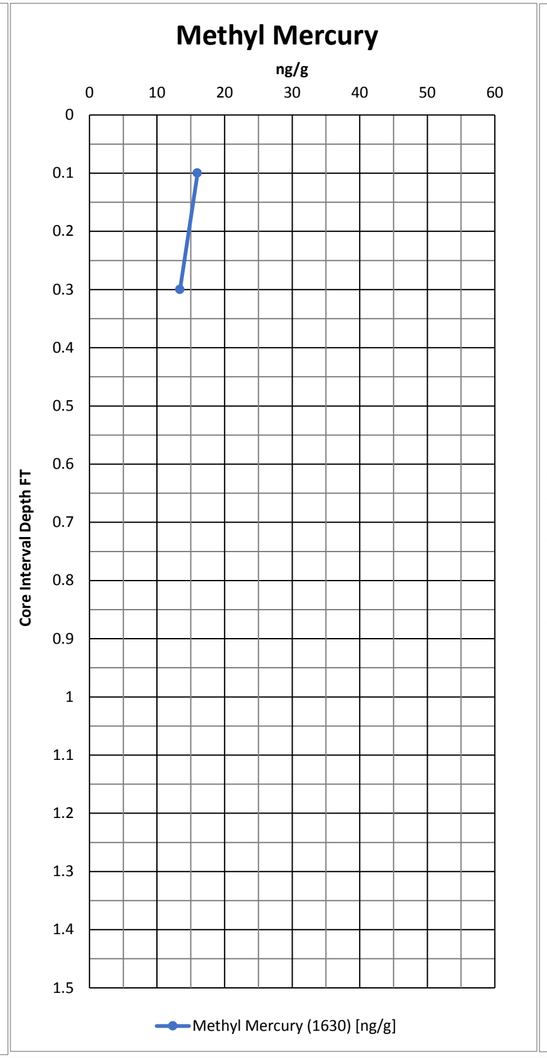
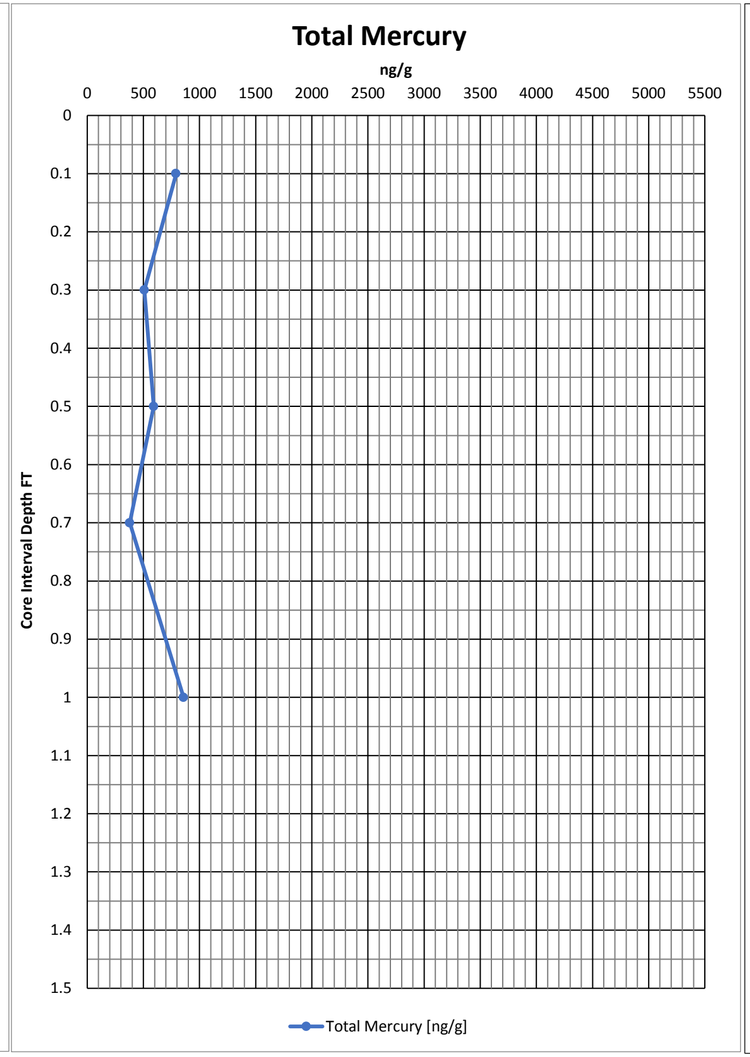
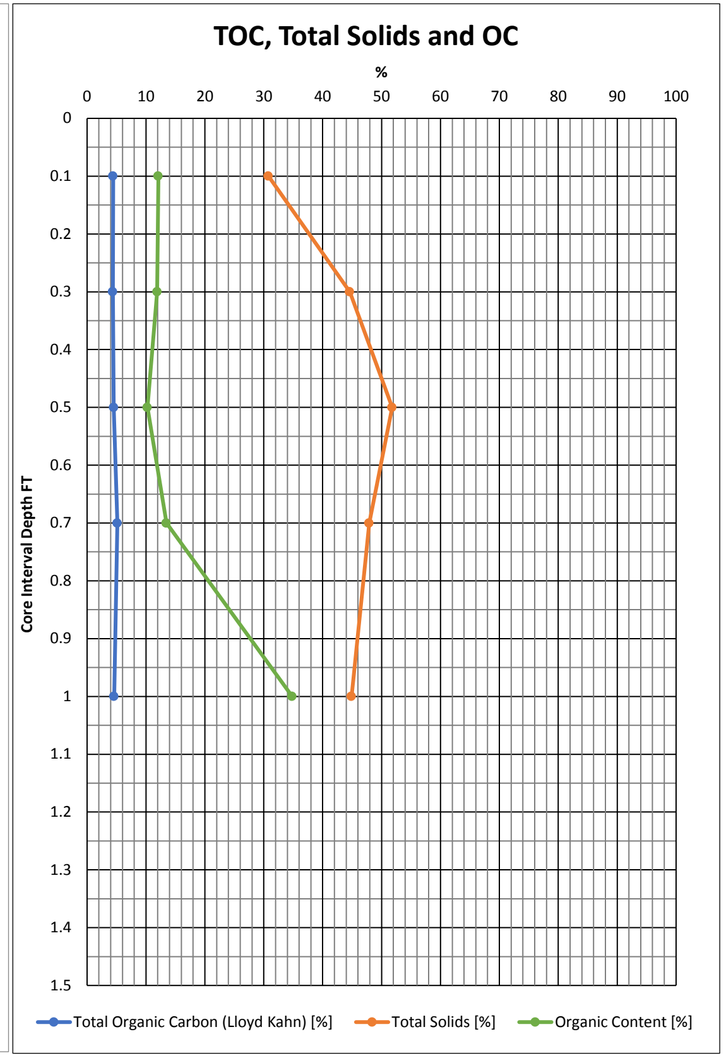
Figure A.3-25
Station ID: BU-08-01
Core ID: BU-08-01-E
Core Designation: Unconsolidated



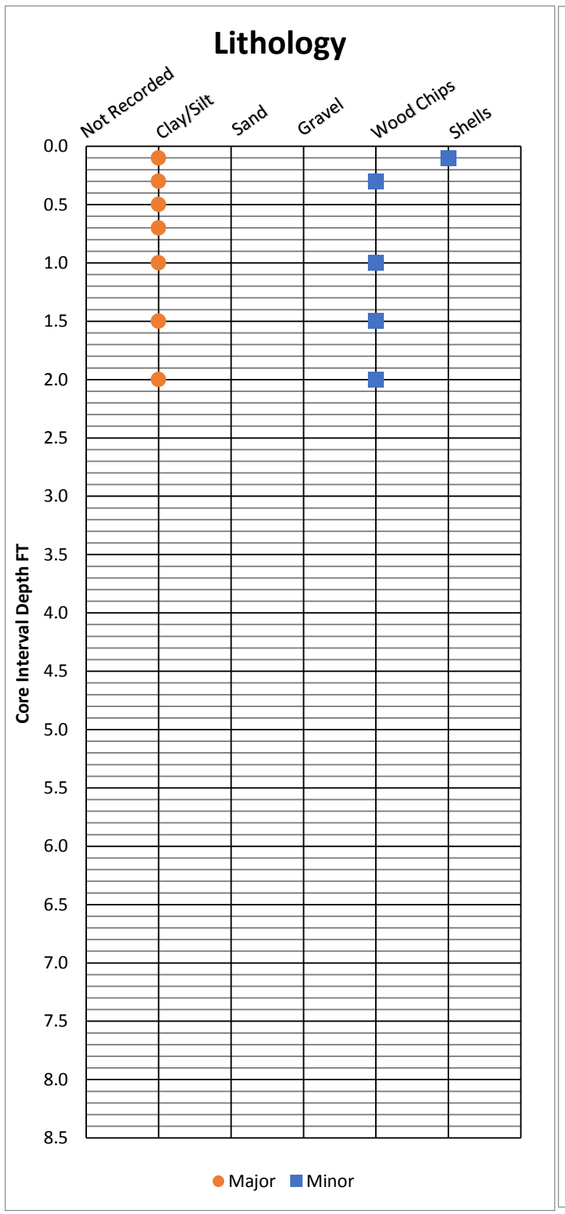


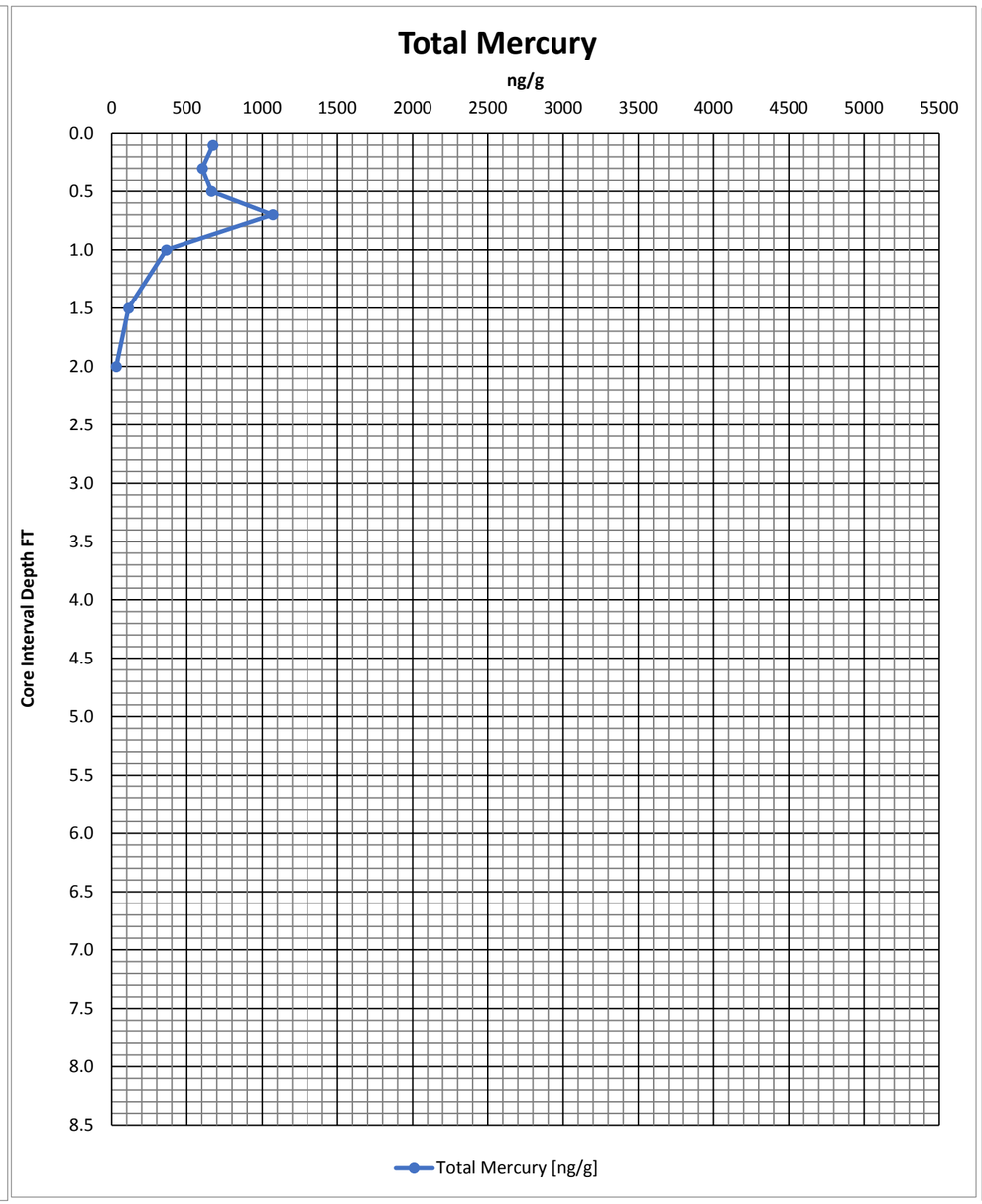


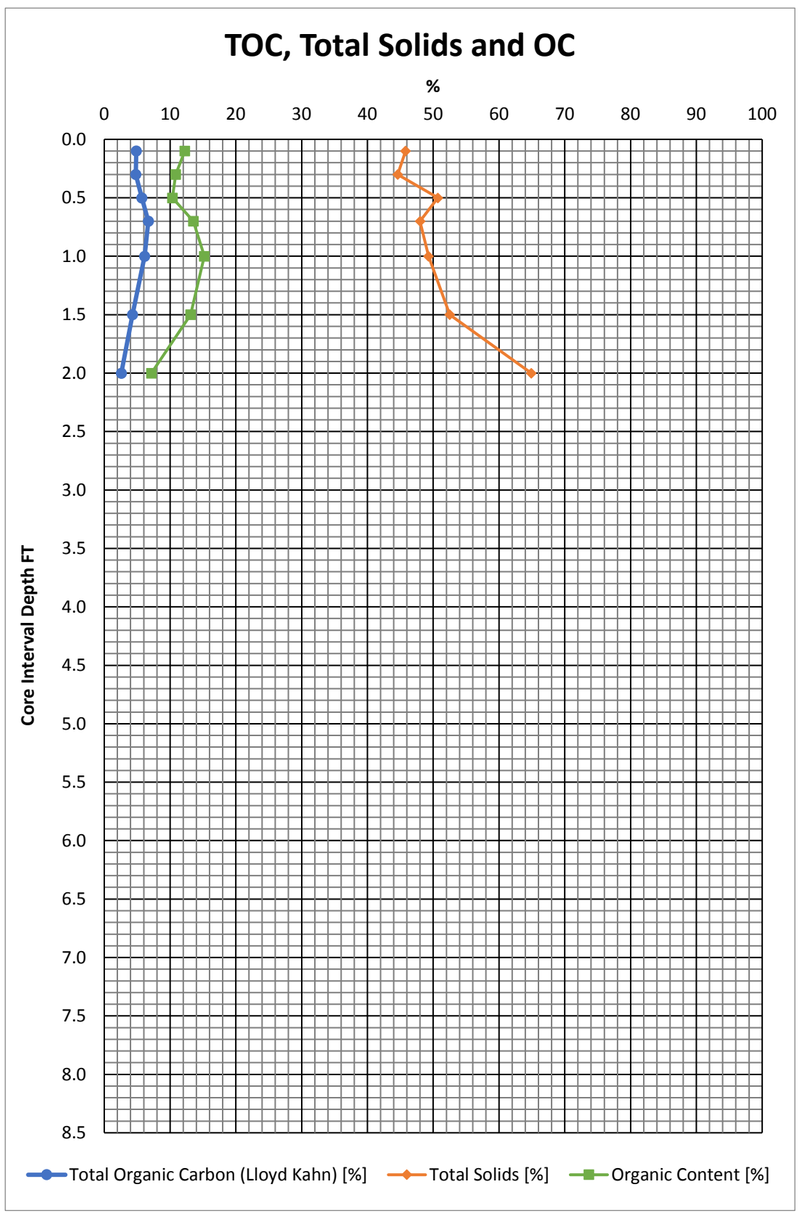


TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

Figure A.3-26
Station ID: BU-08-01
Core ID: BU-08-01-A
Core Designation: Consolidated







TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

Out Standing: TOC, Percent Solids

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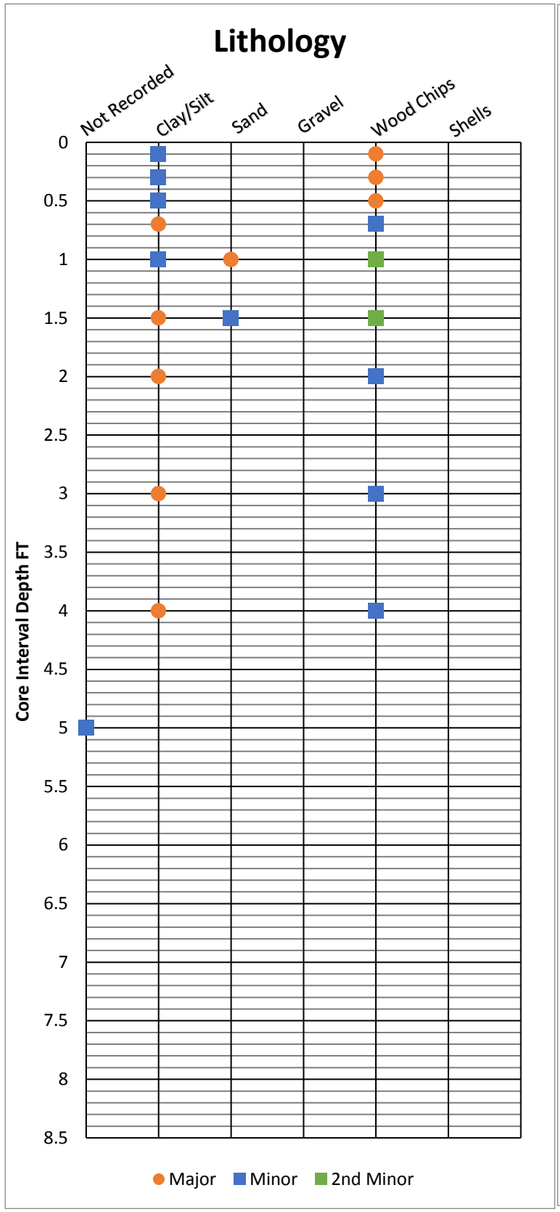
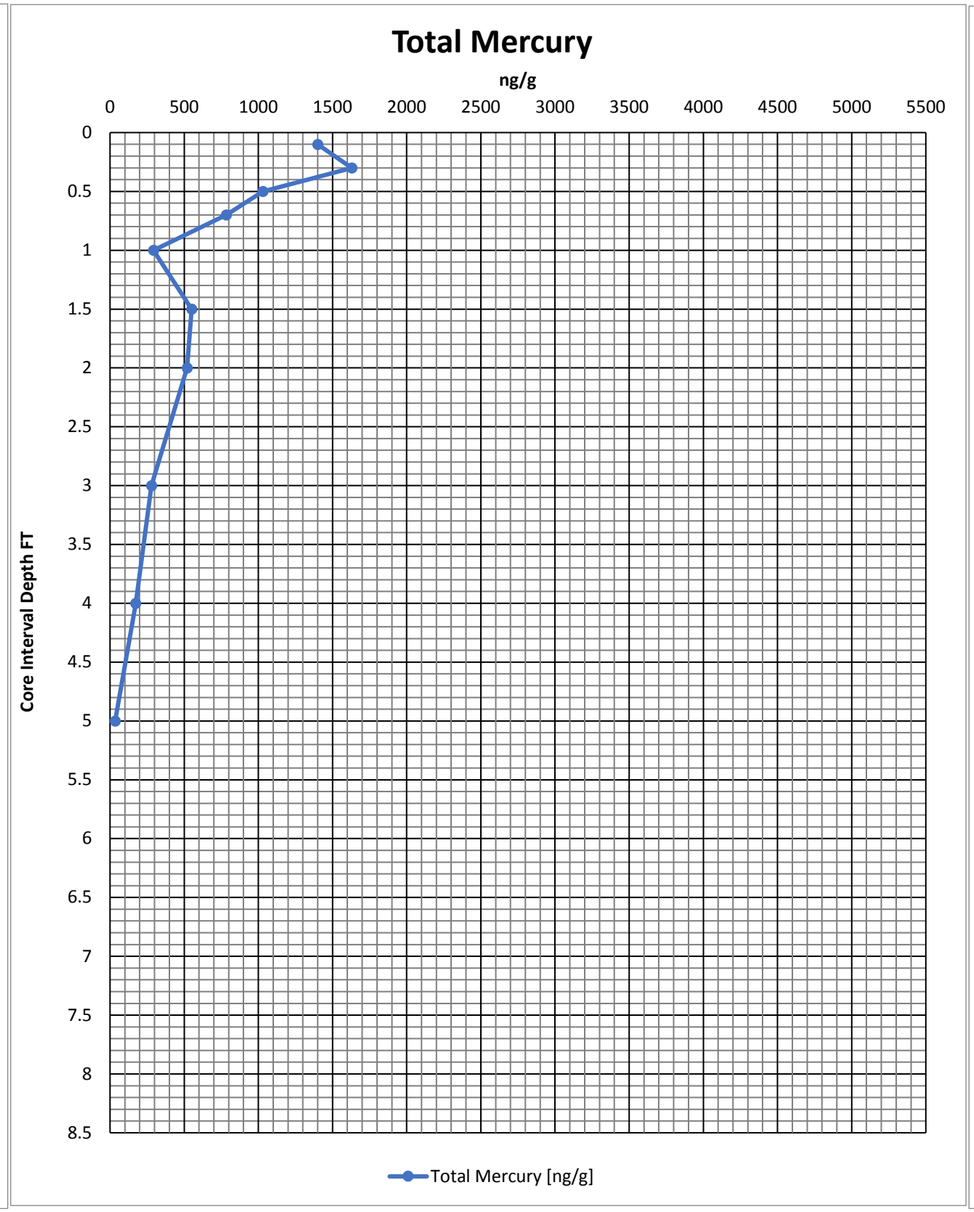
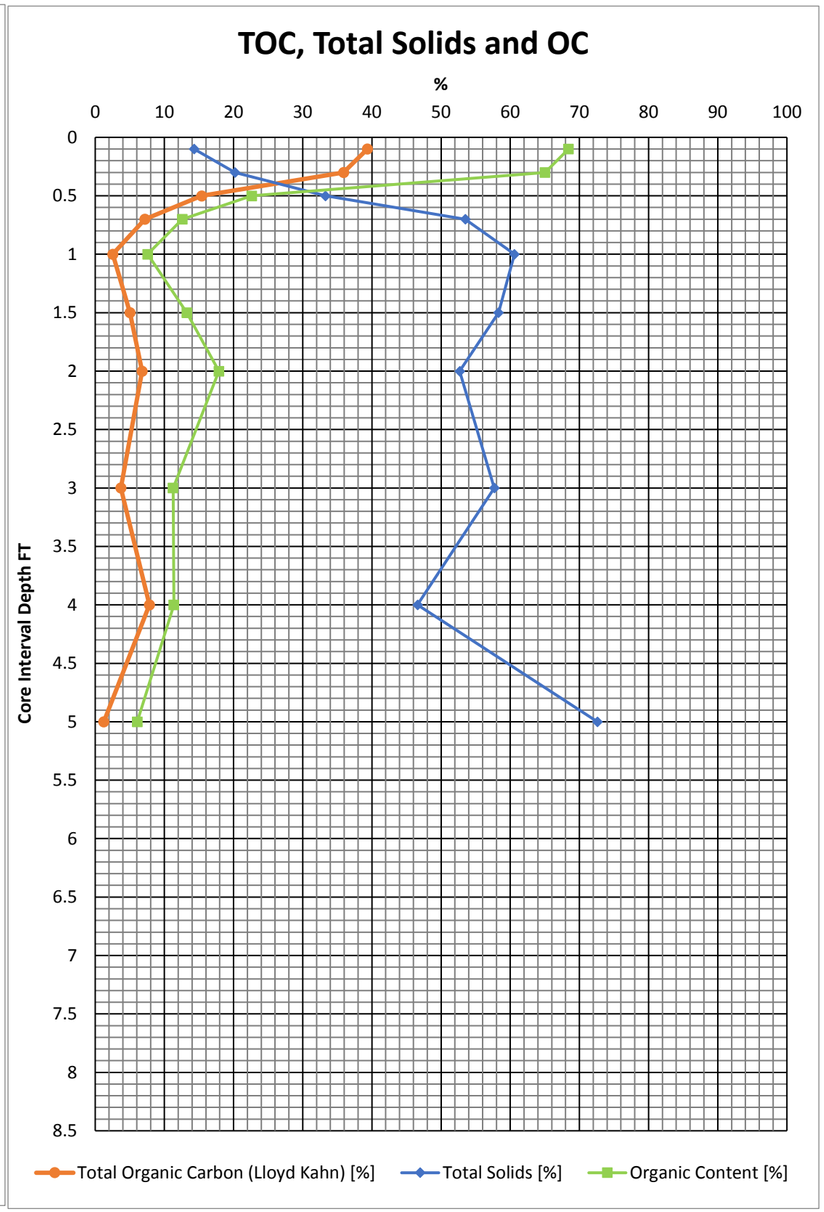
Figure A.3-27
Station ID: BU-09-01
Core ID: BU-09-01-C
Core Designation: Consolidated







TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

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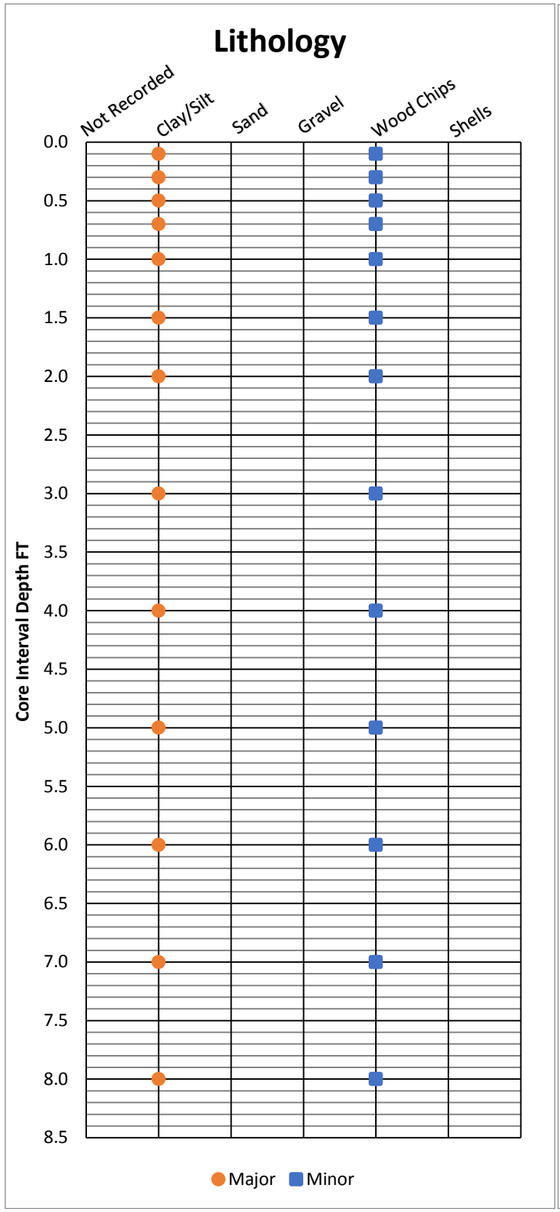
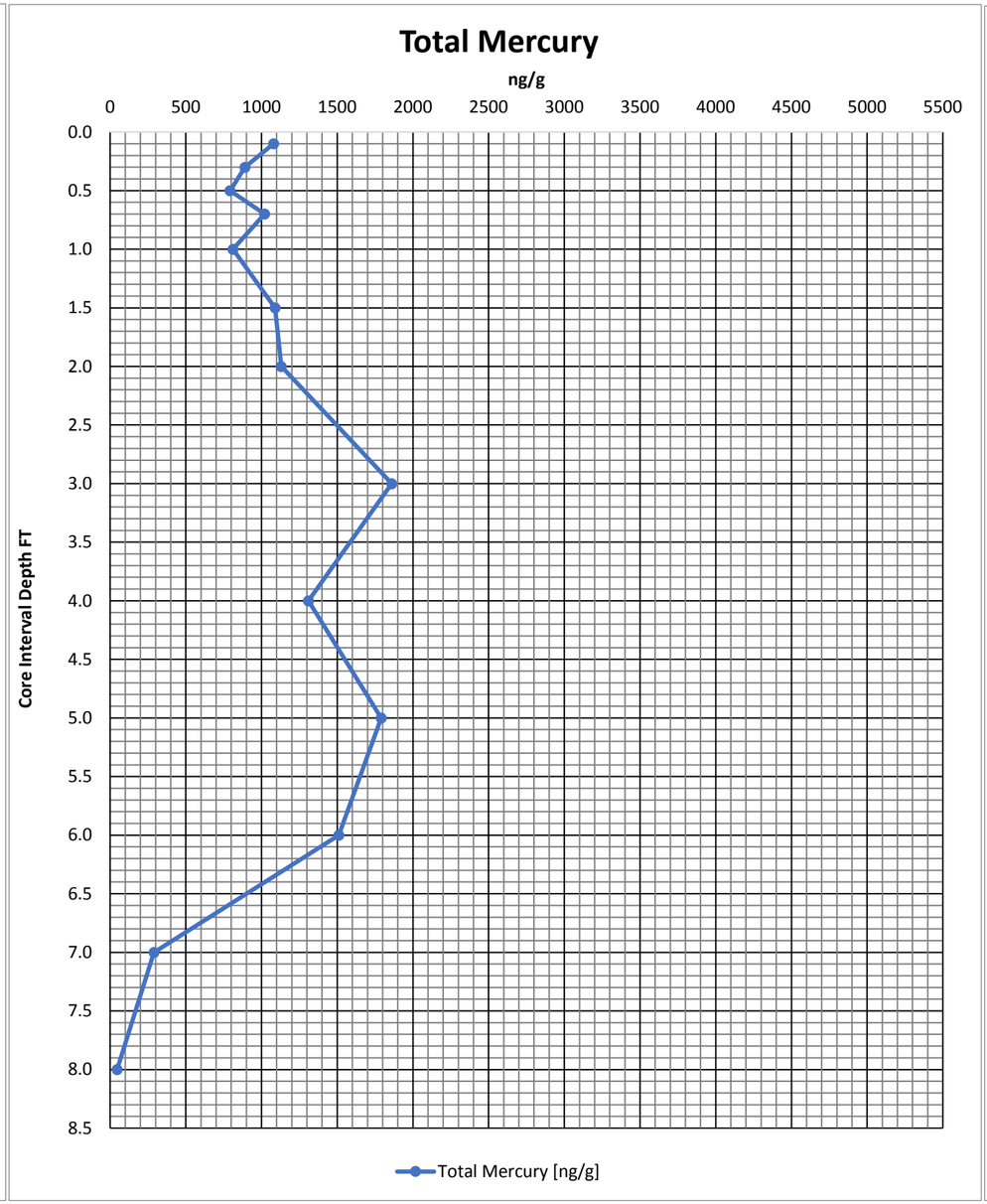
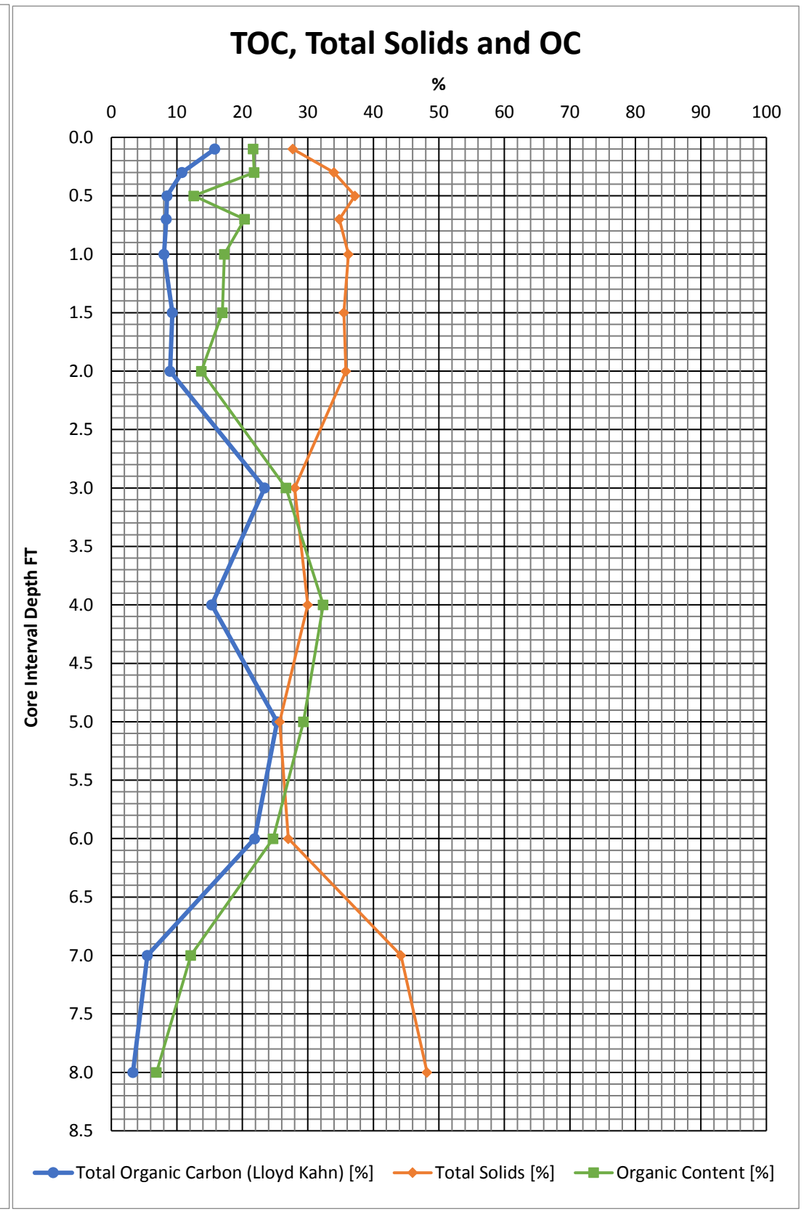
Figure A.3-28
Core ID: BU-10-01-A
Core ID: BU-10-01-A
Core Designation: Consolidated



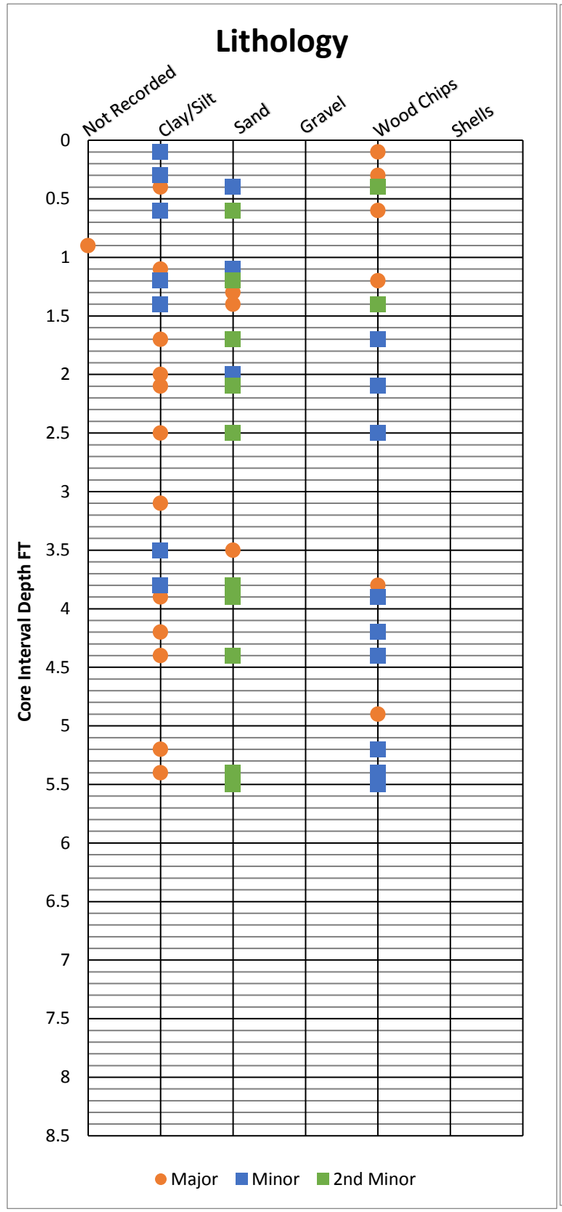


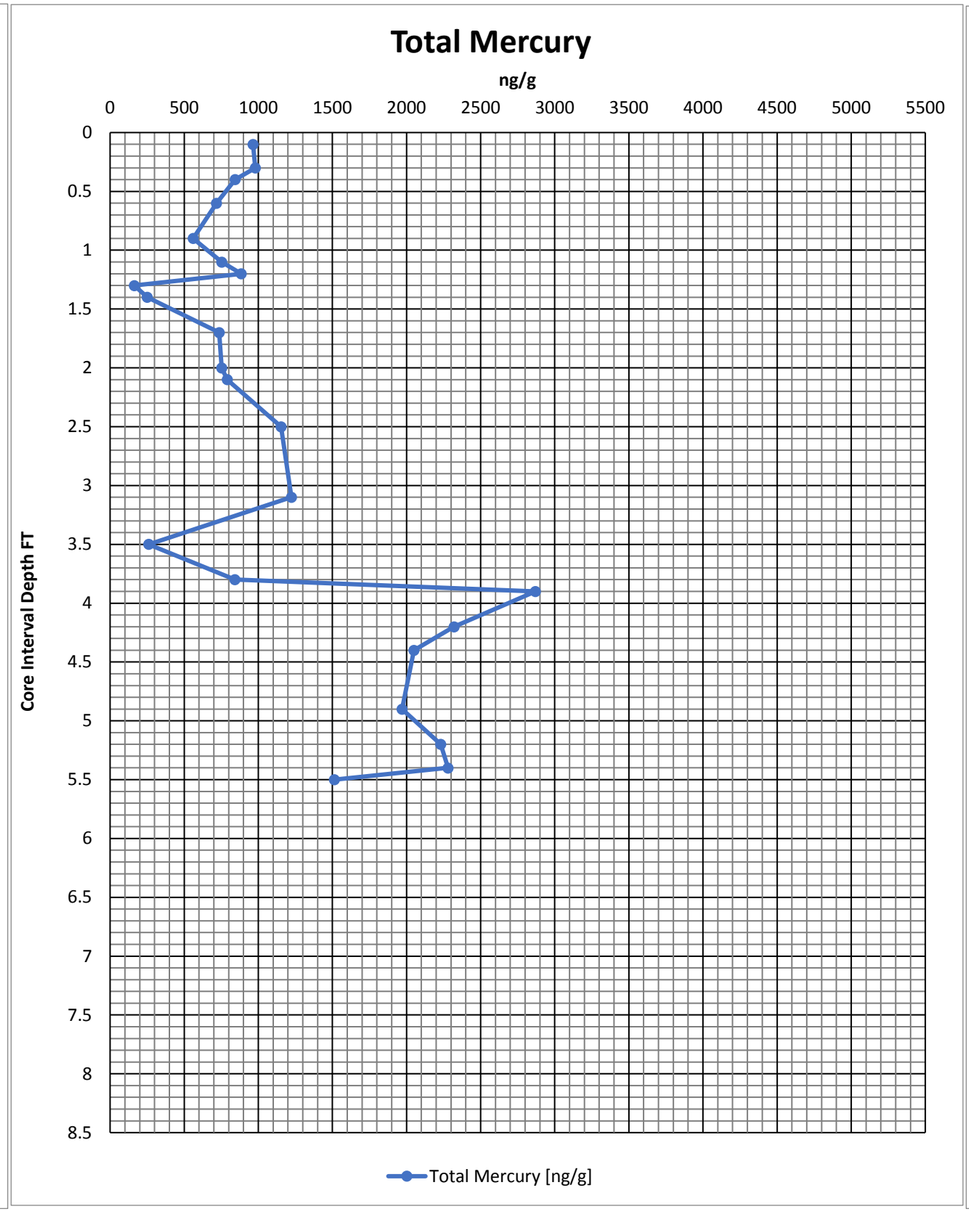


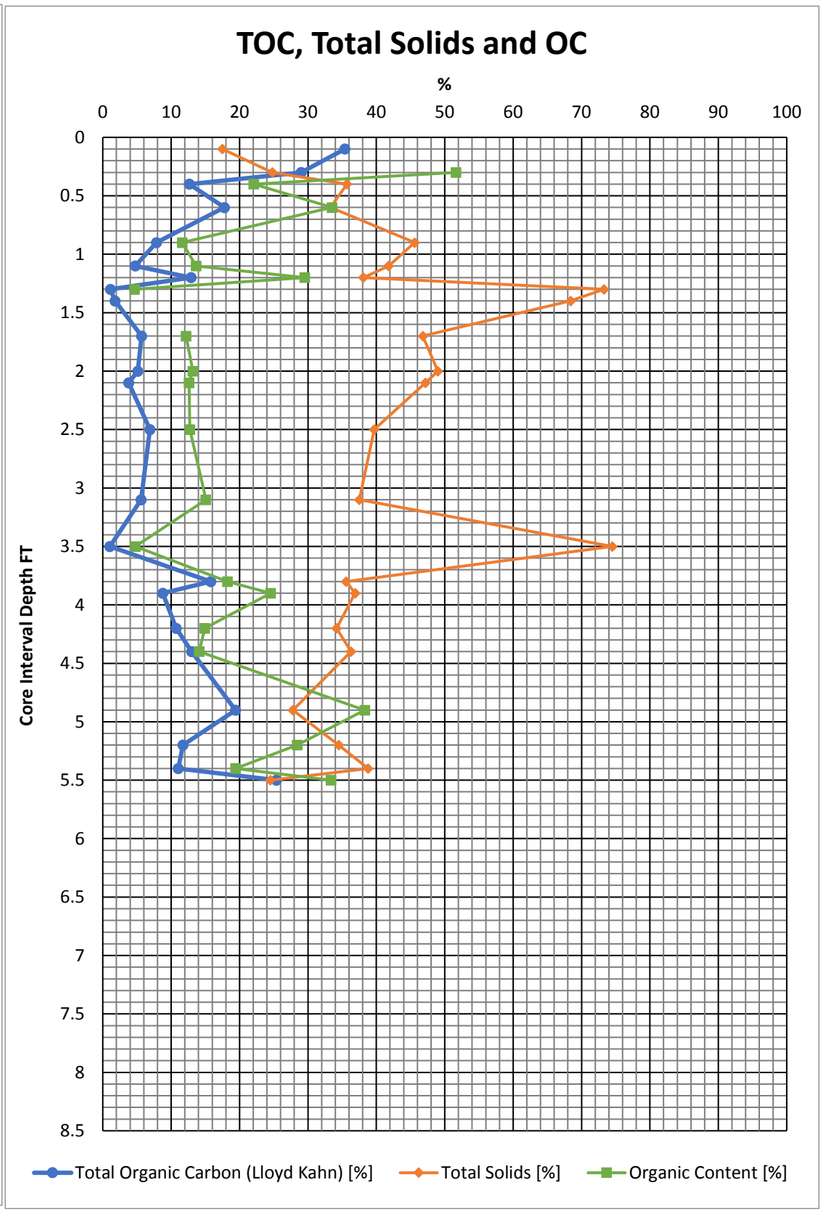
TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

Issued: 5/17/2018 at 1:49 PM

Figure A.3-29
Station ID: BU-10-02
Core ID: BU-10-02-C
Core Designation: Consolidated



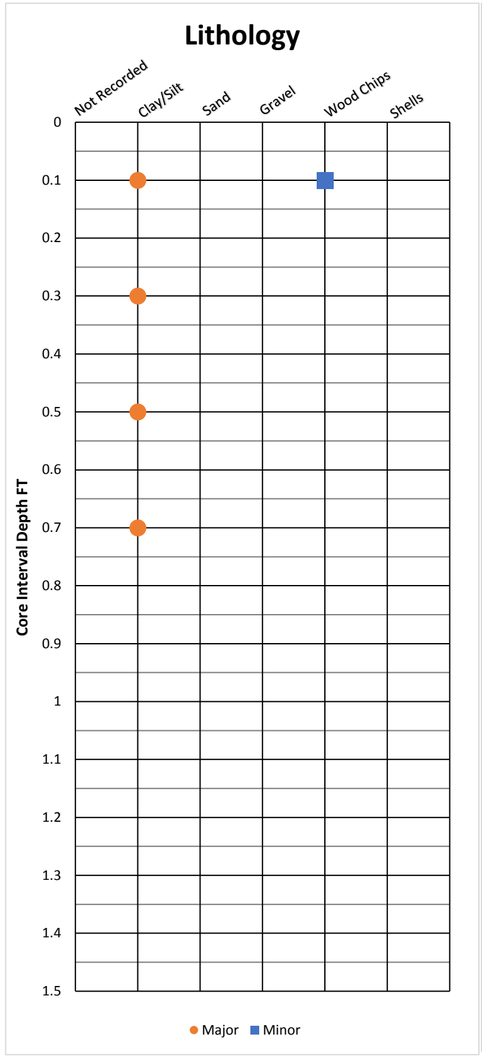


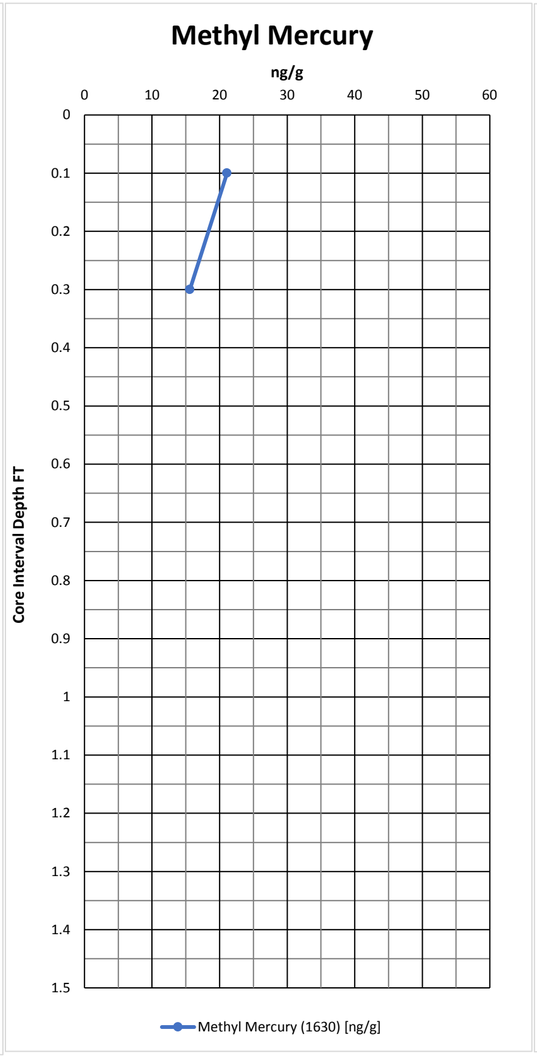


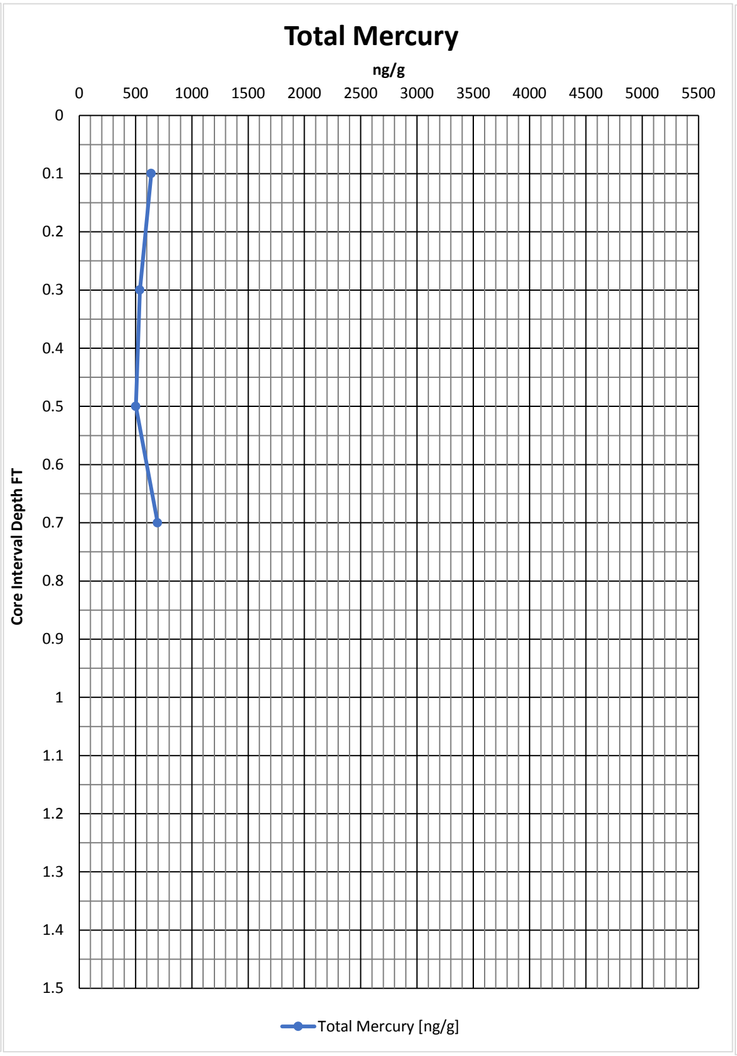
TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

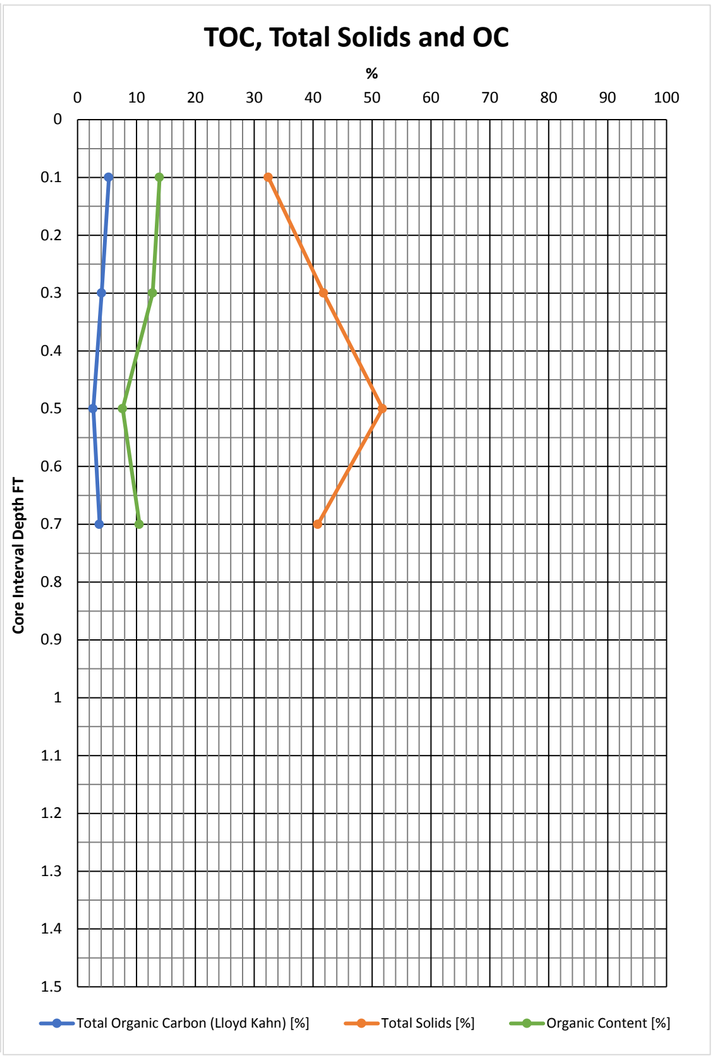
Issued: 5/17/2018 at 1:49 PM

Figure A.3-30
Station ID: BH-03-01
Core ID: BH-03-01-E
Core Designation: Unconsolidated



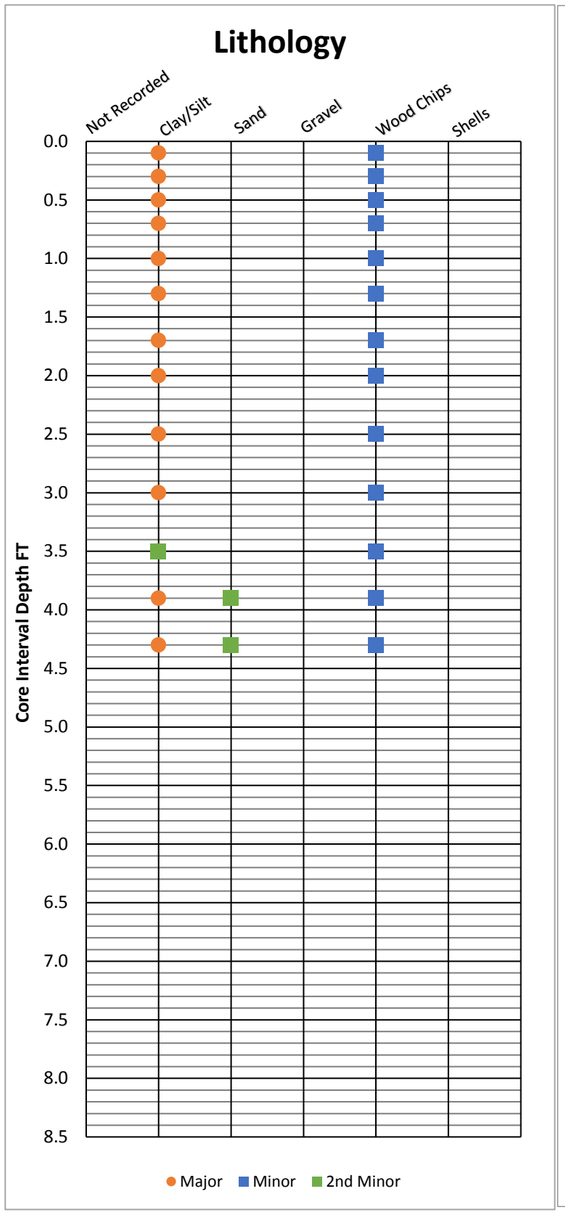


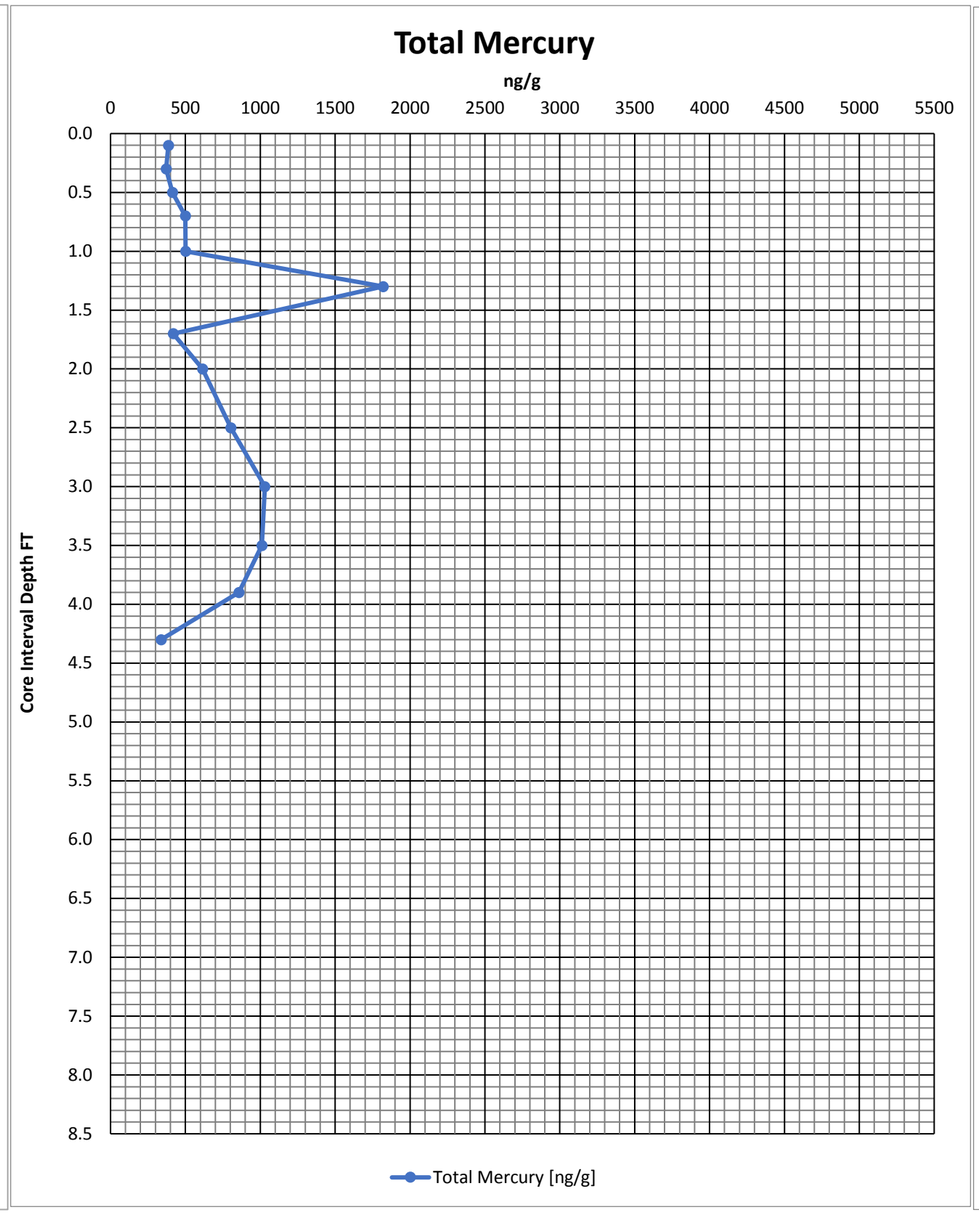


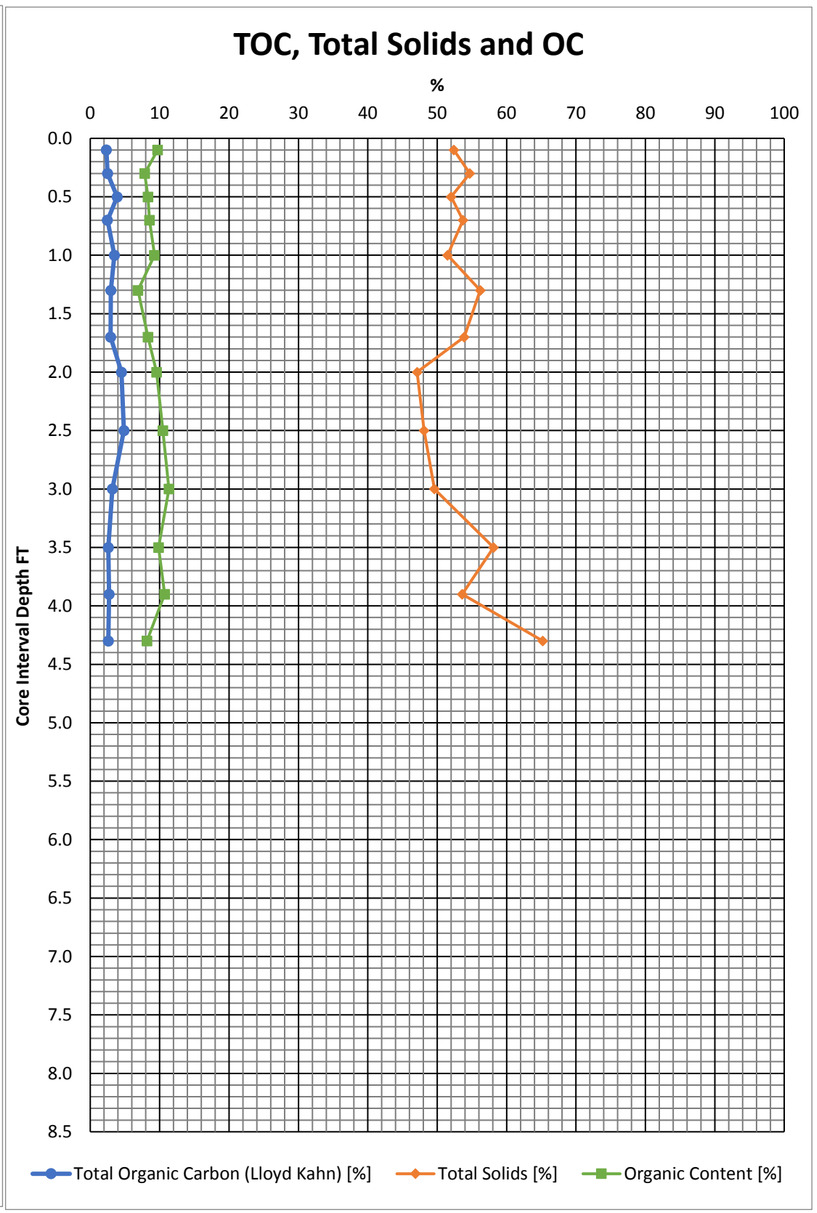


TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

Figure A.3-31
Station ID: BH-03-01
Core ID: BH-03-01-A
Core Designation: Consolidated



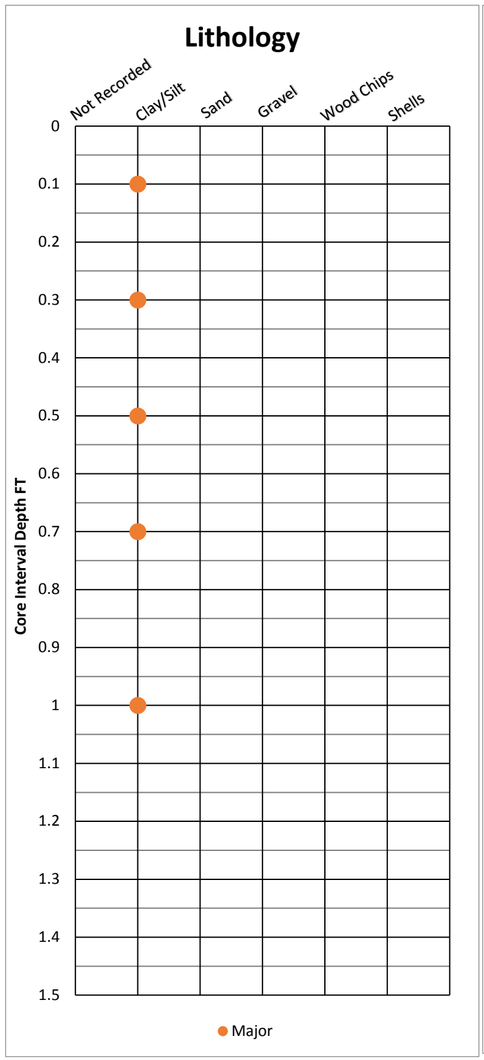


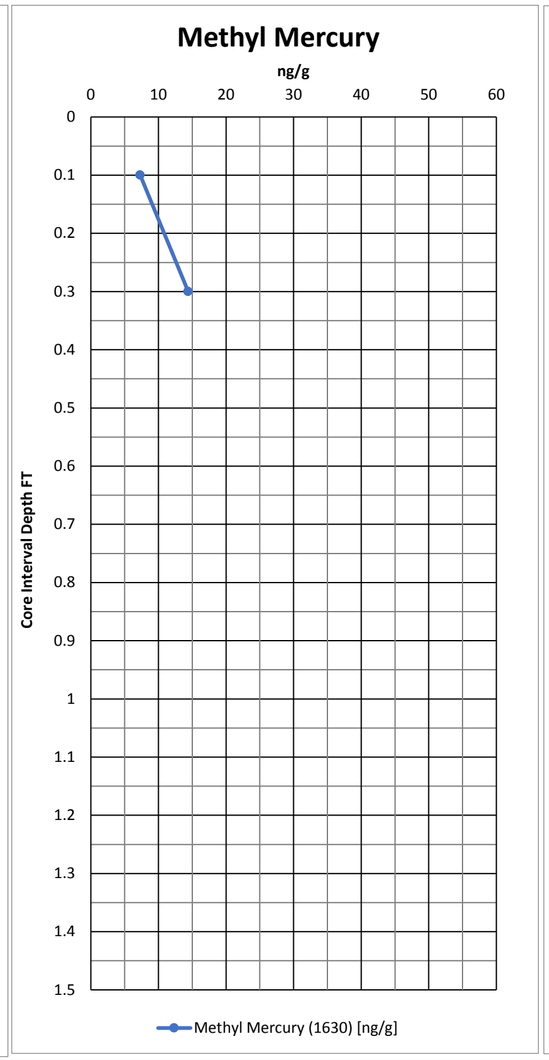


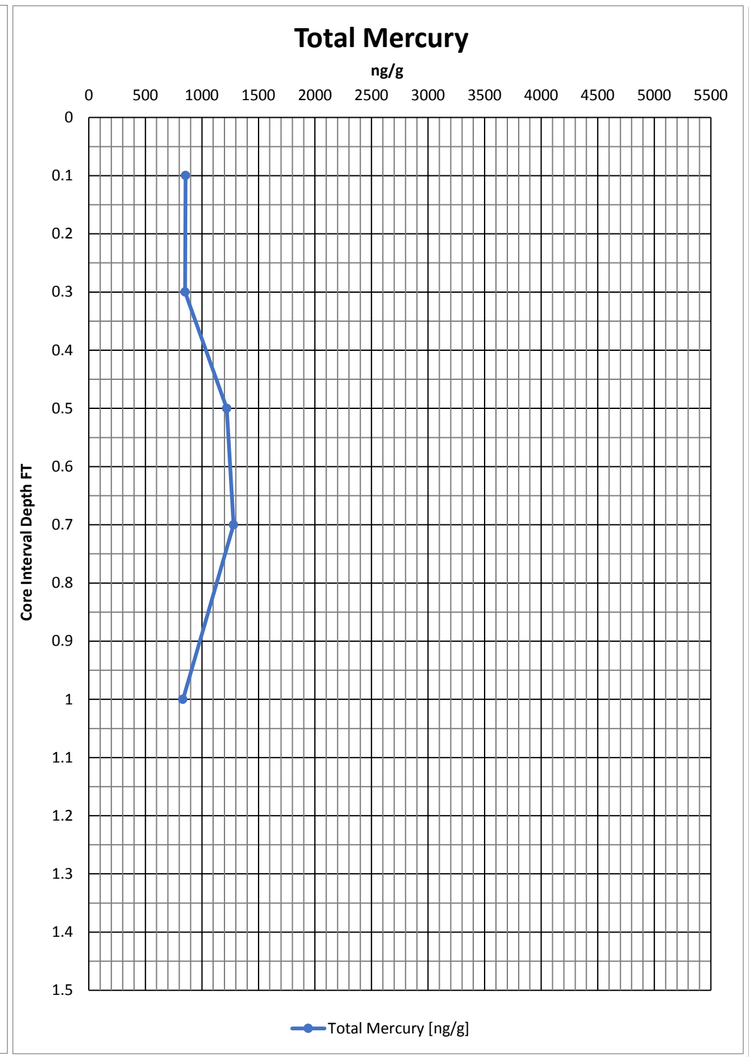
TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

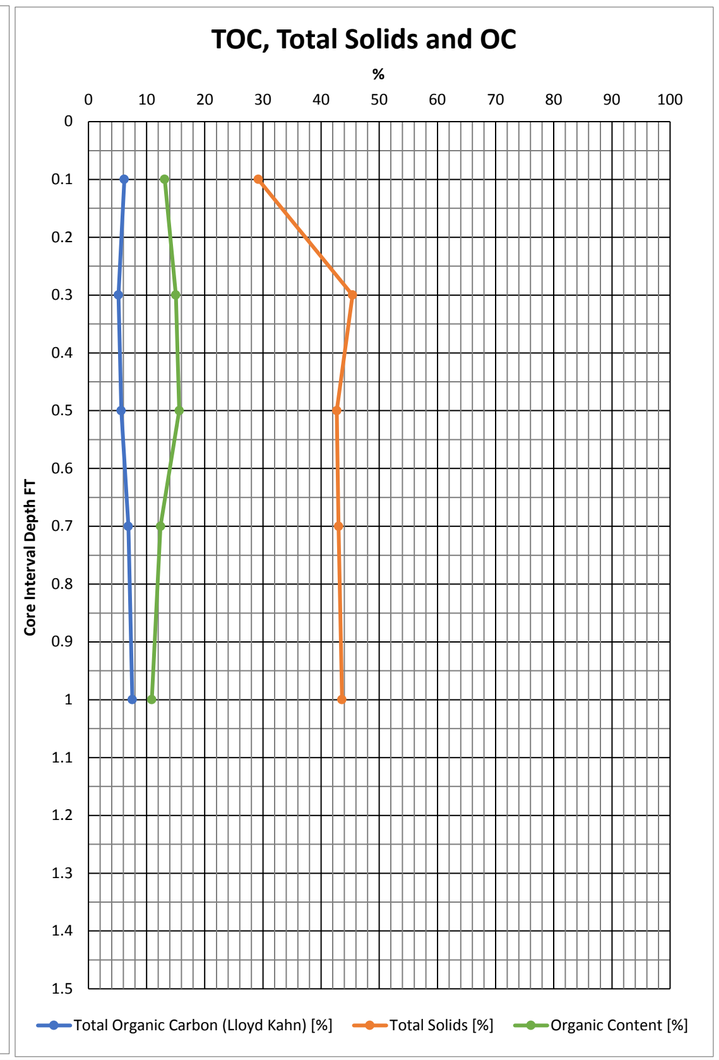
Issued: 5/17/2018 at 1:49 PM

Figure A.3-32
Station ID: VN-01-01
Core ID: VN-01-01-B
Core Designation: Unconsolidated



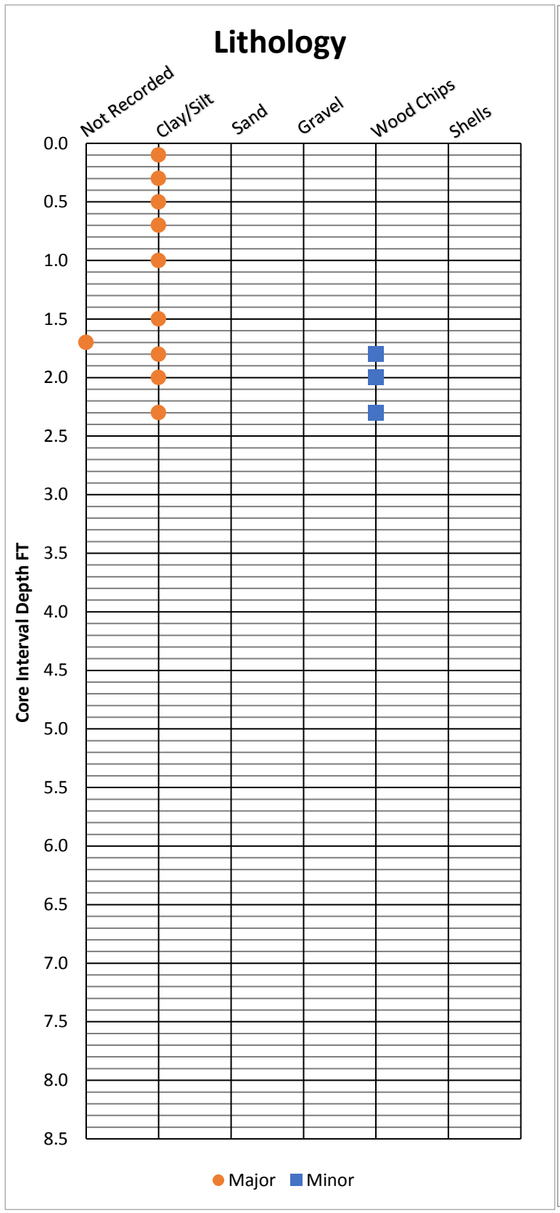


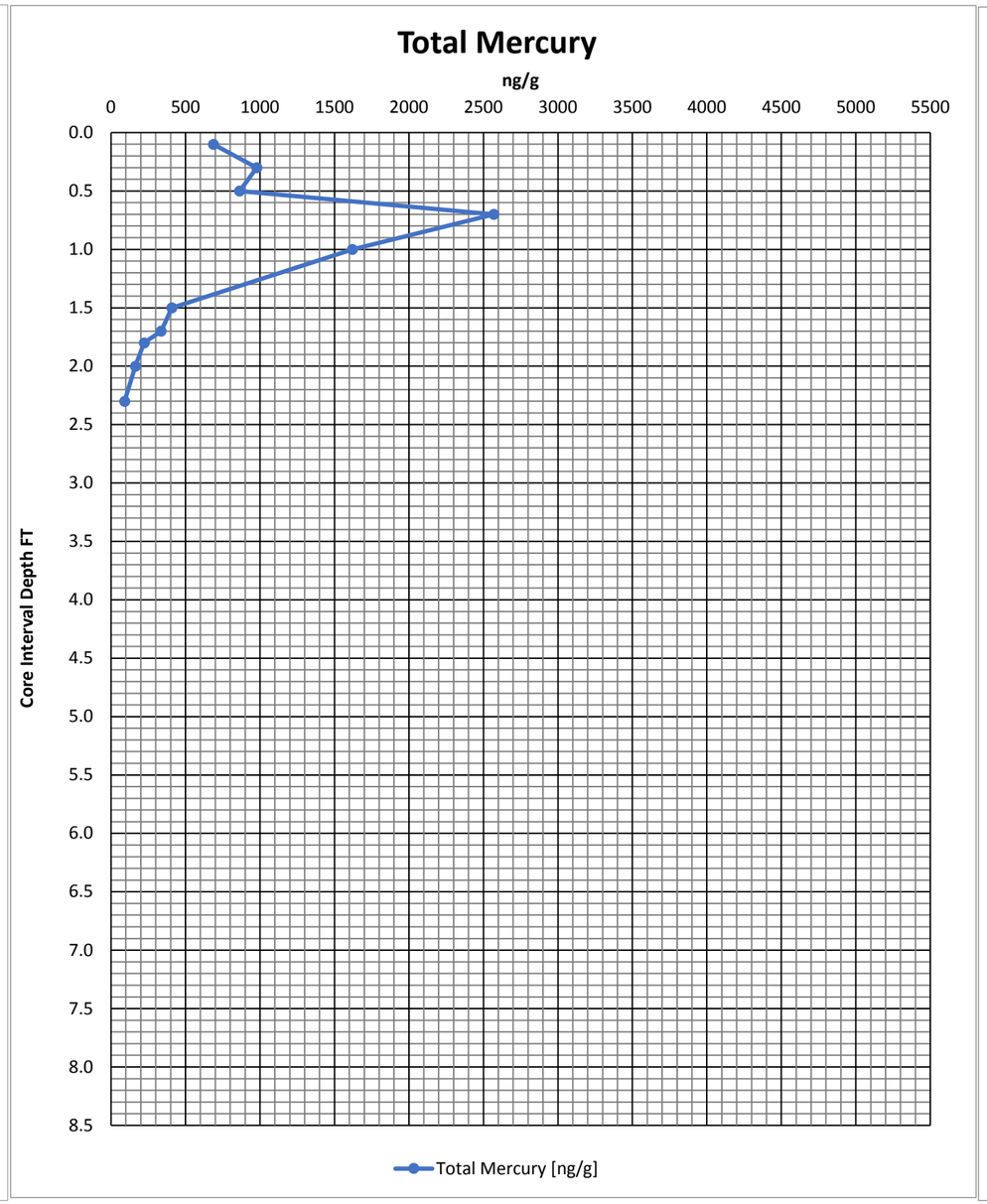


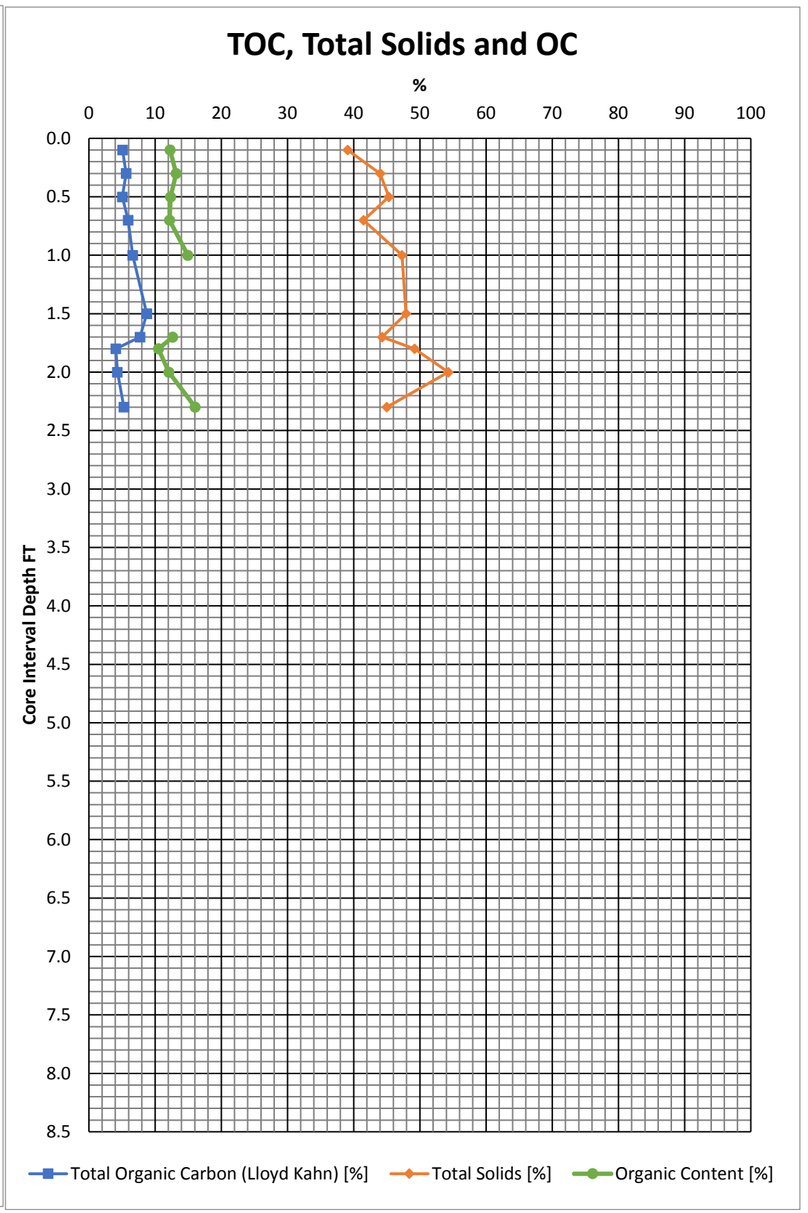


TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

Figure A.3-33
Station ID: VN-01-01
Core ID: VN-01-01-E
Core Designation: Consolidated



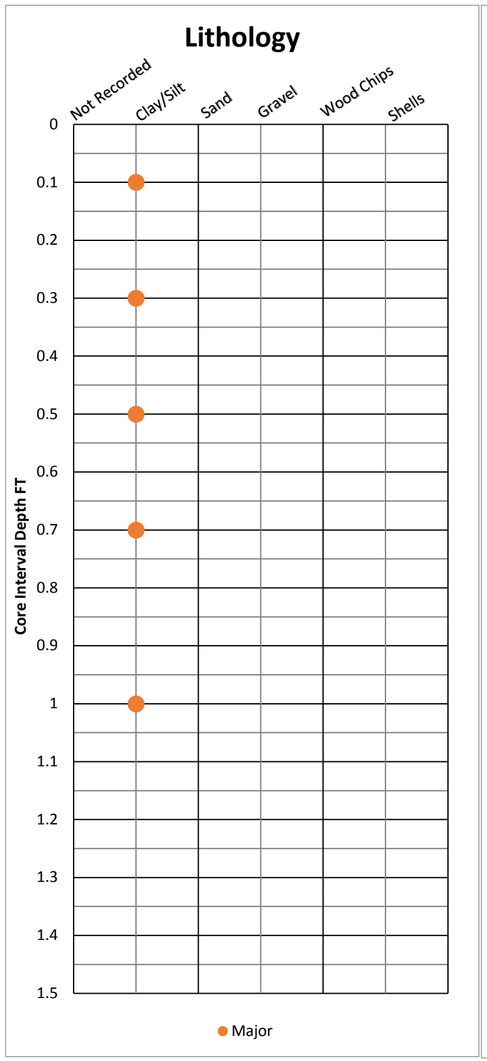


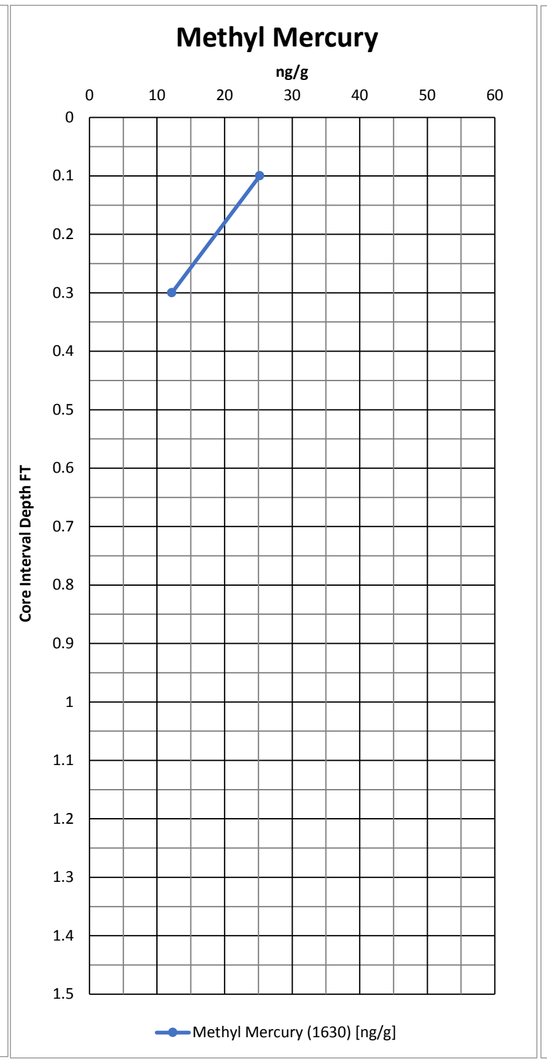


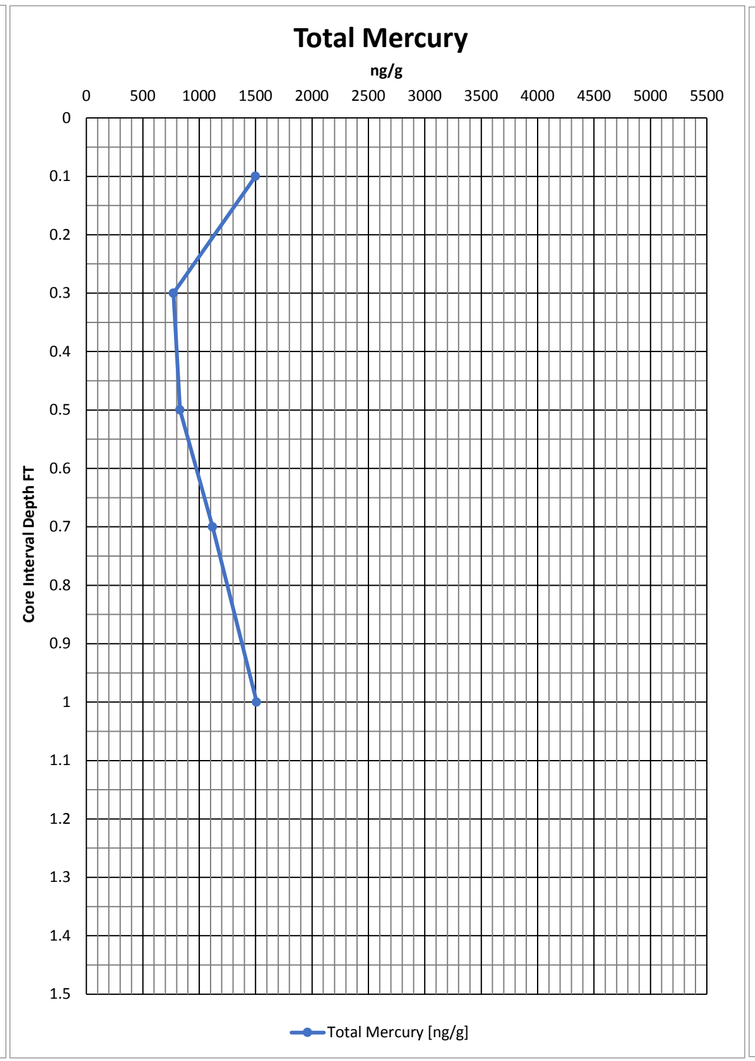
TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

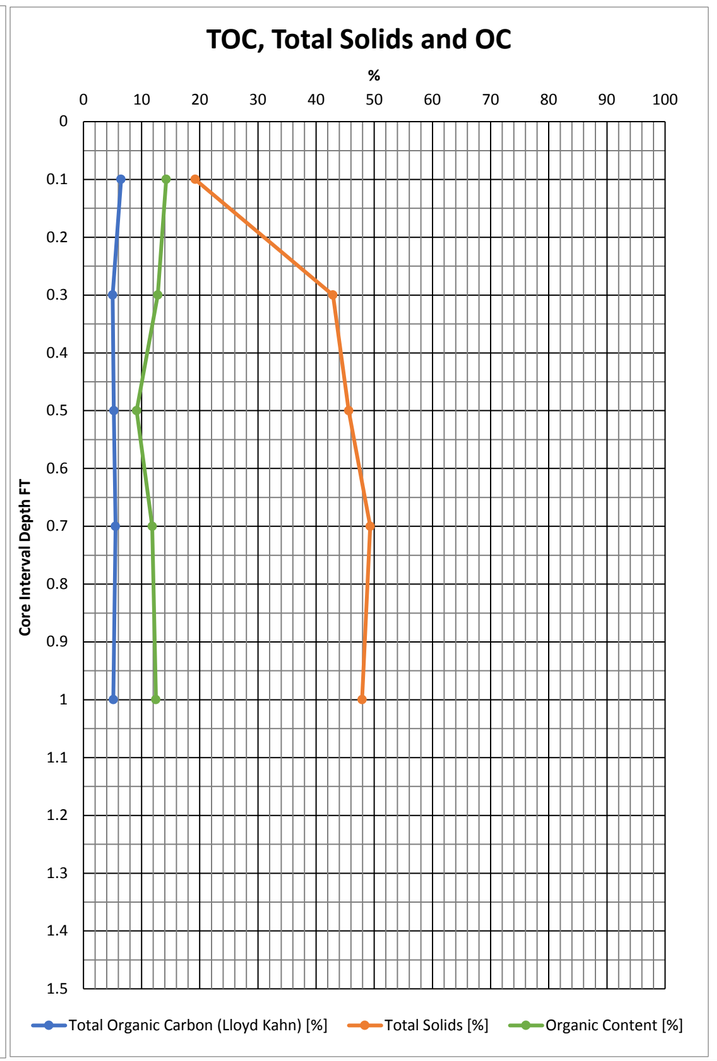
Issued: 5/17/2018 at 1:49 PM

Figure A.3-34
Station ID: VN-02-01
Core ID: VN-02-01-A
Core Designation: Unconsolidated



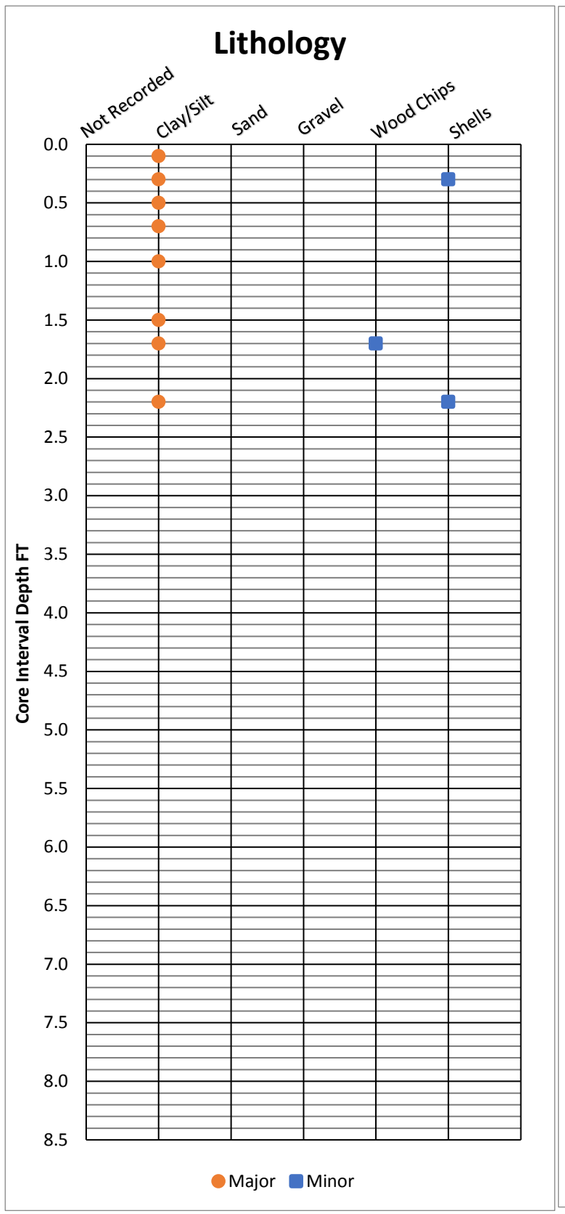


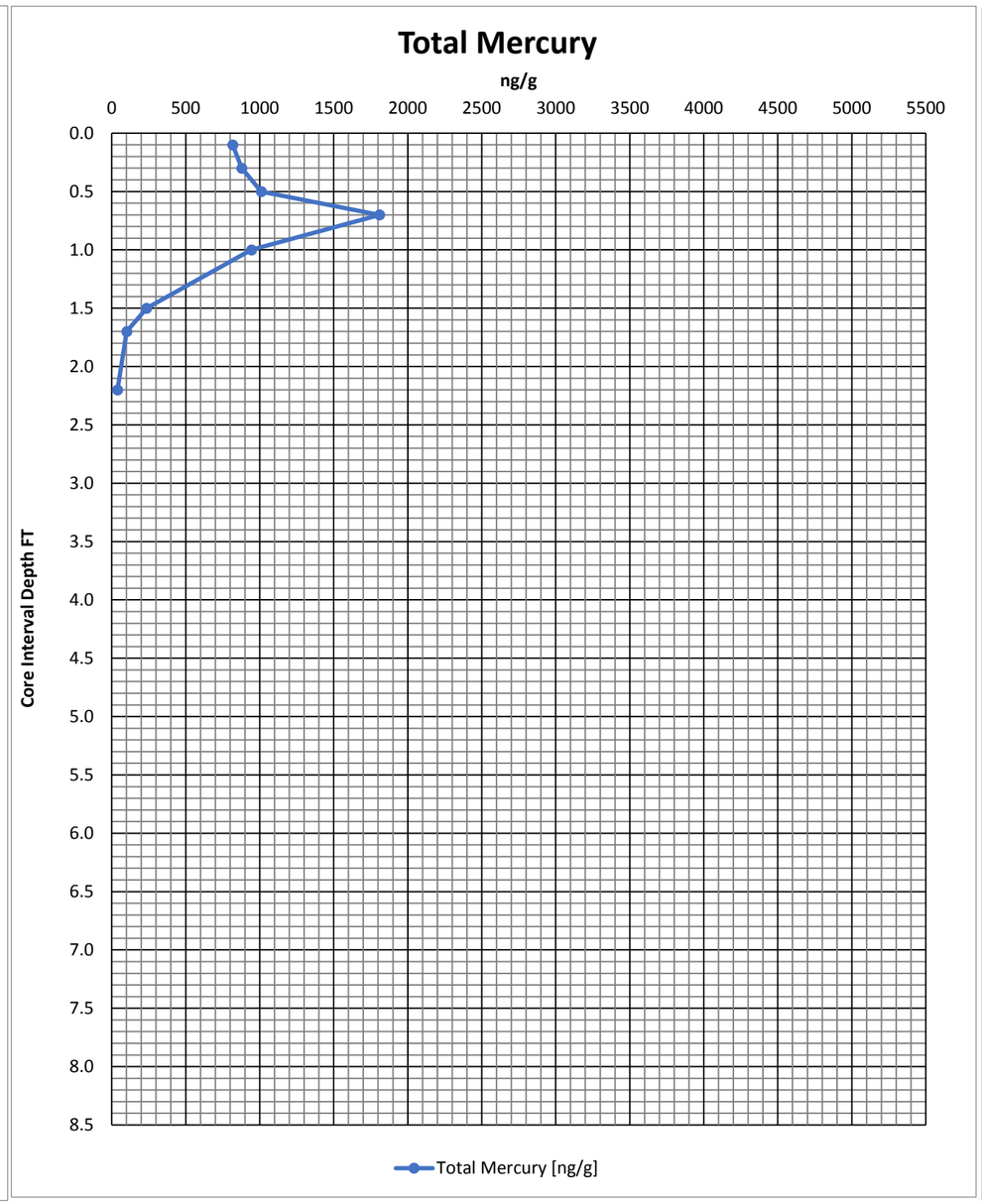


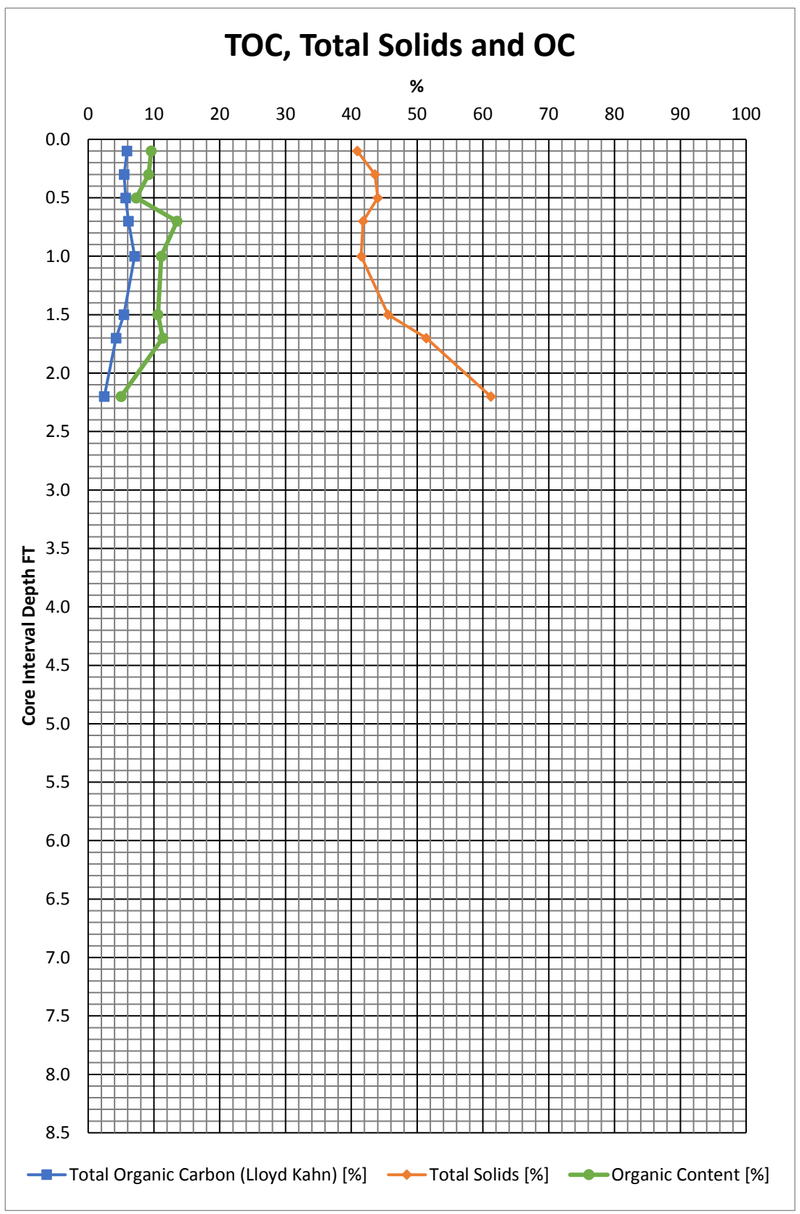


TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

Figure A.3-35
Station ID: VN-02-01
Core ID: VN-02-01-D
Core Designation: Consolidated







TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

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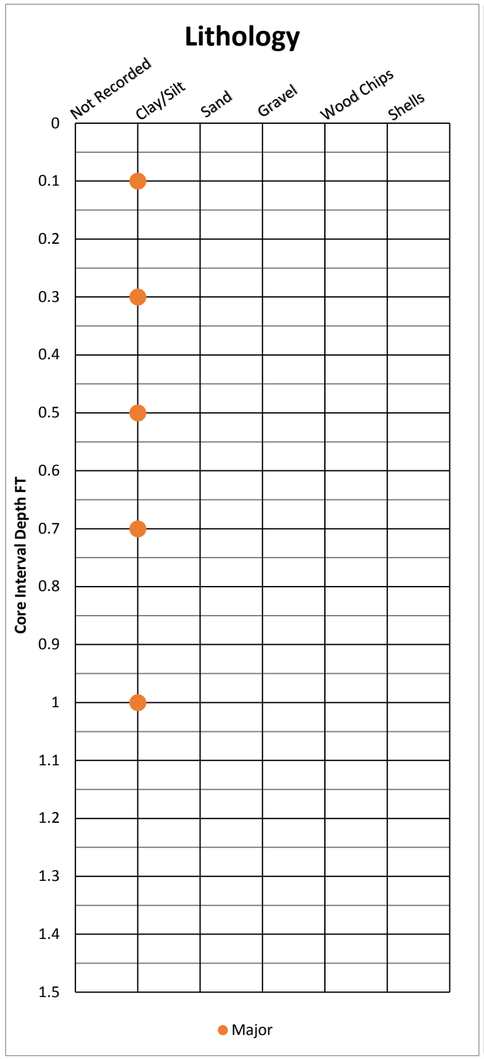
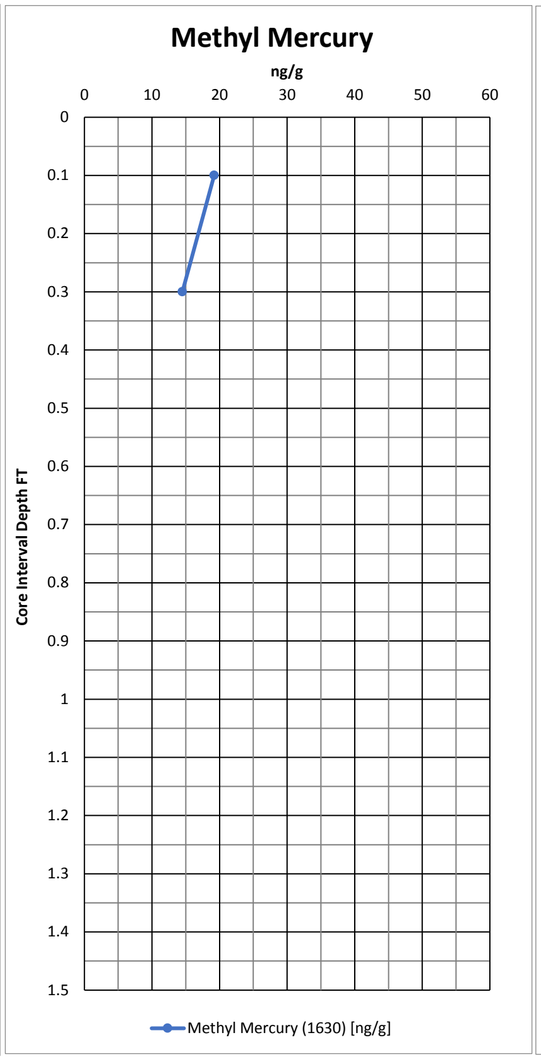
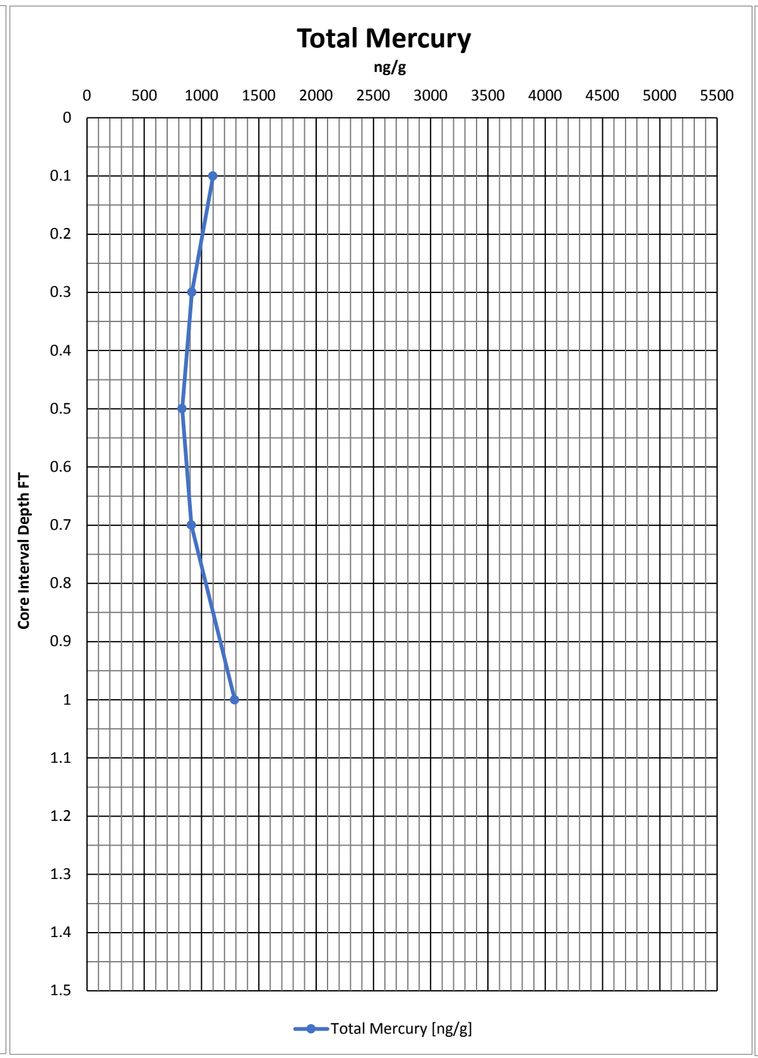
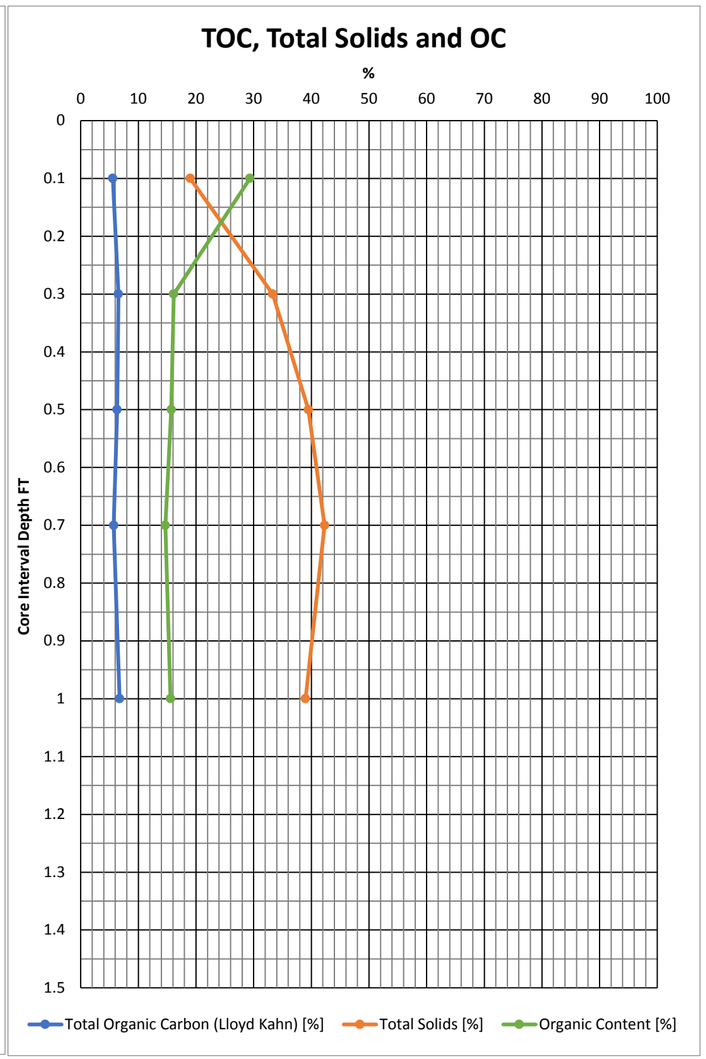
Figure A.3-36
Station ID: VN-02-03
Core ID: VN-02-03-A
Core Designation: Unconsolidated



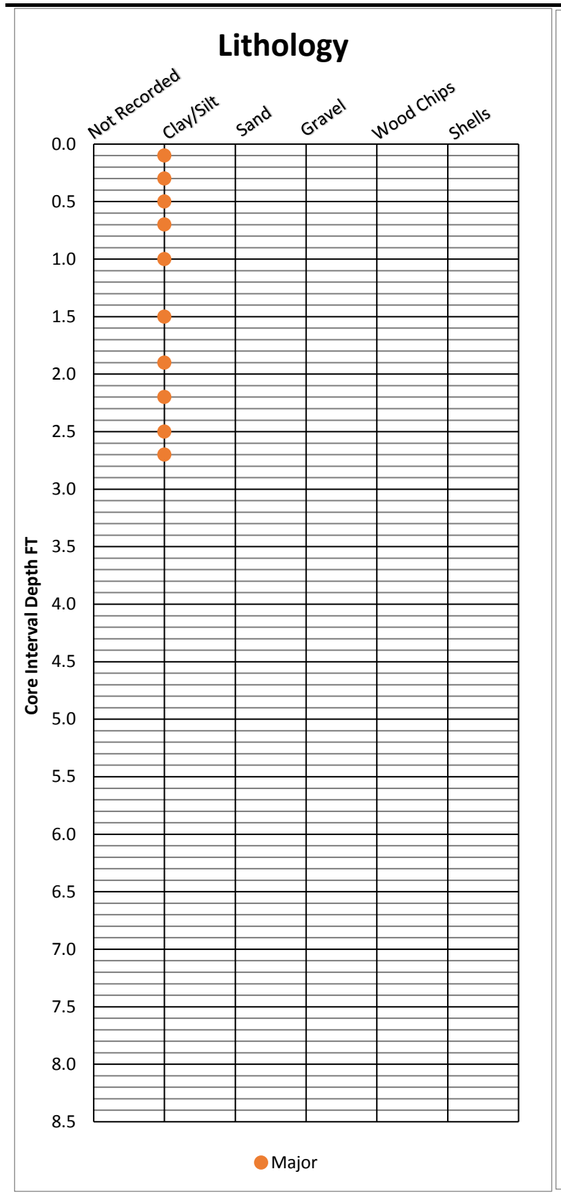


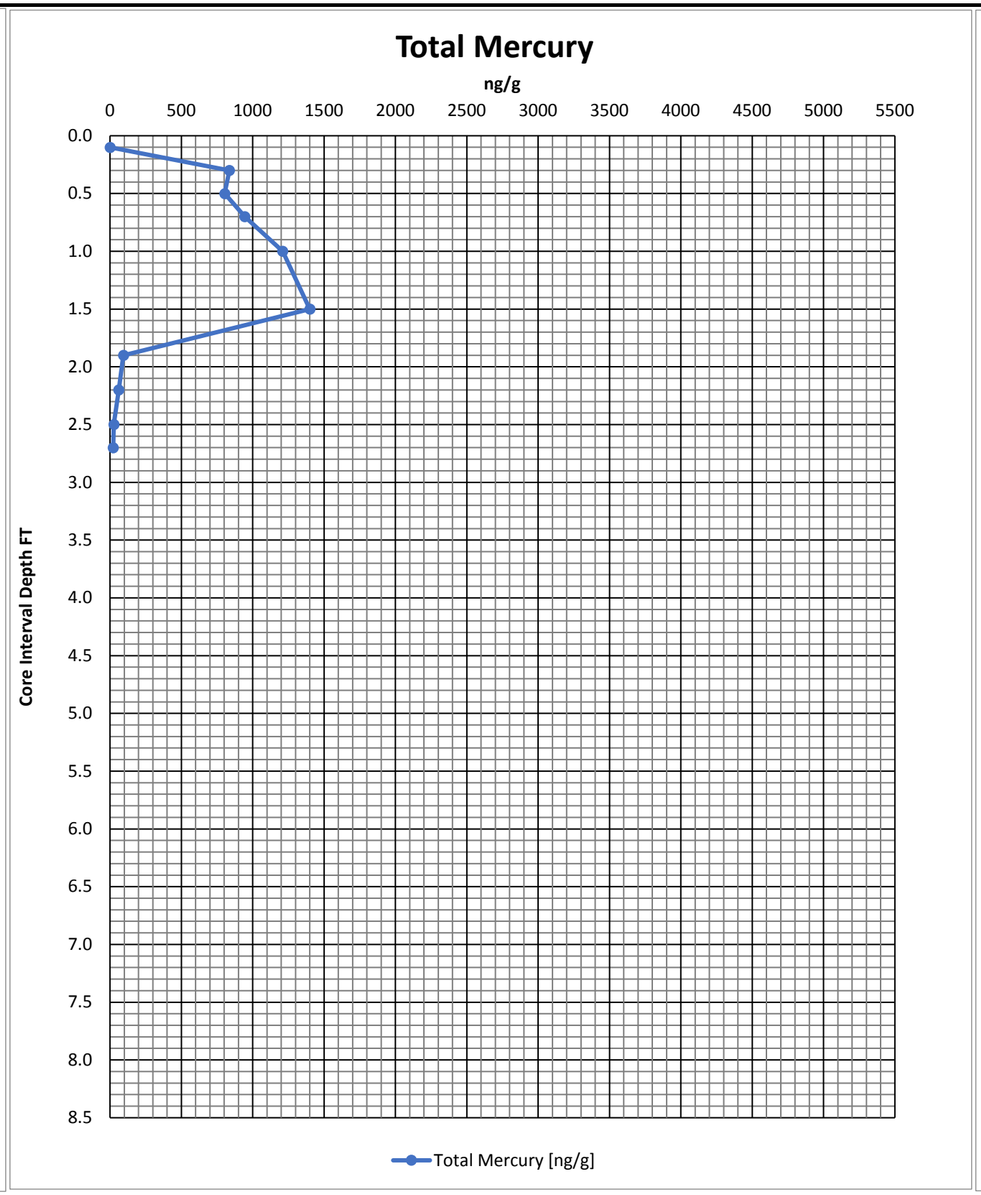


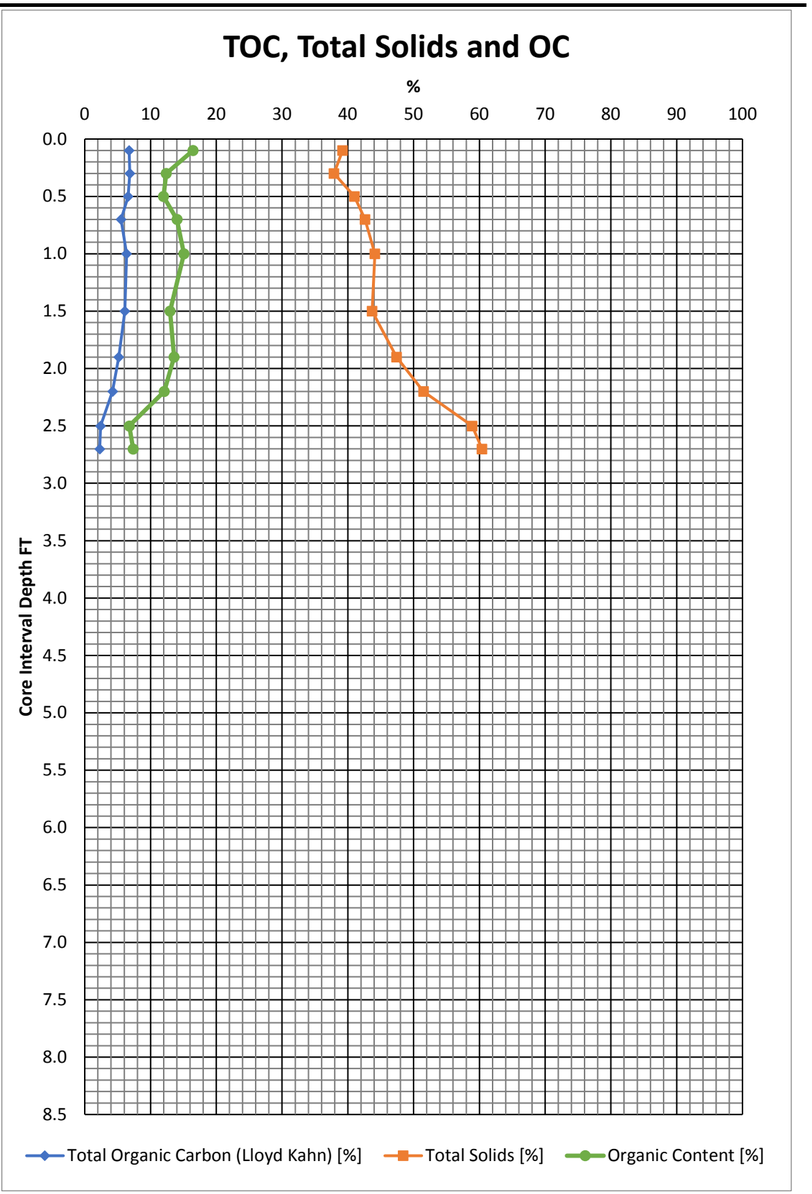


TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

Figure A.3-37
Station ID: VN-02-03
Core ID: VN-02-03-E
Core Designation: Consolidated







TED Pull Date	1/18/2018	By	J. Pallozzi
Data Entered	2/7/2018	By	D. Young
Data Graphed	2/7/2018	By	D. Young

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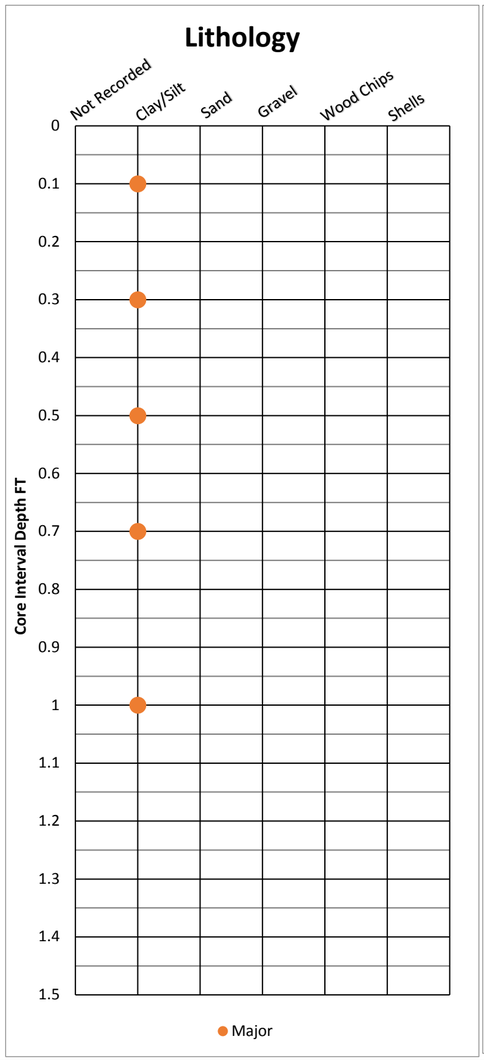
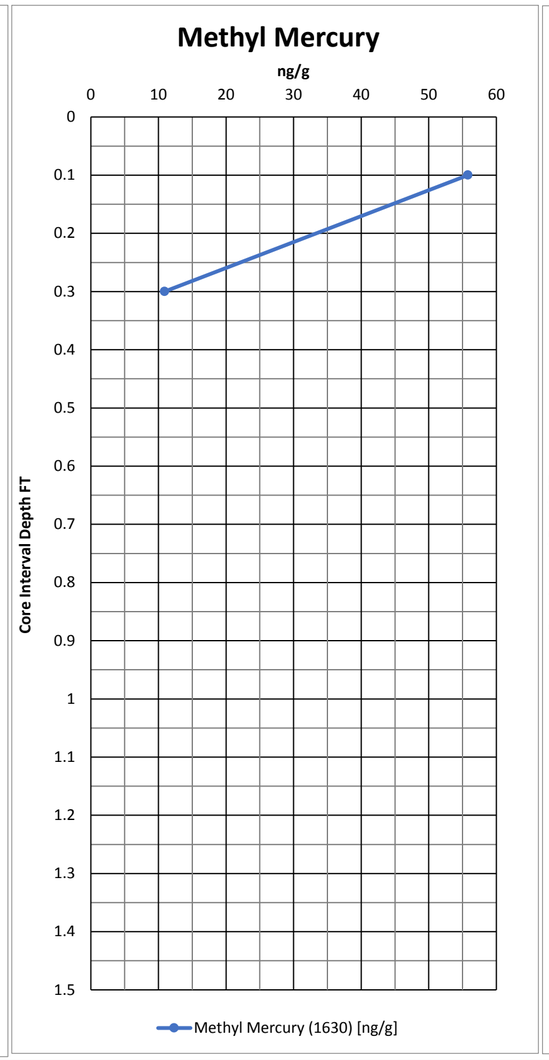
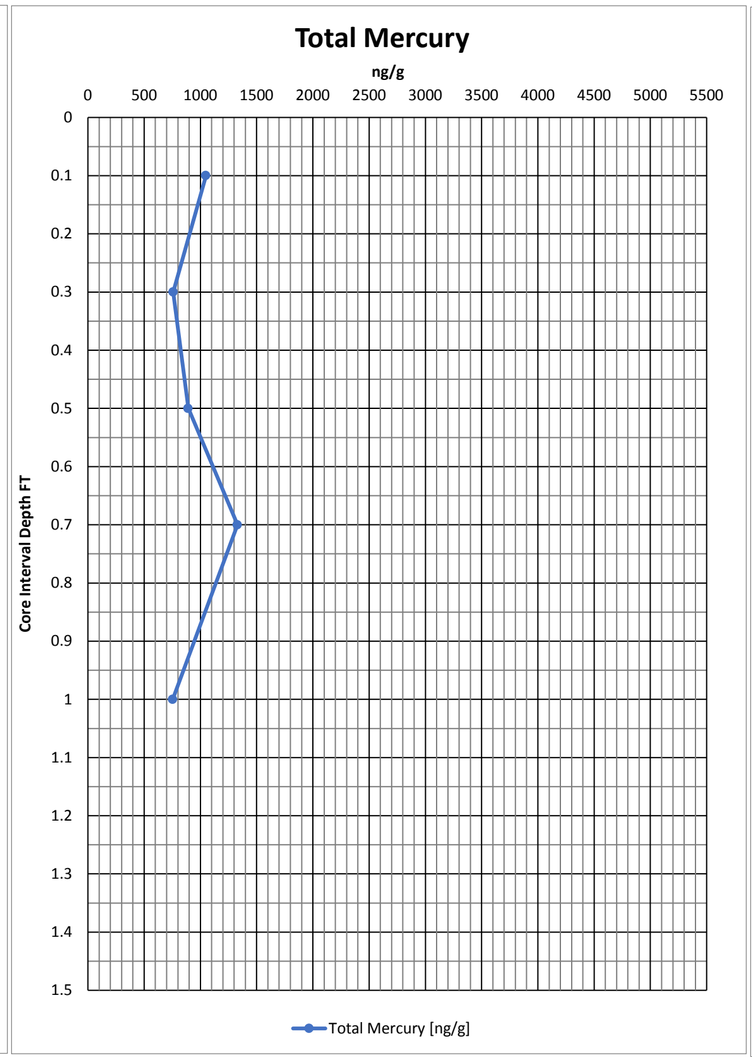
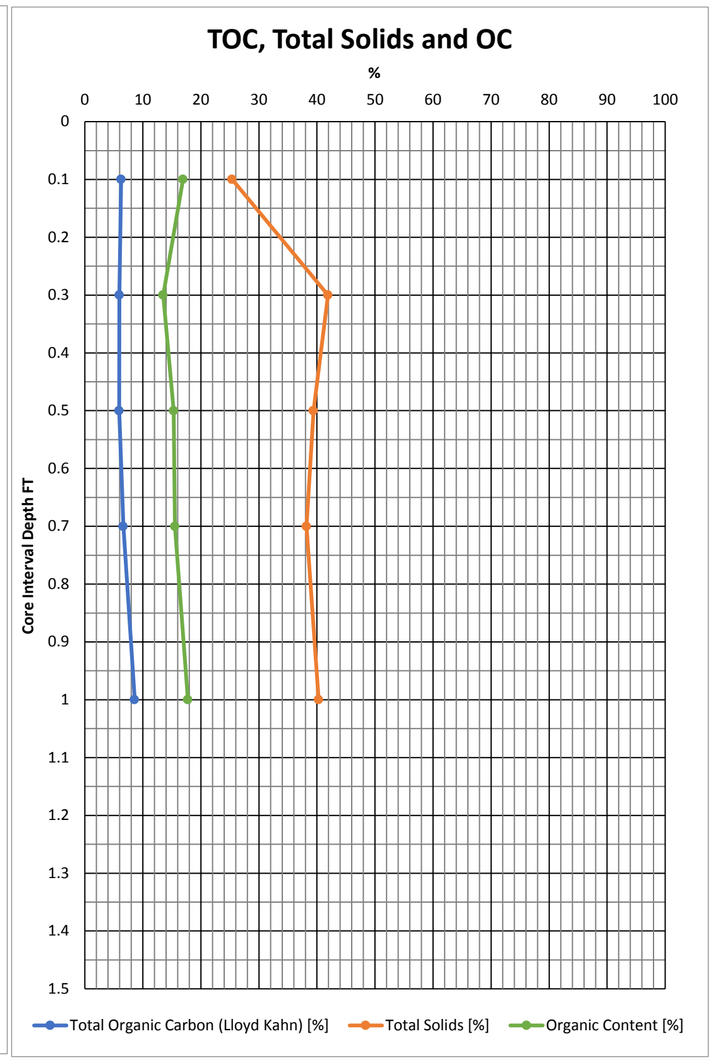
Figure A.3-38
Station ID: VN-02-04
Core ID: VN-02-04-B
Core Designation: Unconsolidated



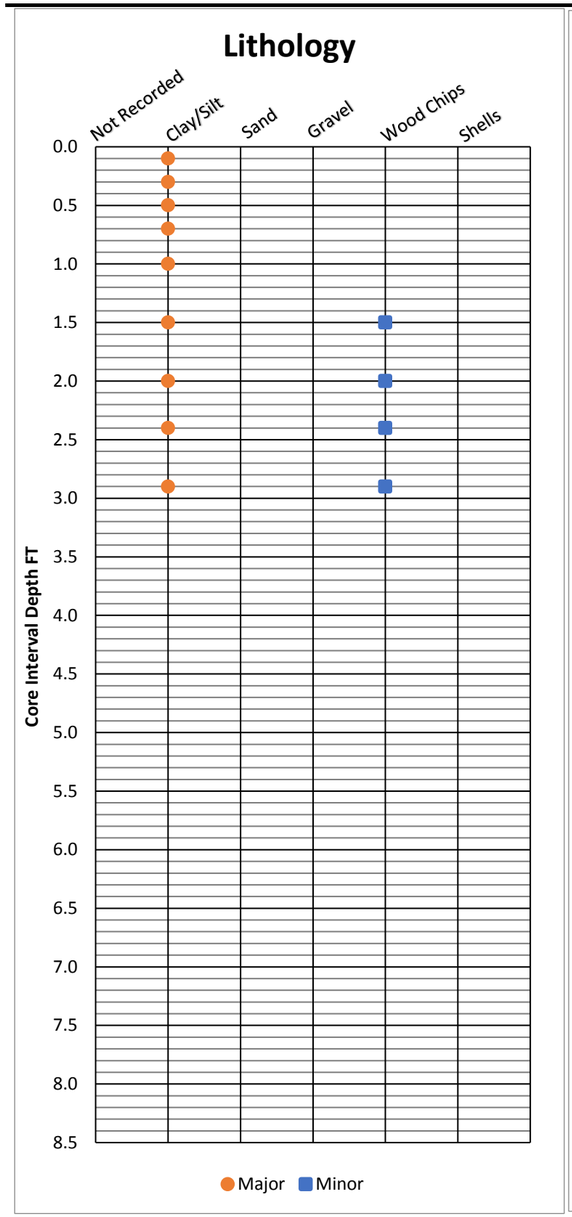


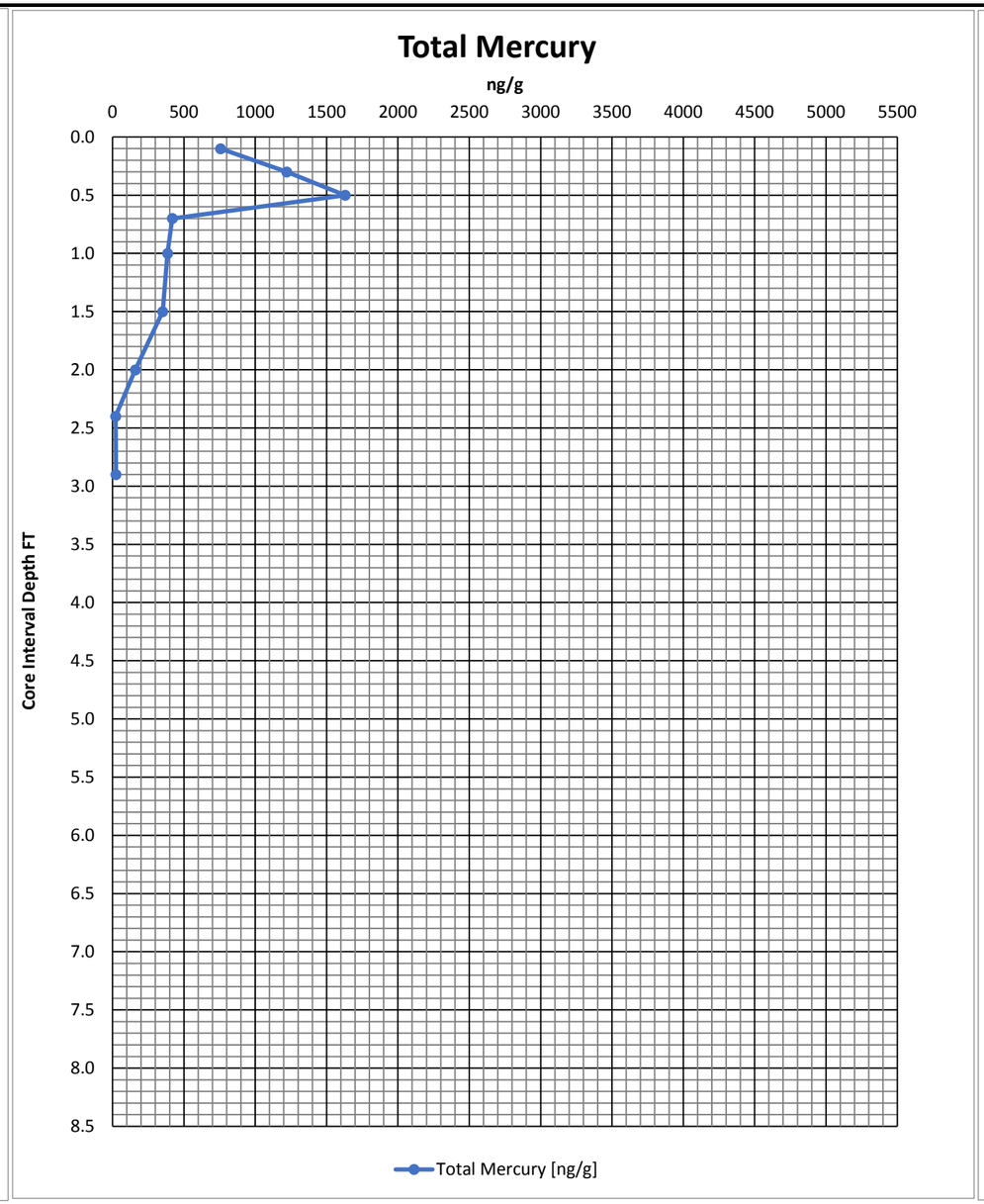


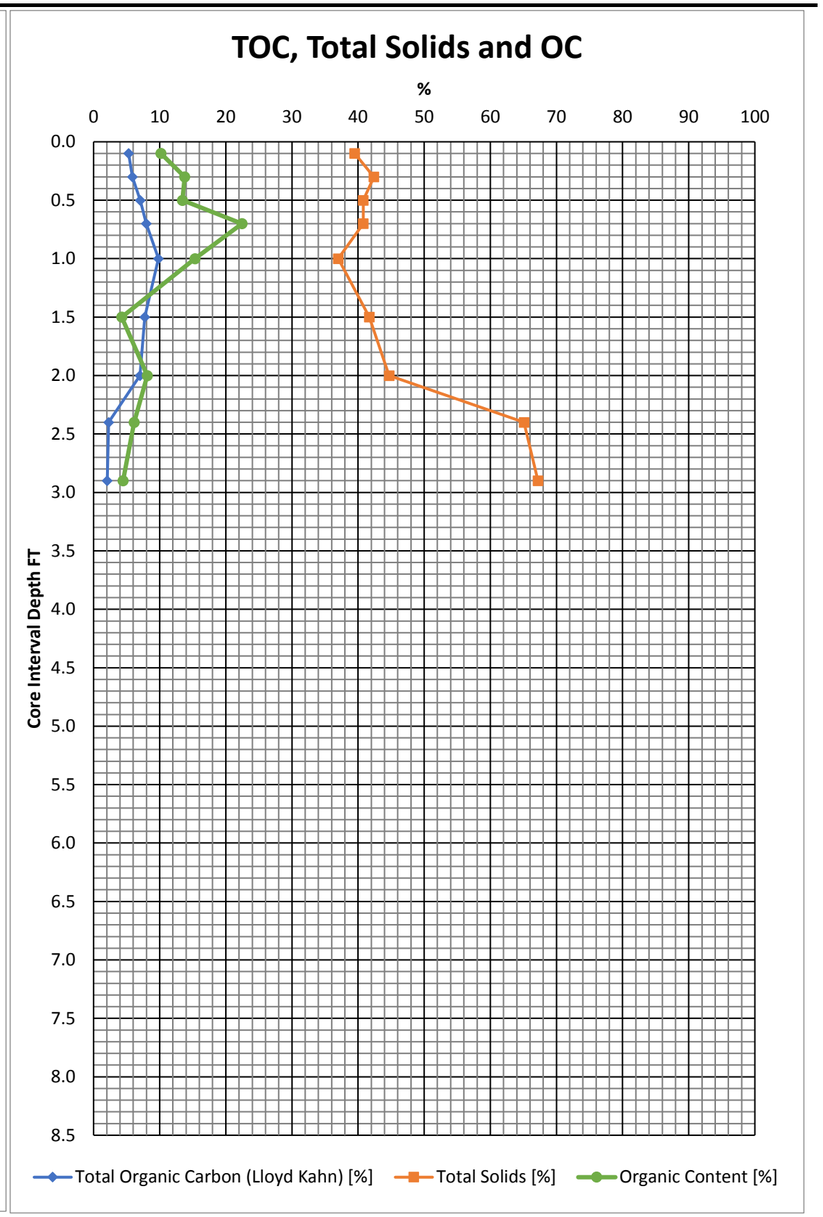


TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

Figure A.3-39
Station ID: VN-02-04
Core ID: VN-02-04-C
Core Designation: Consolidated







TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

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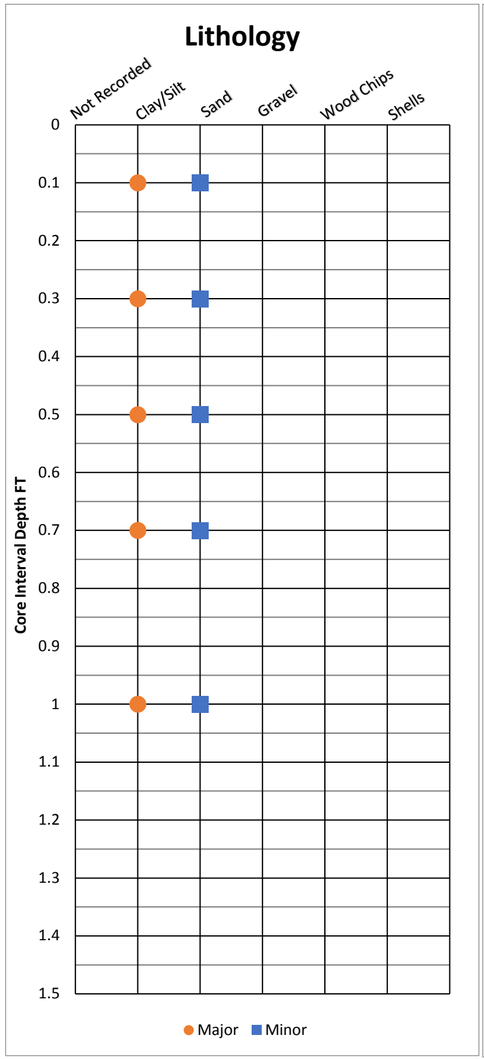
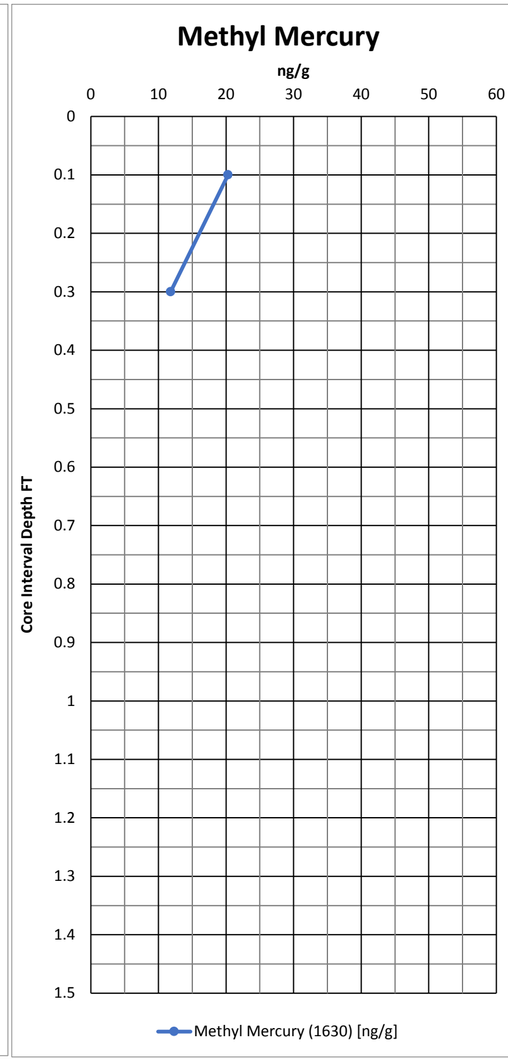
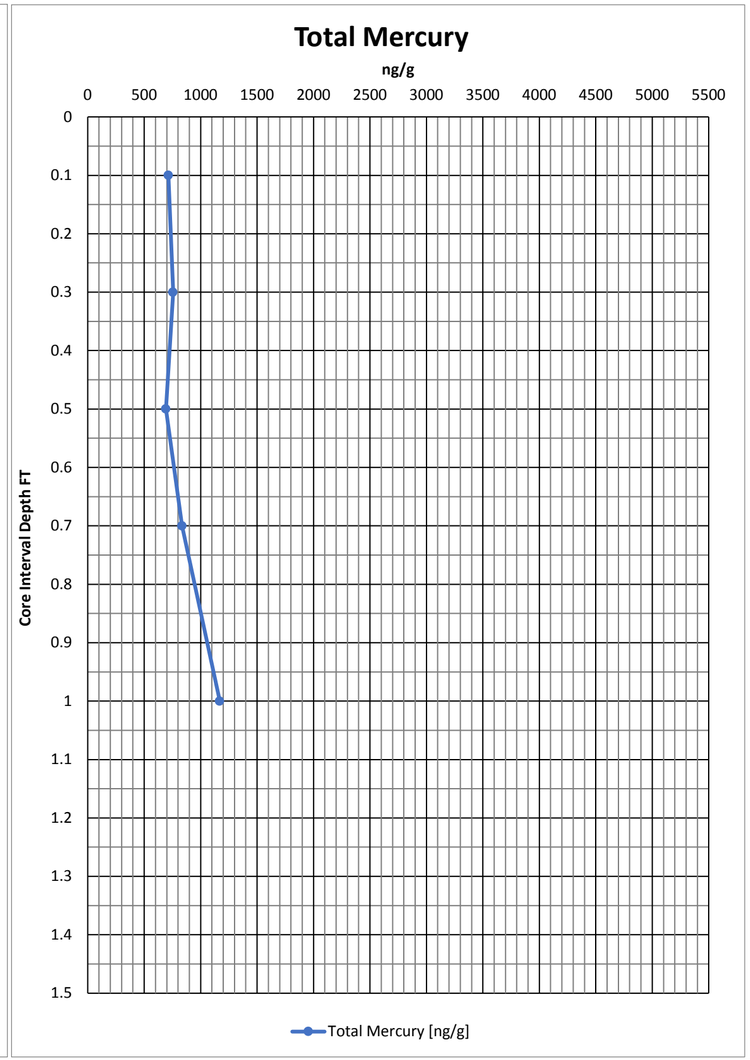
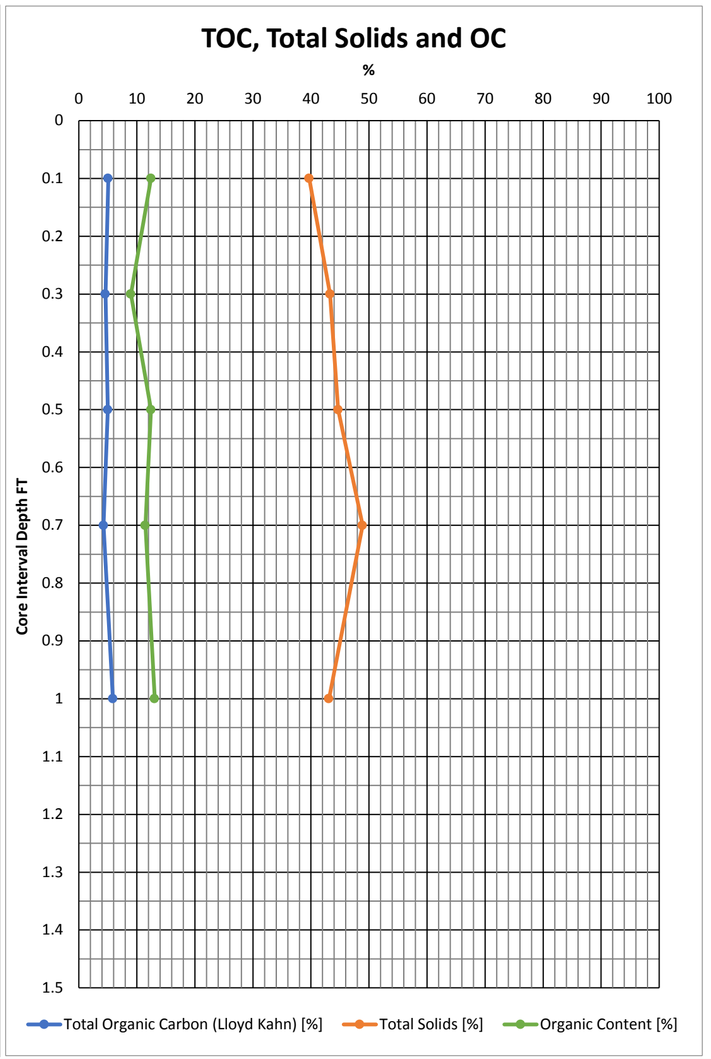
Figure A.3-40
Station ID: VN-03-01
Core ID: VN-03-01-D
Core Designation: Unconsolidated



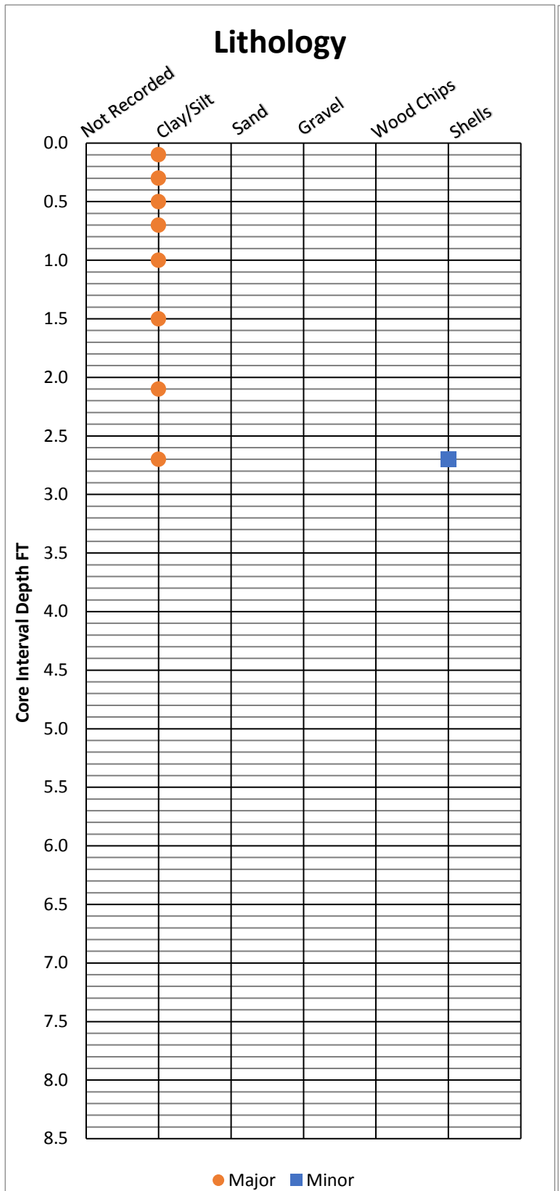


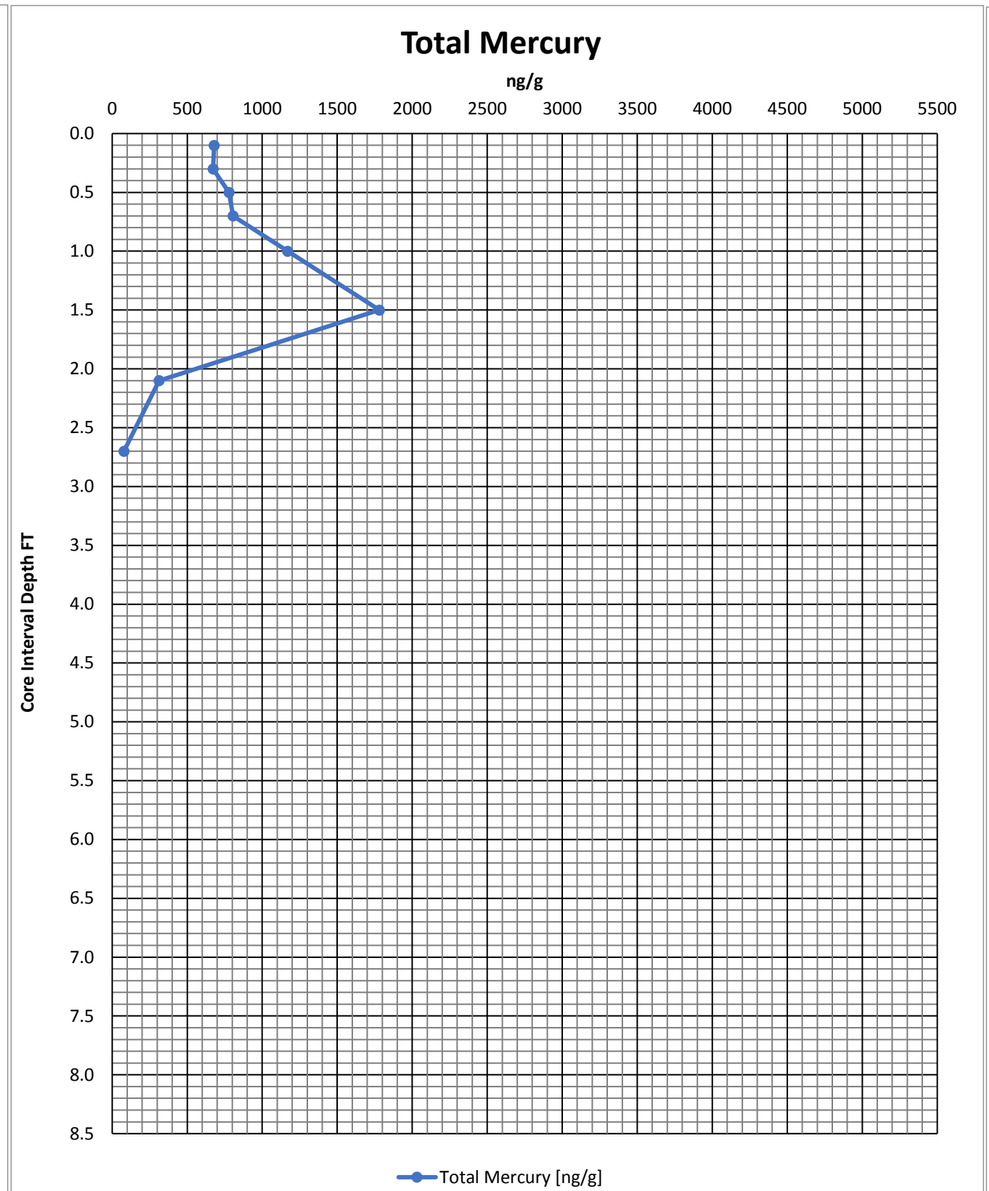


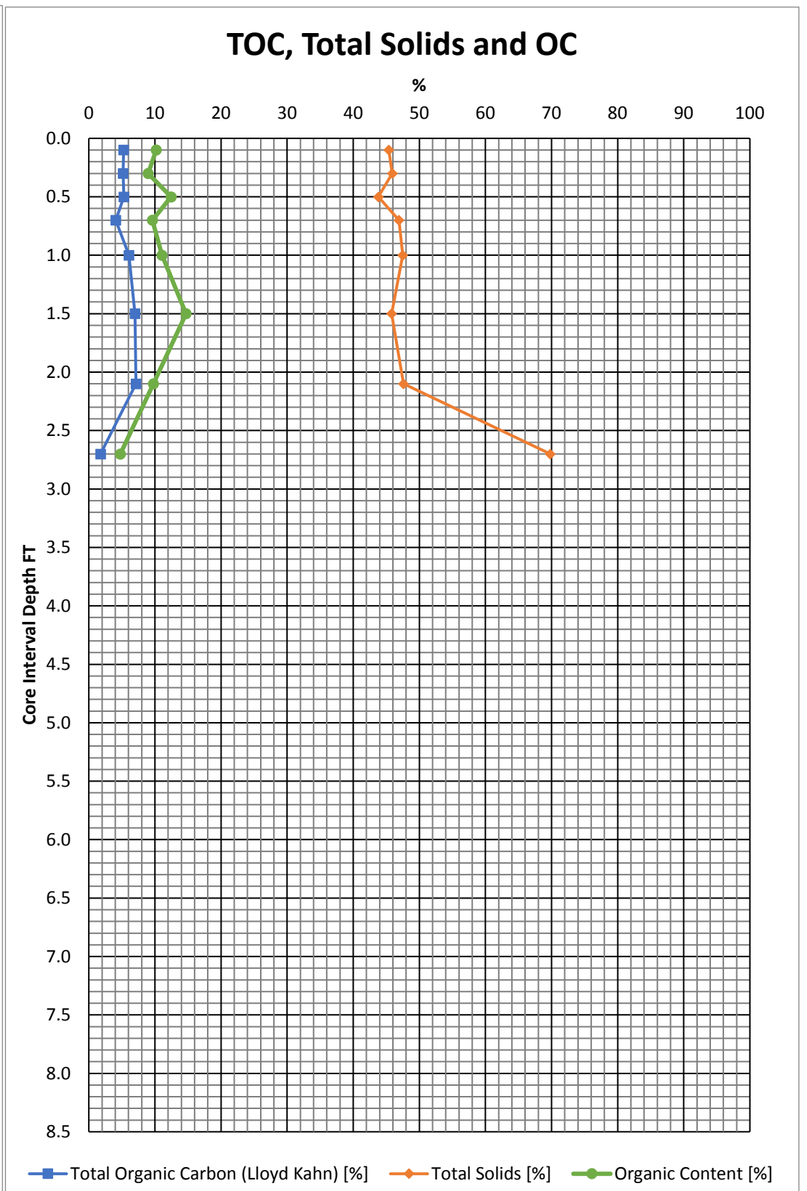


TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

Figure A.3-41
Station ID: VN-03-01
Core ID: VN-03-01-B
Core Designation: Consolidated







TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

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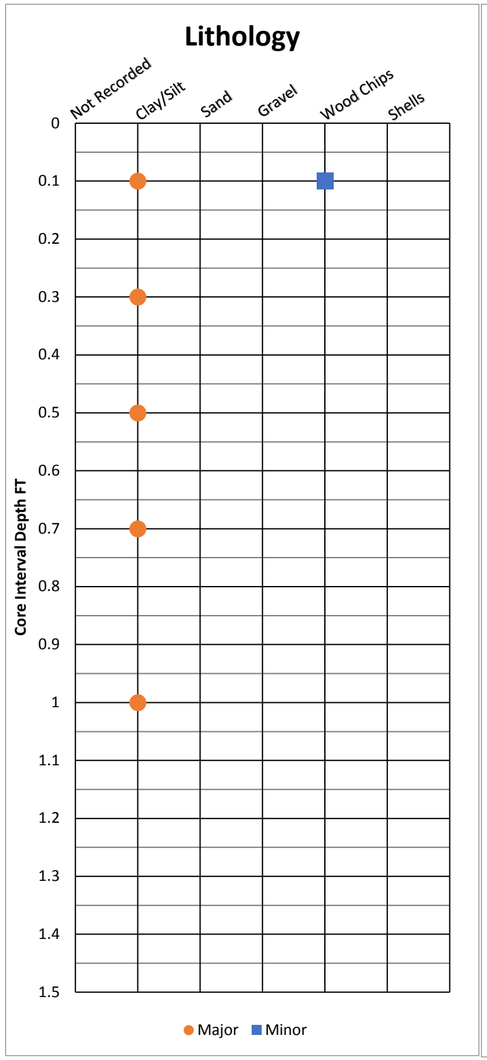
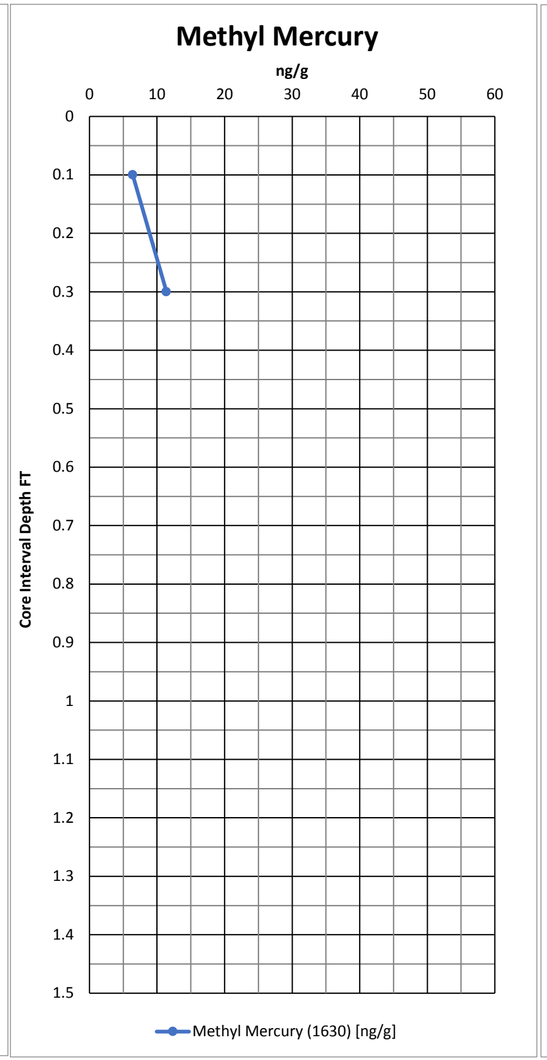
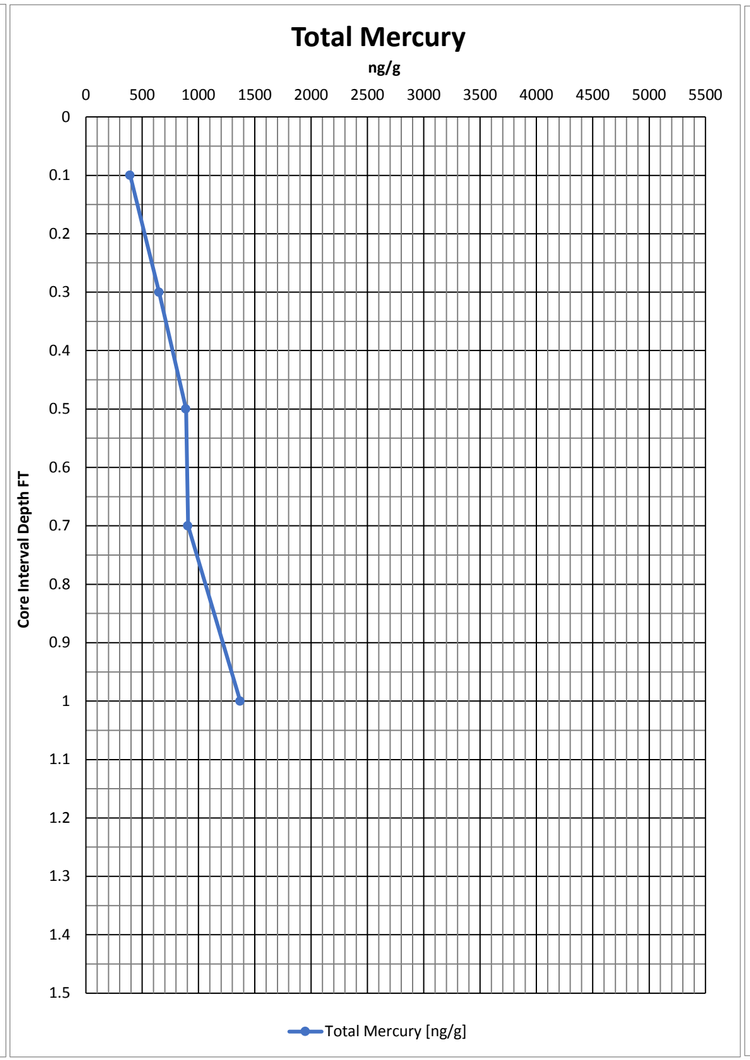
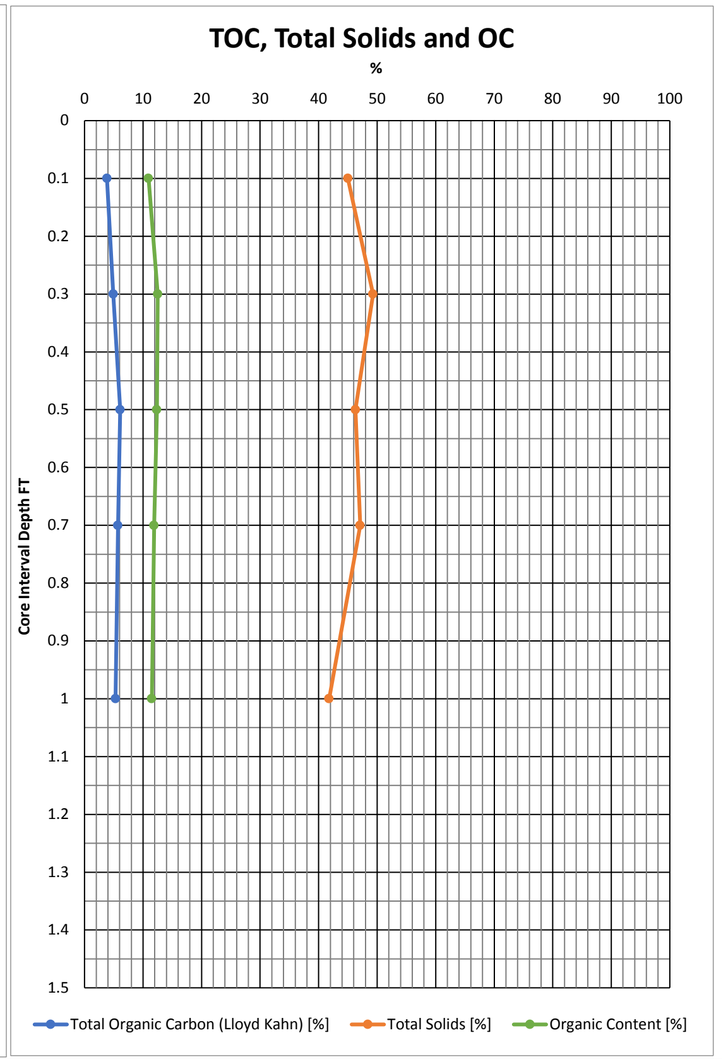
Figure A.3-42
Station ID: VN-04-01
Core ID: VN-04-01-E
Core Designation: Unconsolidated



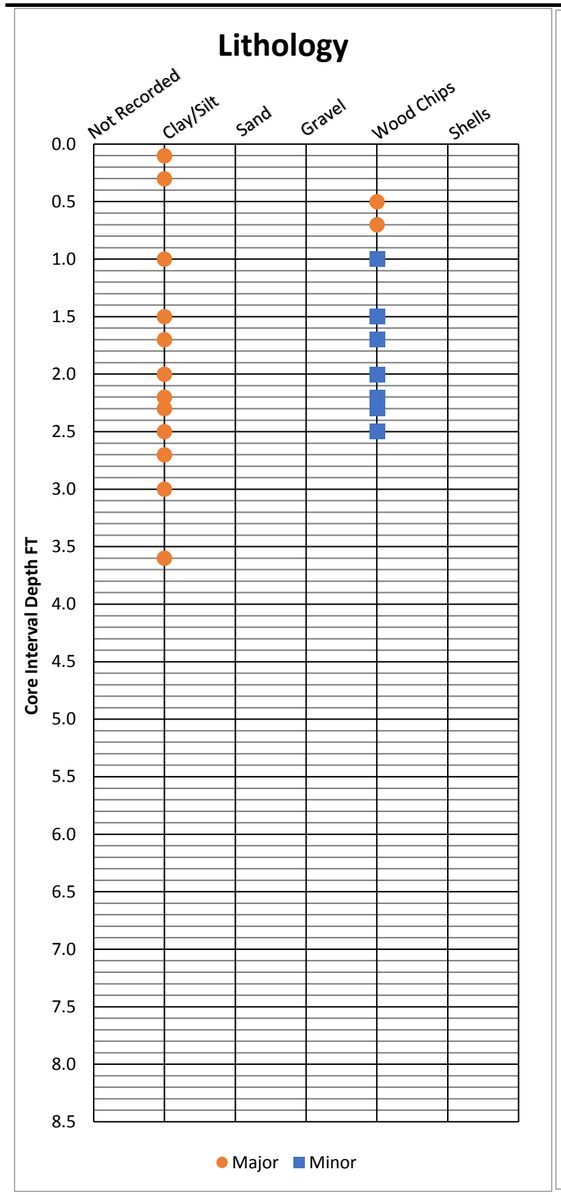


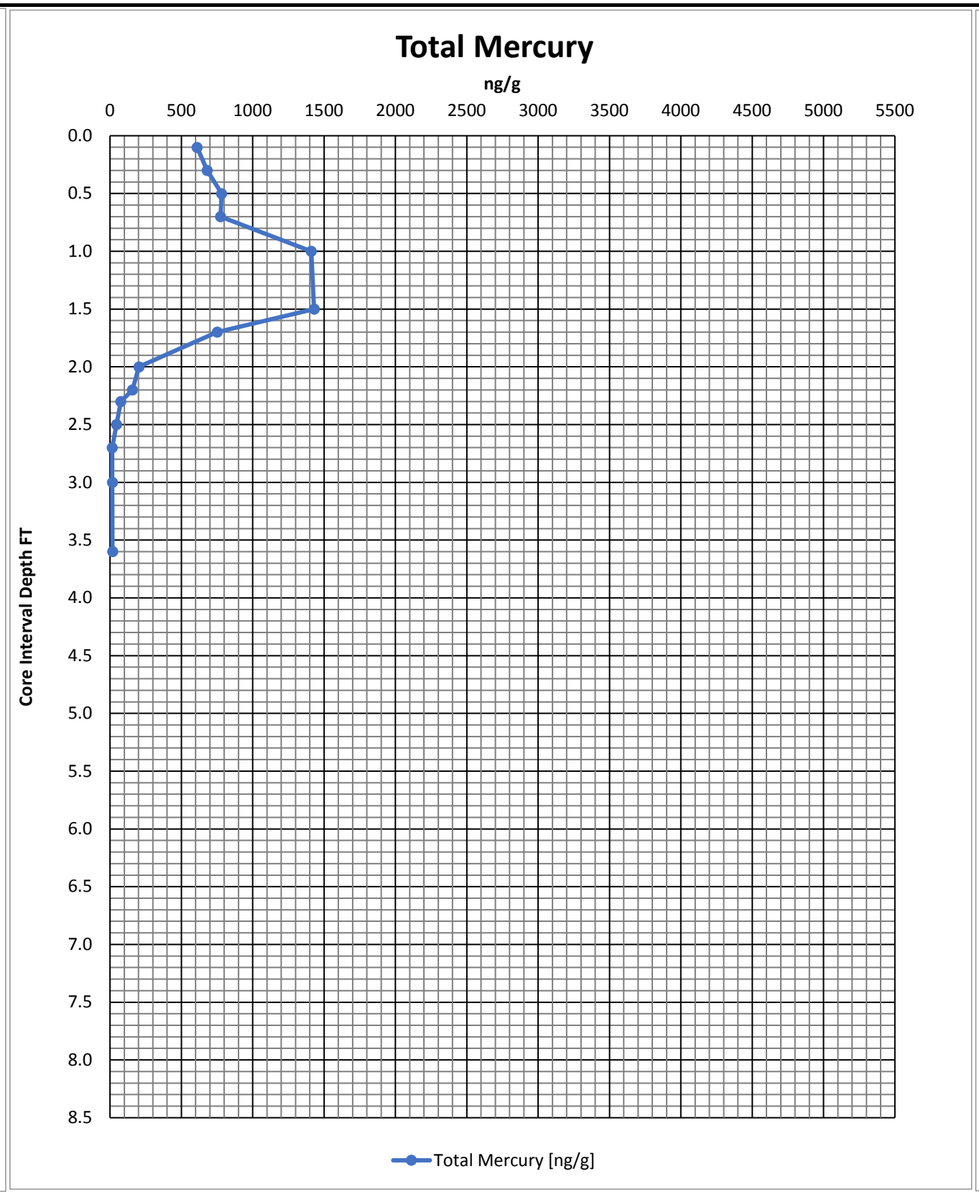


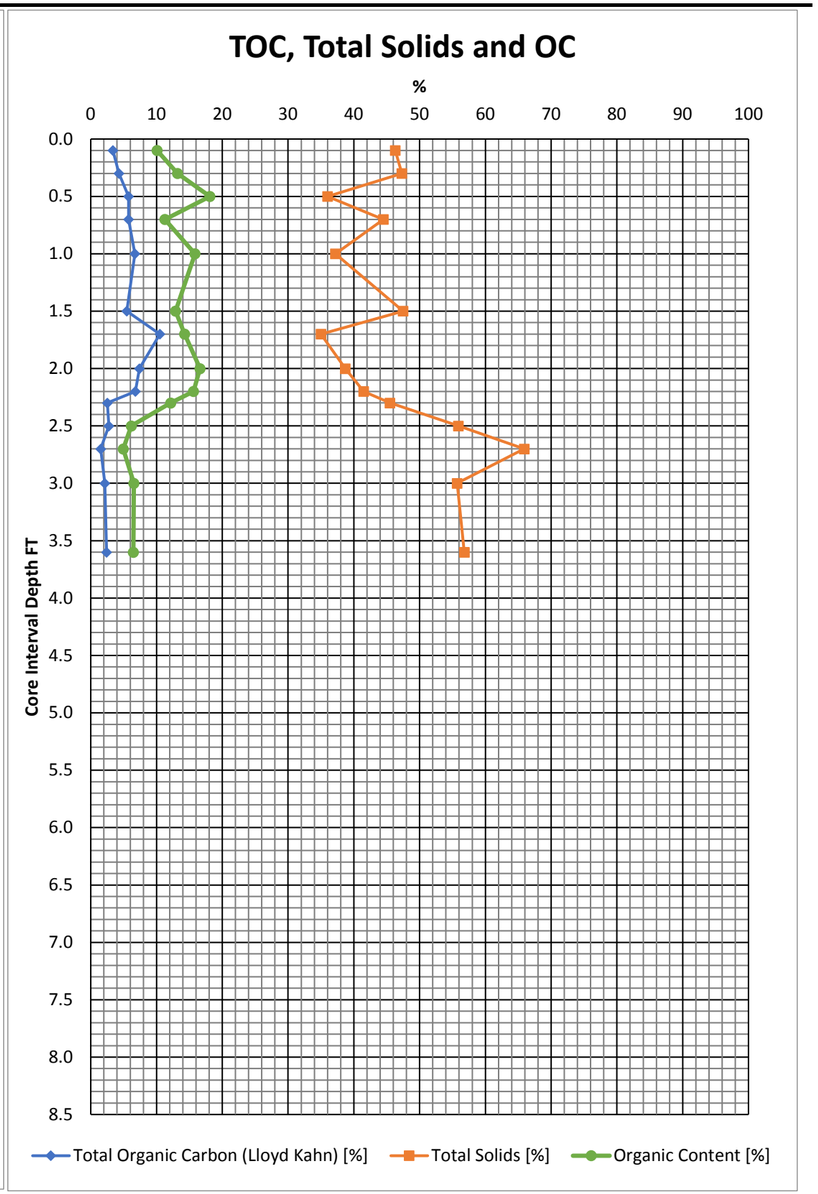


TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

Figure A.3-43
Station ID: VN-04-01
Core ID: VN-04-01-D
Core Designation: Consolidated

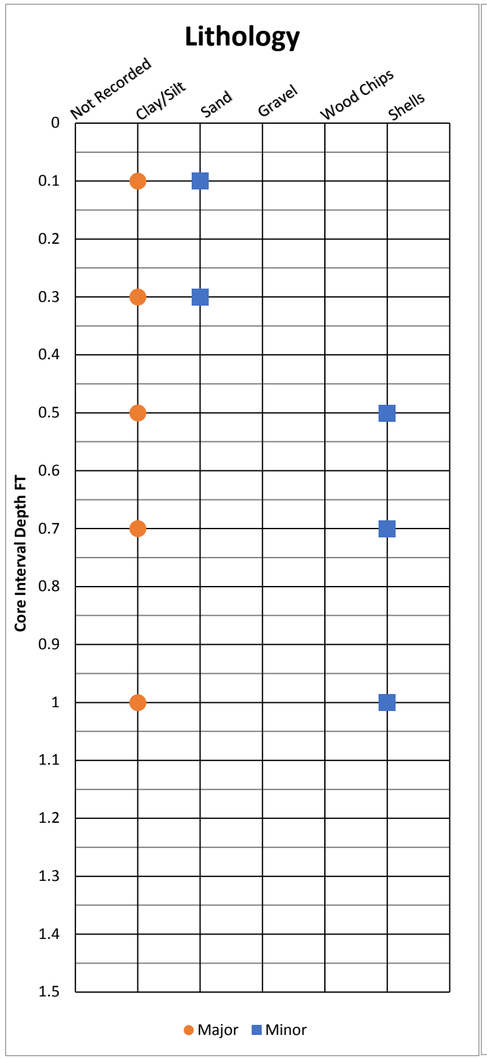


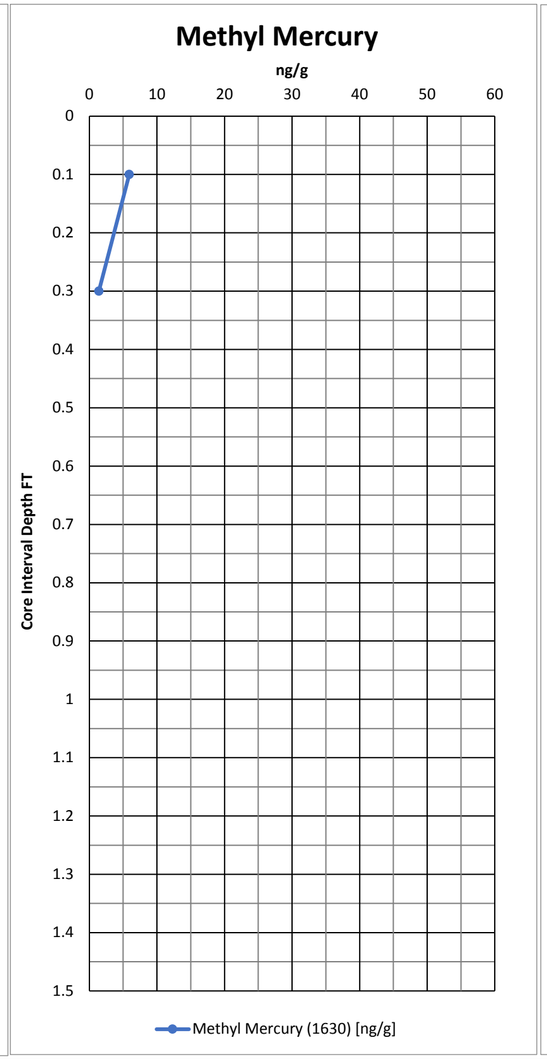


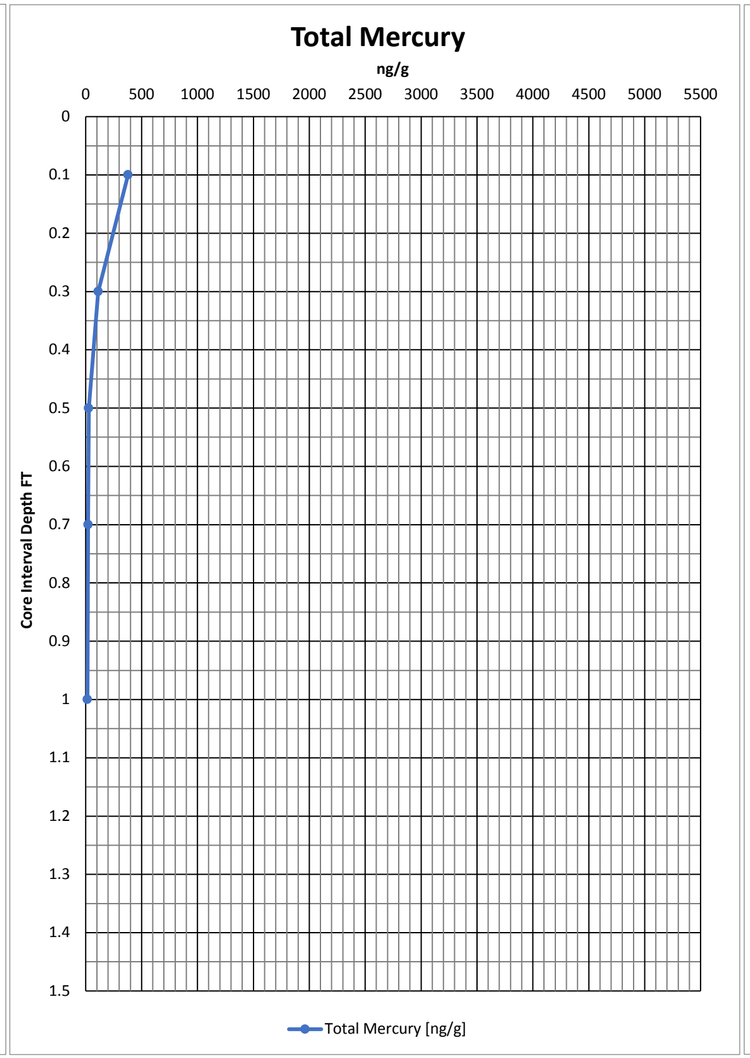


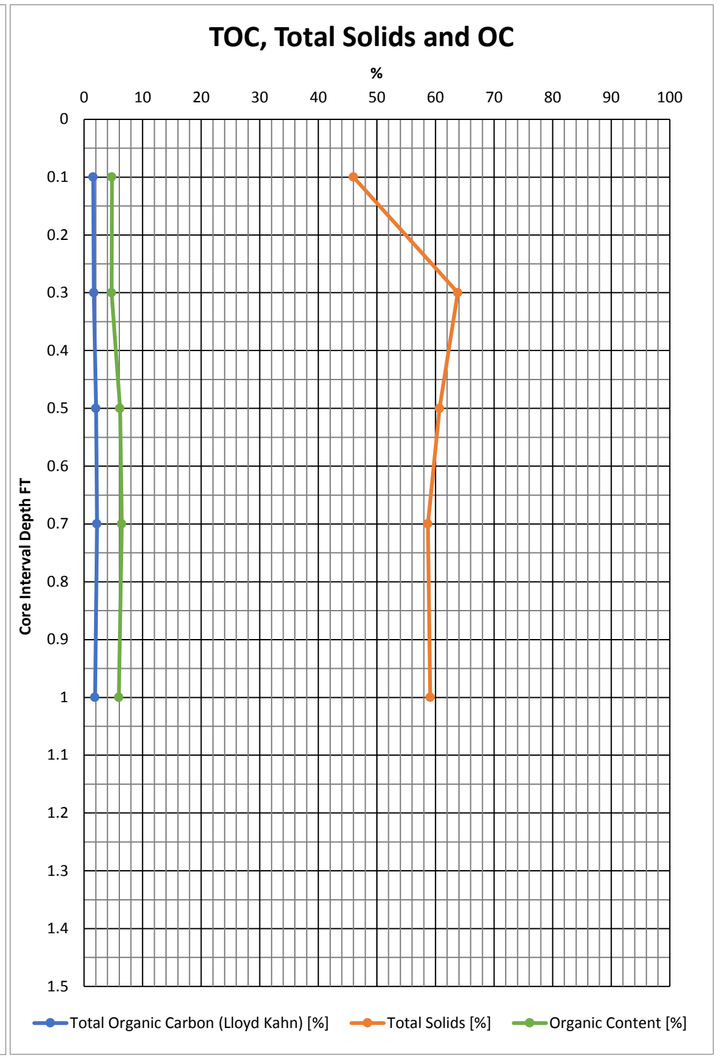
TED Pull Date	1/18/2018	By	J. Pallozzi
Data Entered	2/9/2018	By	K. Casey
Data Graphed	2/9/2018	By	K. Casey

Figure A.3-44
Station ID: VN-04-02
Core ID: VN-04-02-C
Core Designation: Unconsolidated



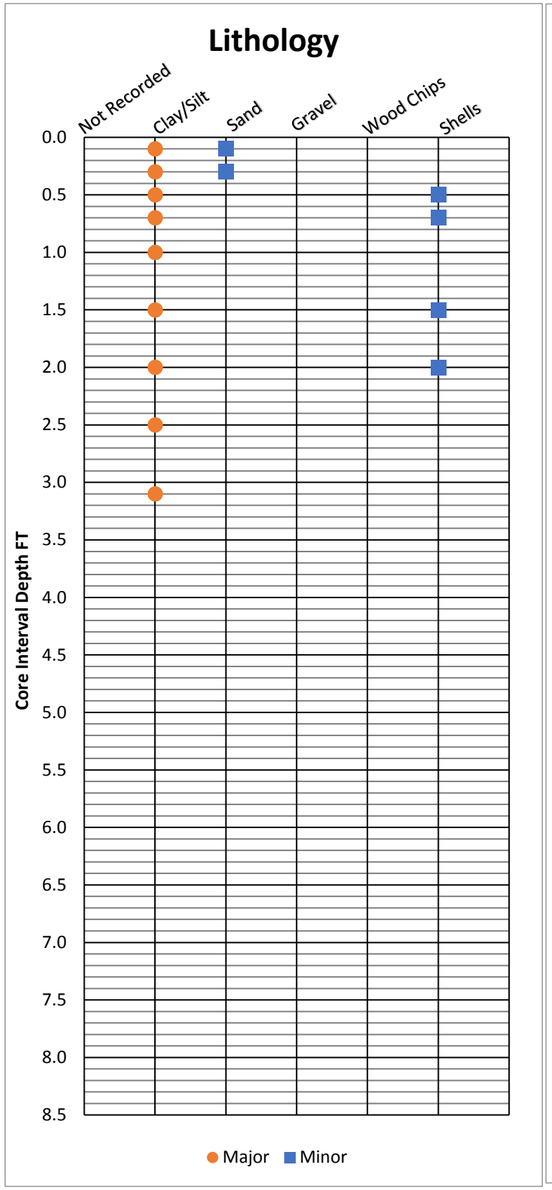


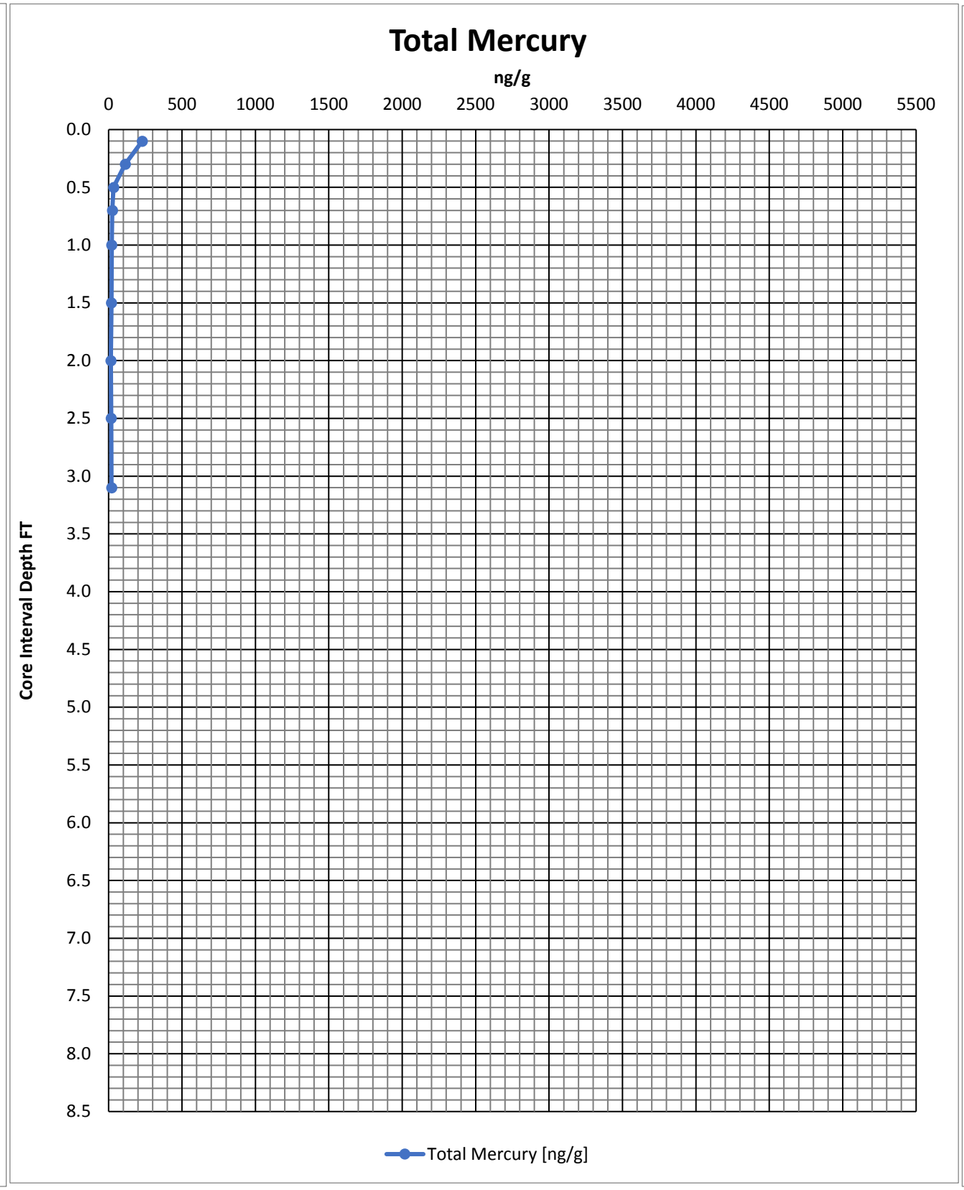


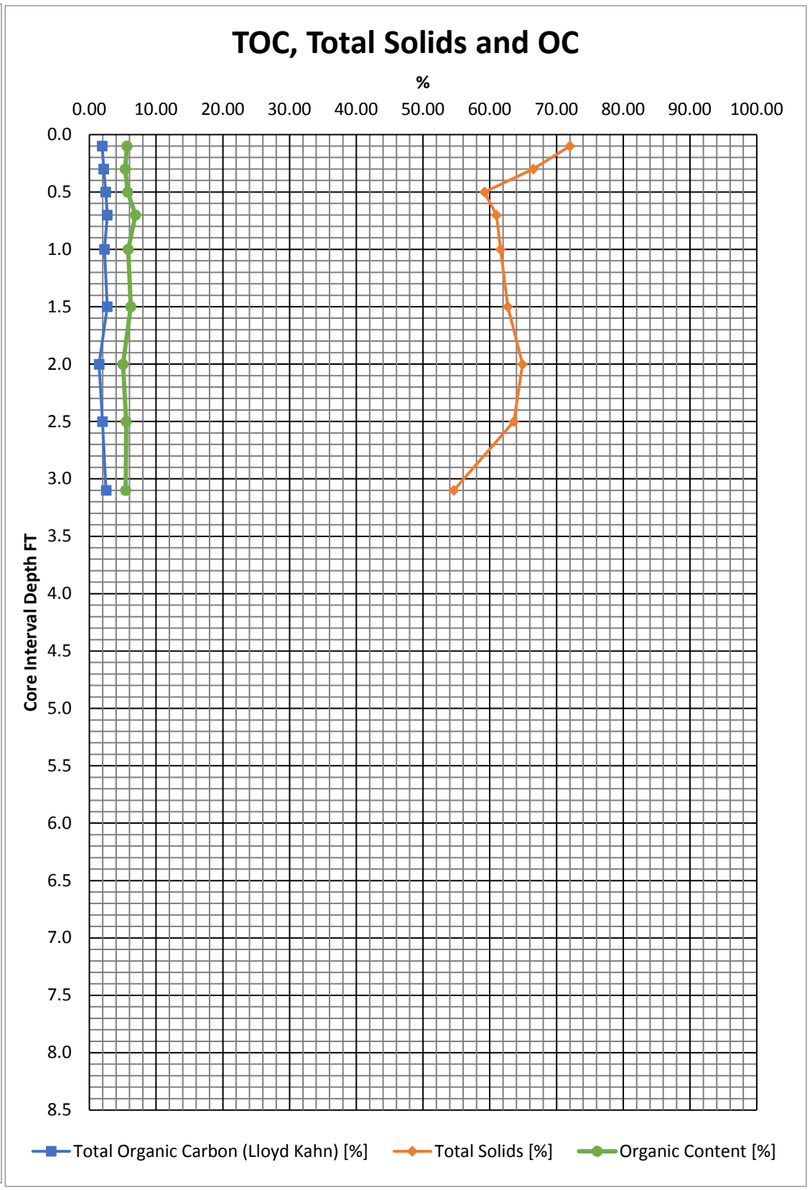


TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

Figure A.3-45
Station ID: VN-04-02
Core ID: VN-04-02-A
Core Designation: Consolidated

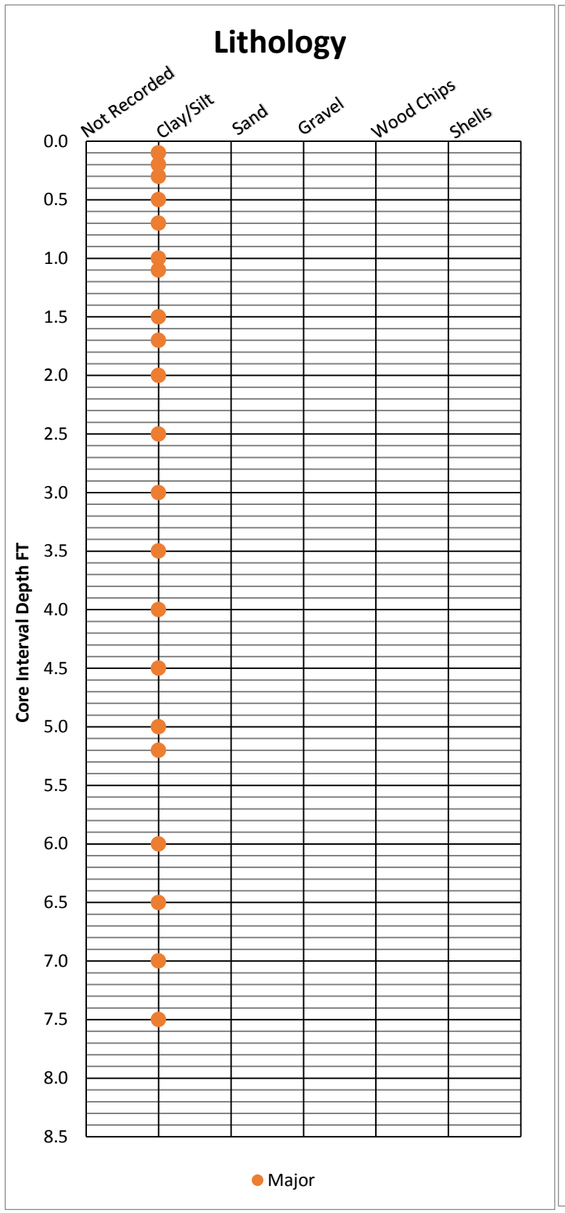


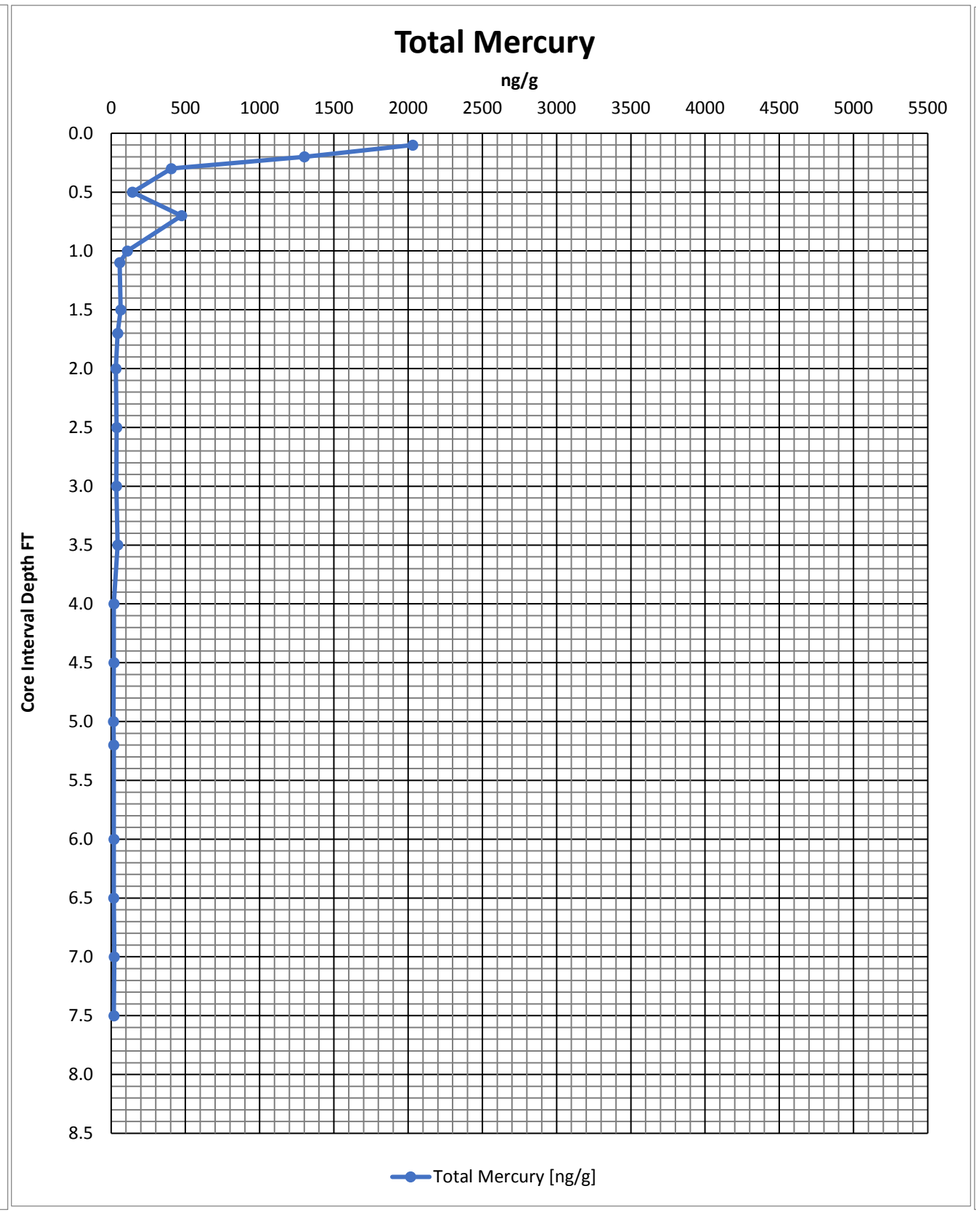


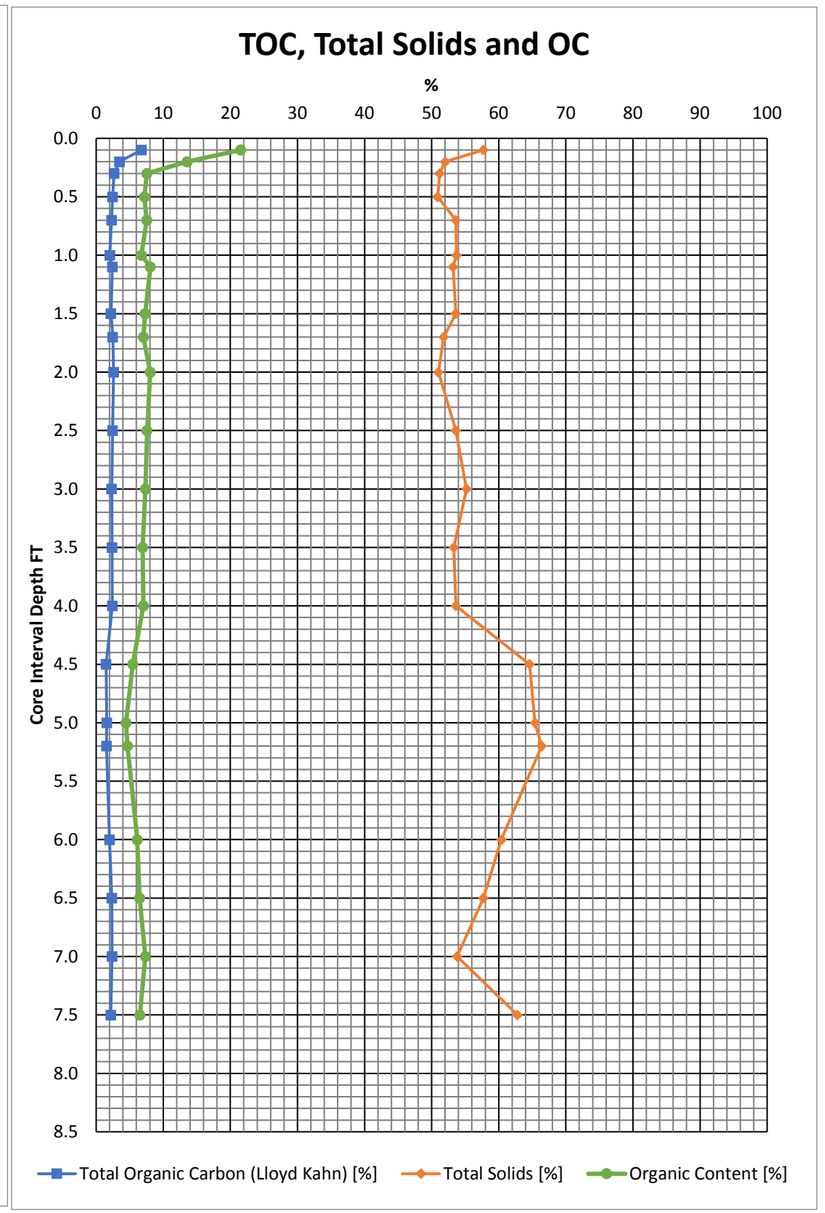


TED Pull Date	1/18/2018	By	J. Pallozzi
Data Entered	2/7/2018	By	D. Young
Data Graphed	2/7/2018	By	D. Young

Figure A.3-46
Station ID: VN-05-01
Core ID: VN-05-01-D
Core Designation: Consolidated







TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

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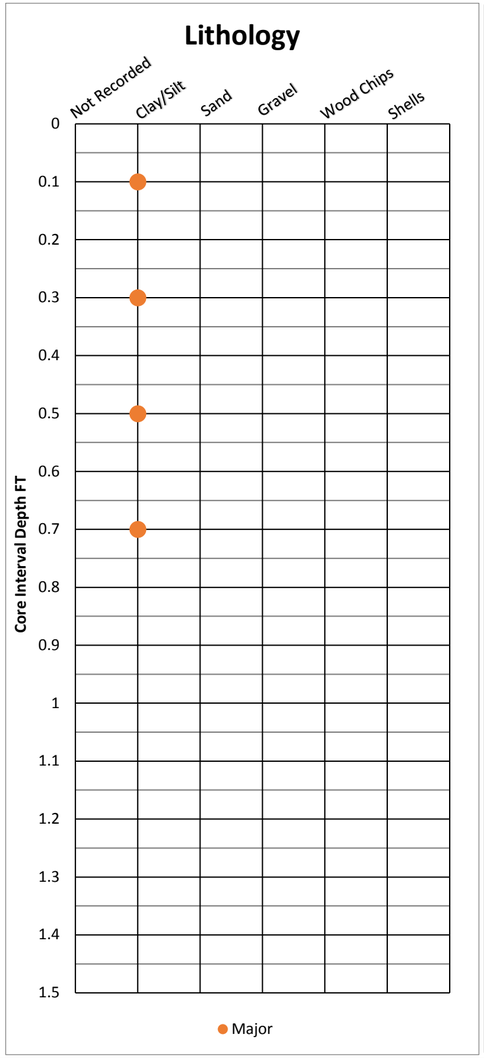
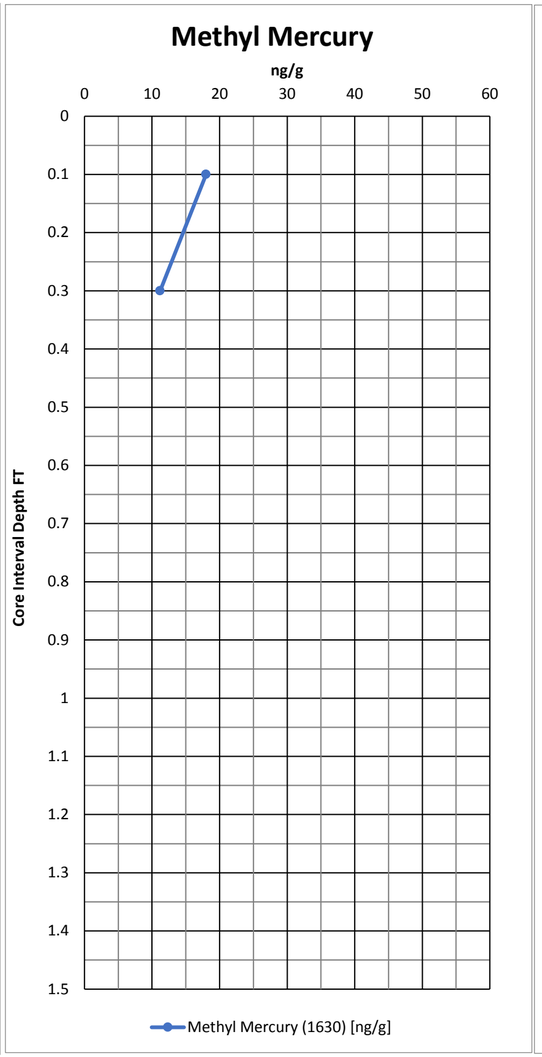
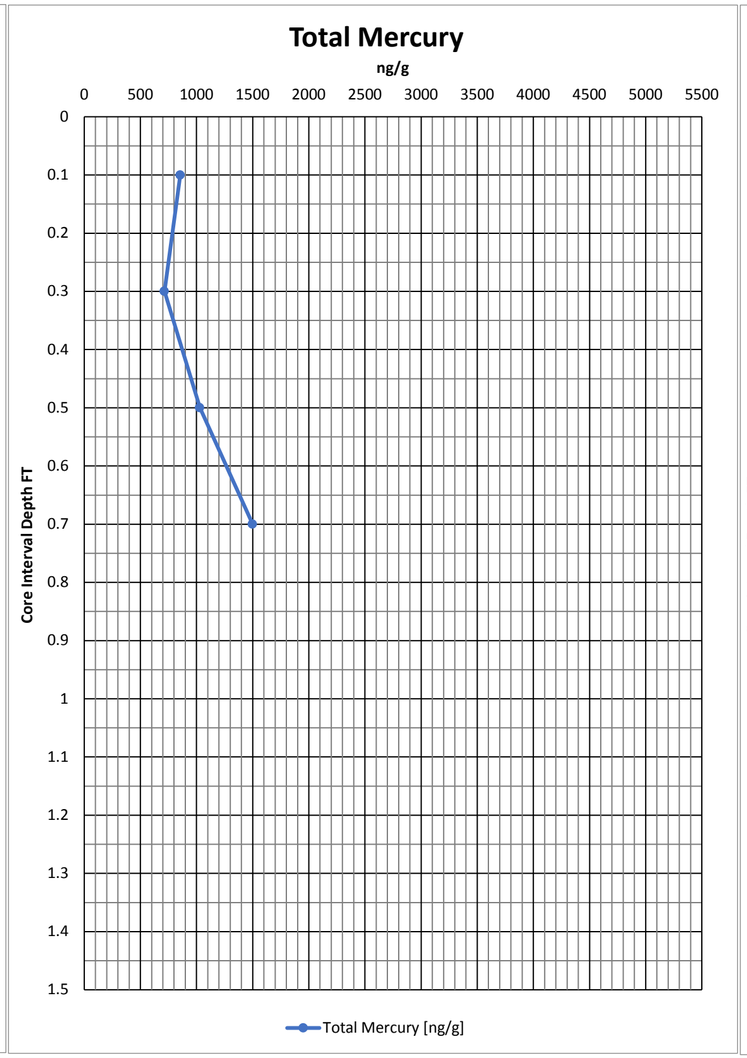
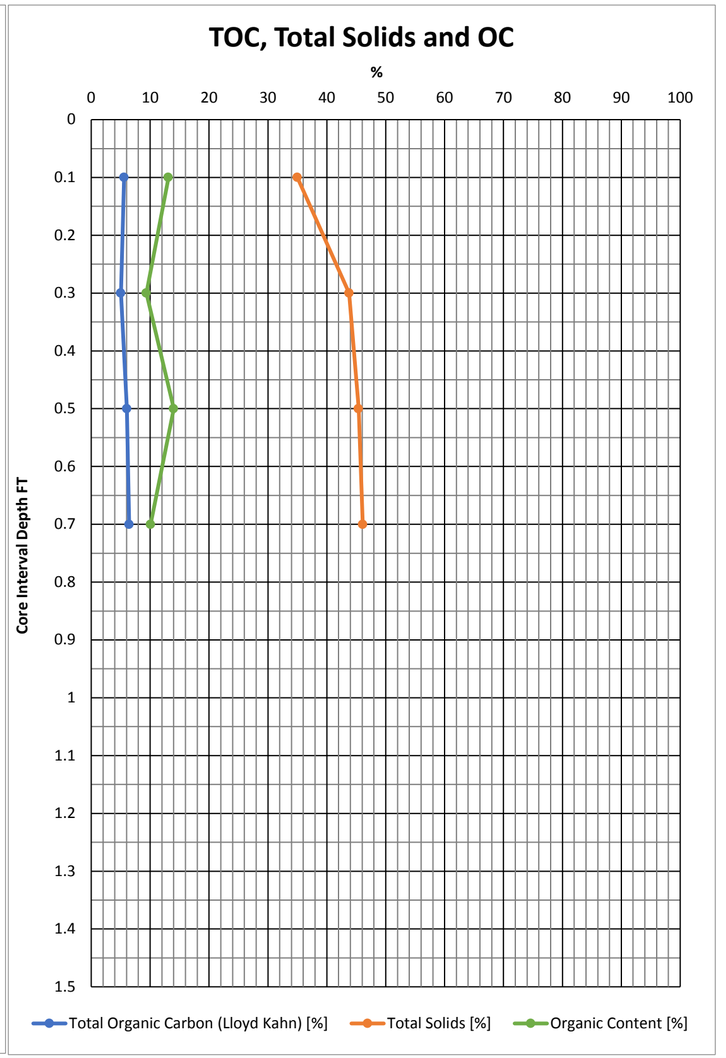
Figure A.3-47
Station ID: VN-08-01
Core ID: VN-08-01-E
Core Designation: Unconsolidated



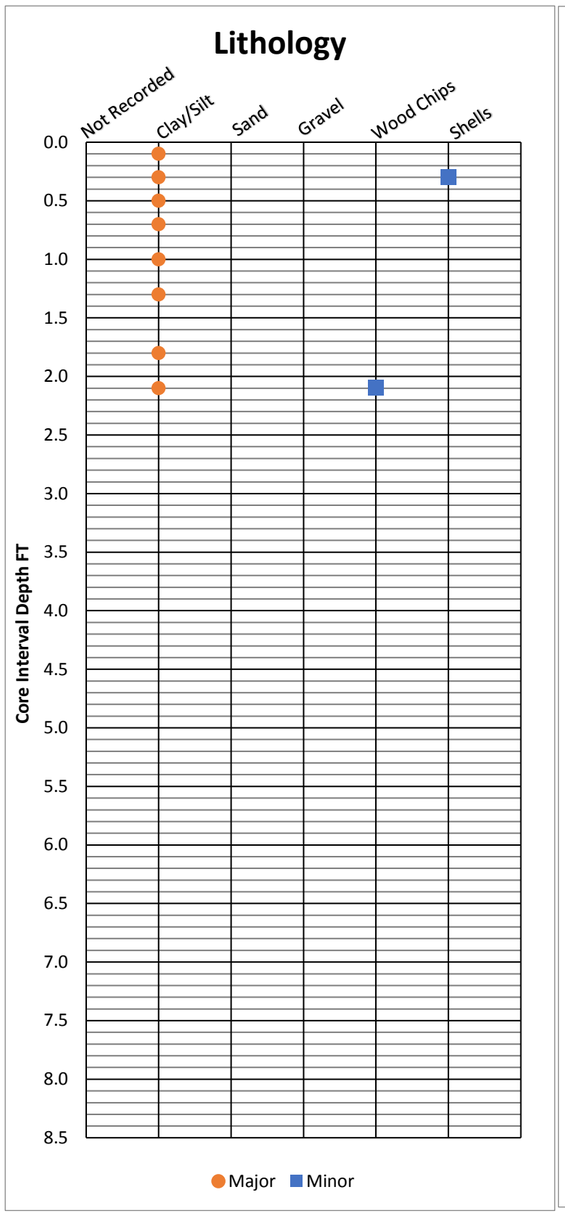


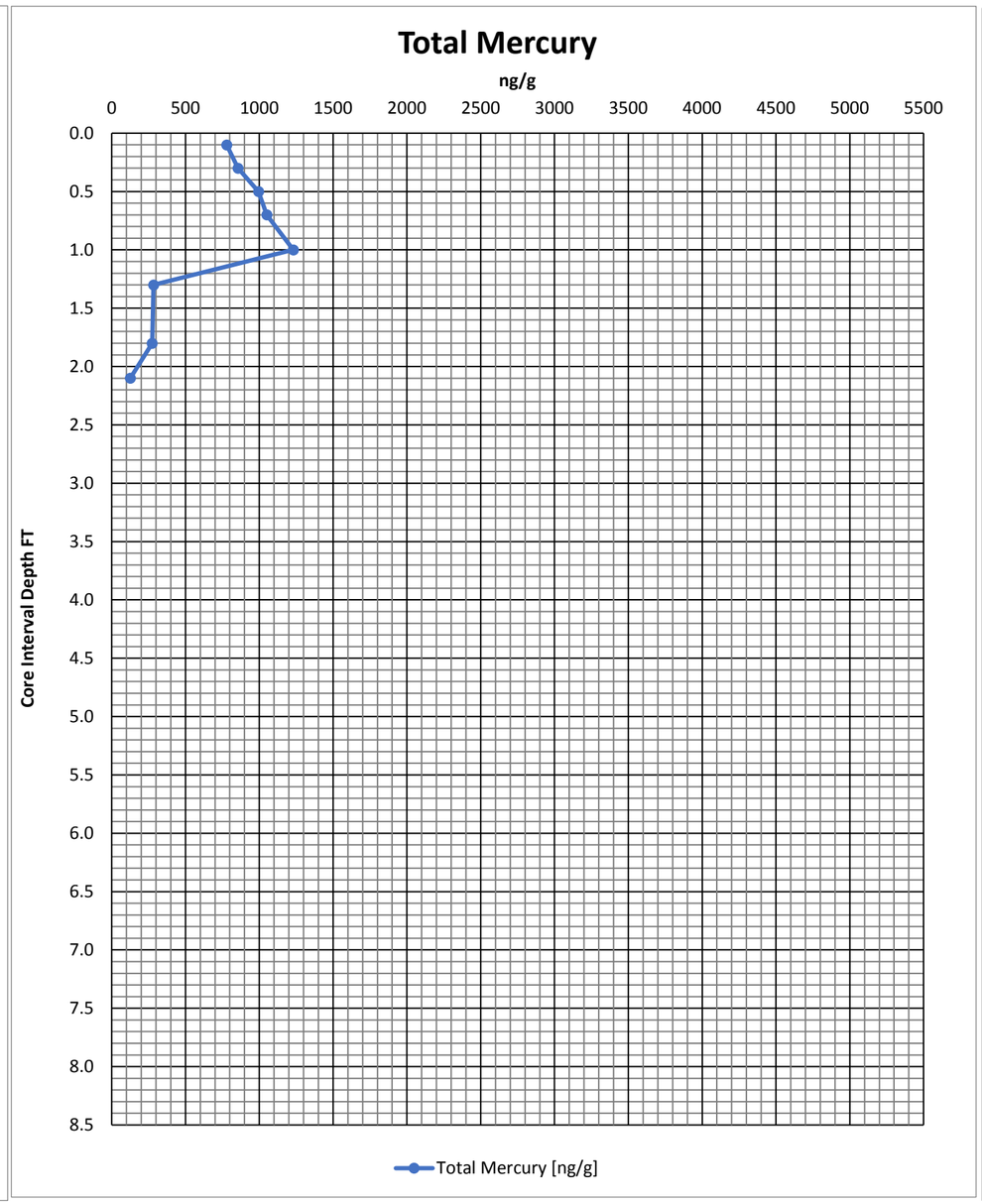


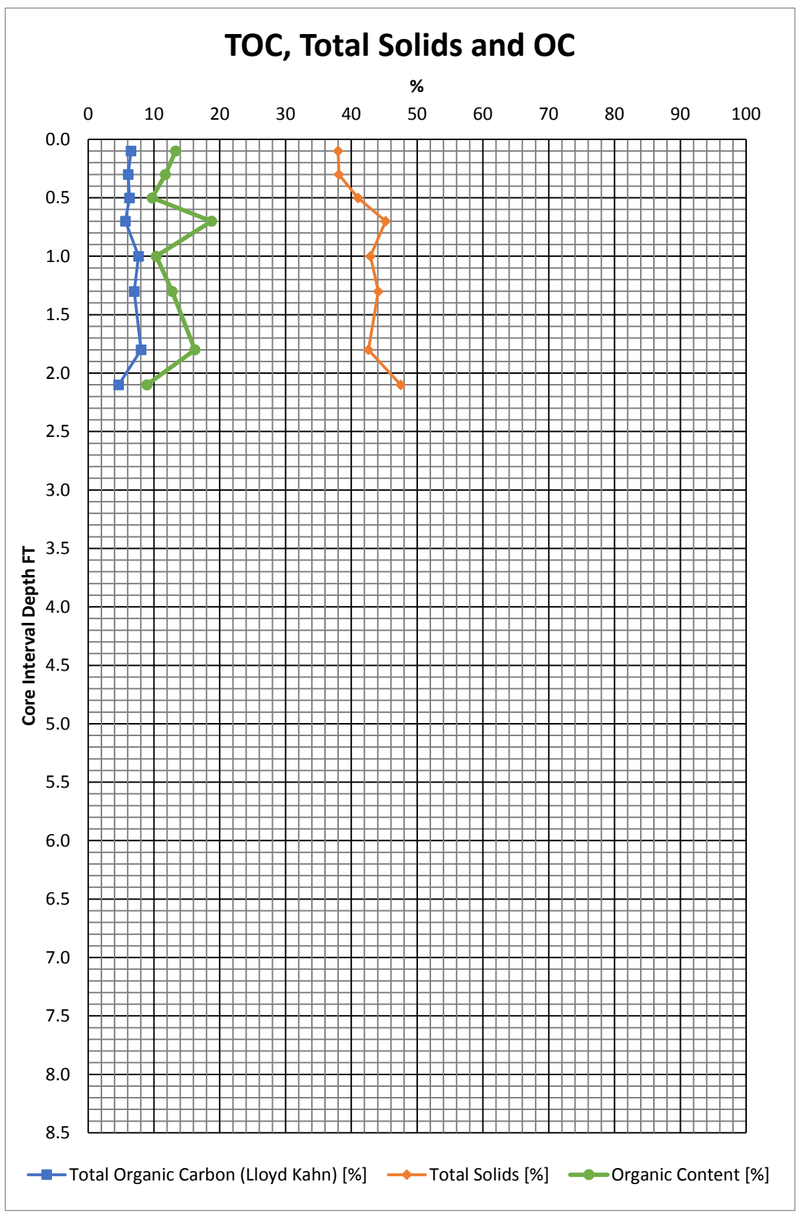


TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

Figure A.3-48
Station ID: VN-08-01
Core ID: VN-08-01-B
Core Designation: Consolidated







TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

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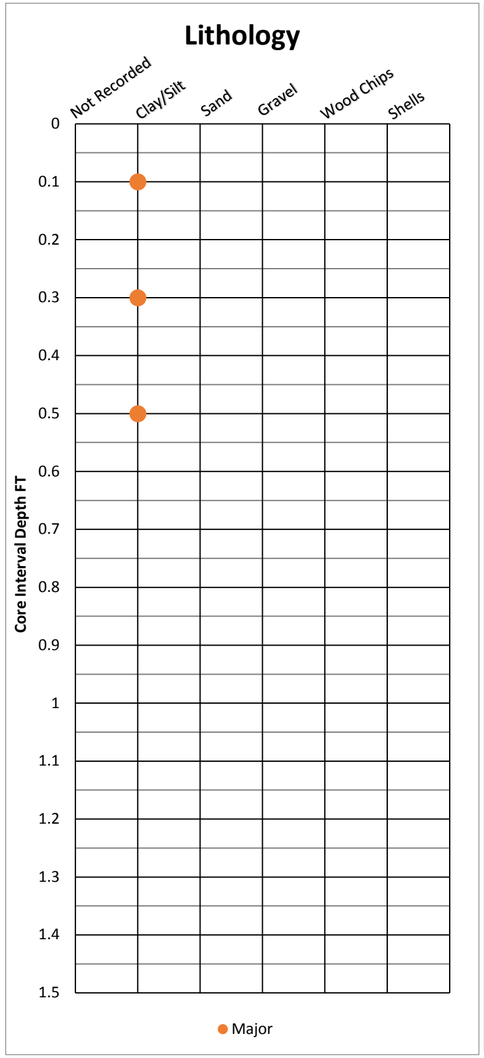
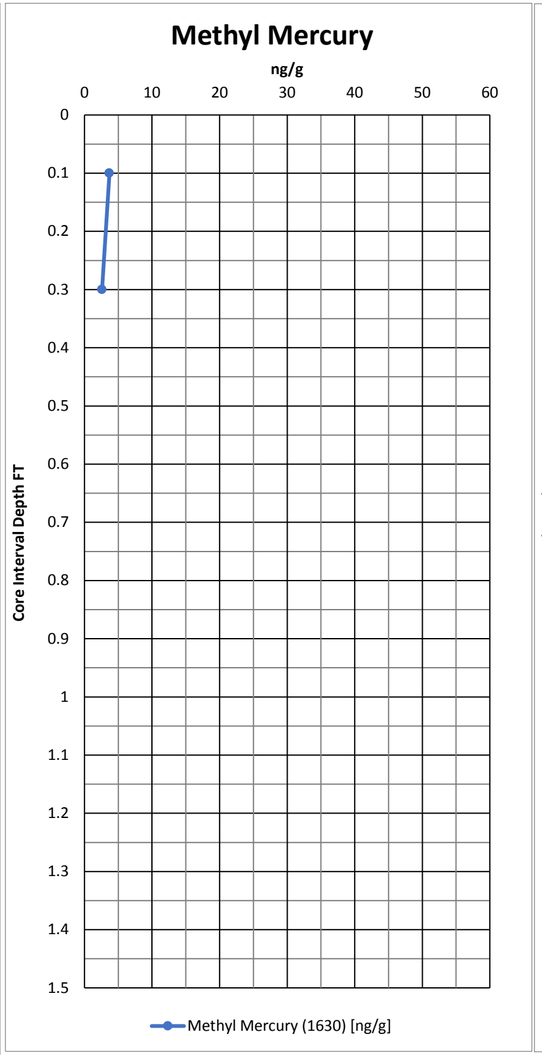
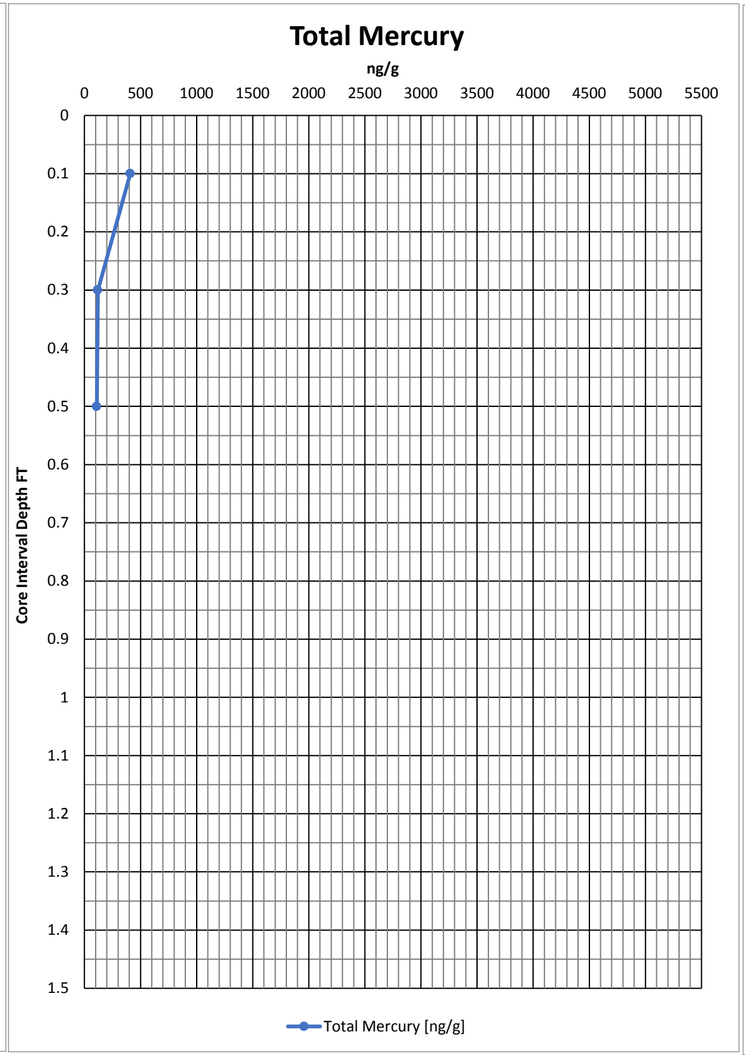
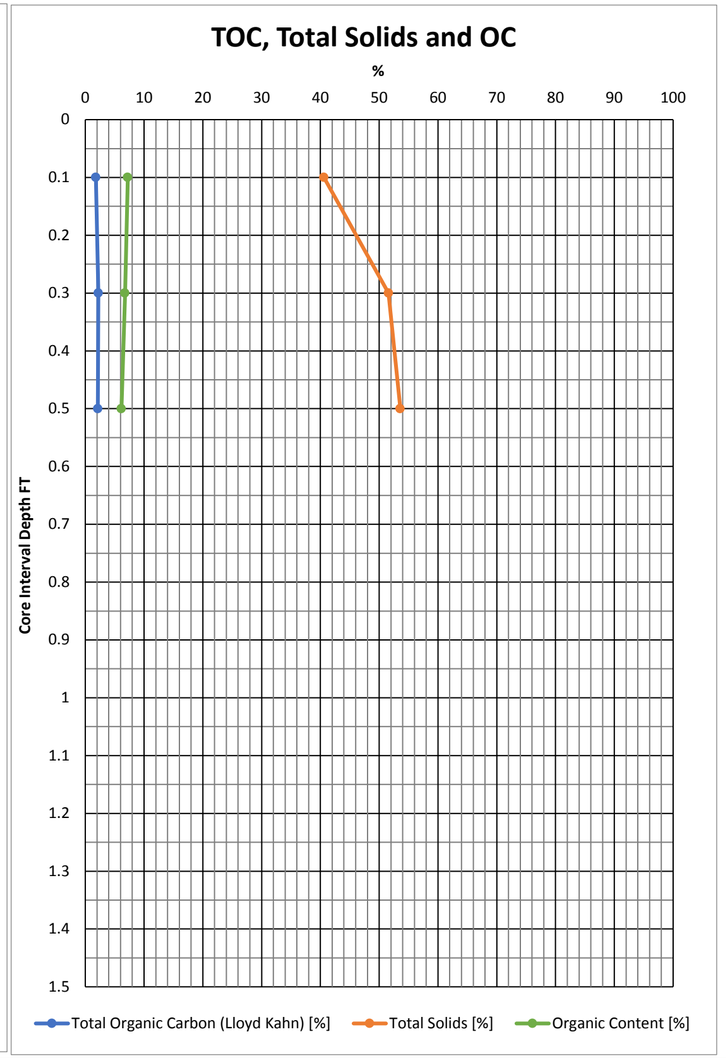
Figure A.3-49
Station ID: VW-02-01
Core ID: VW-02-01-E
Core Designation: Unconsolidated





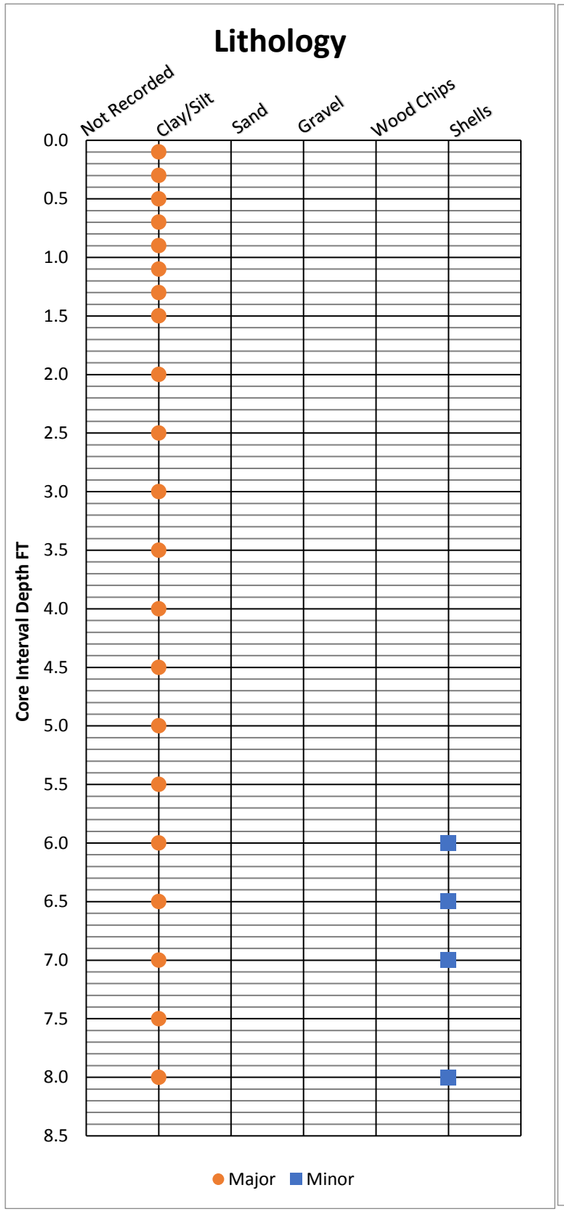


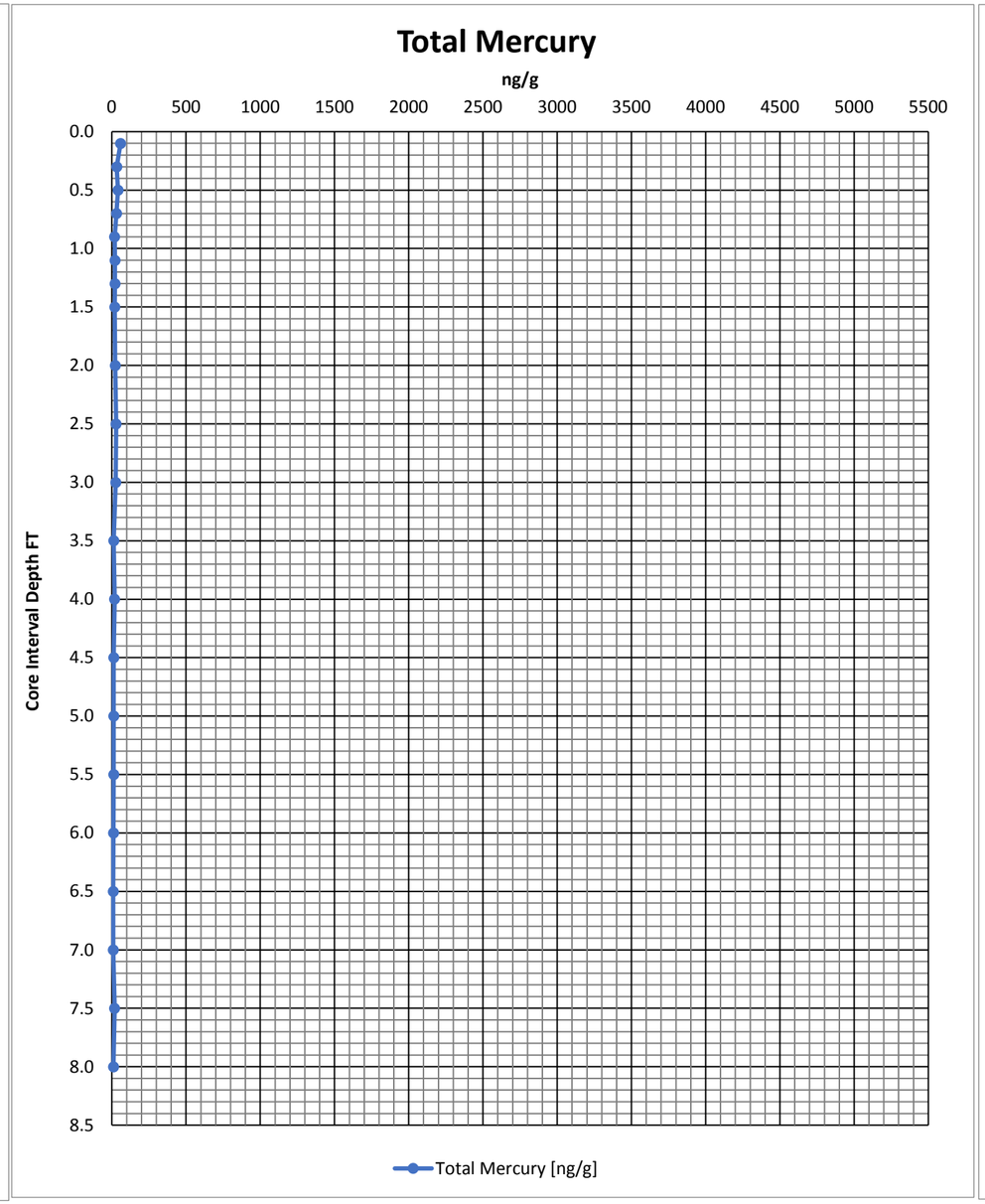


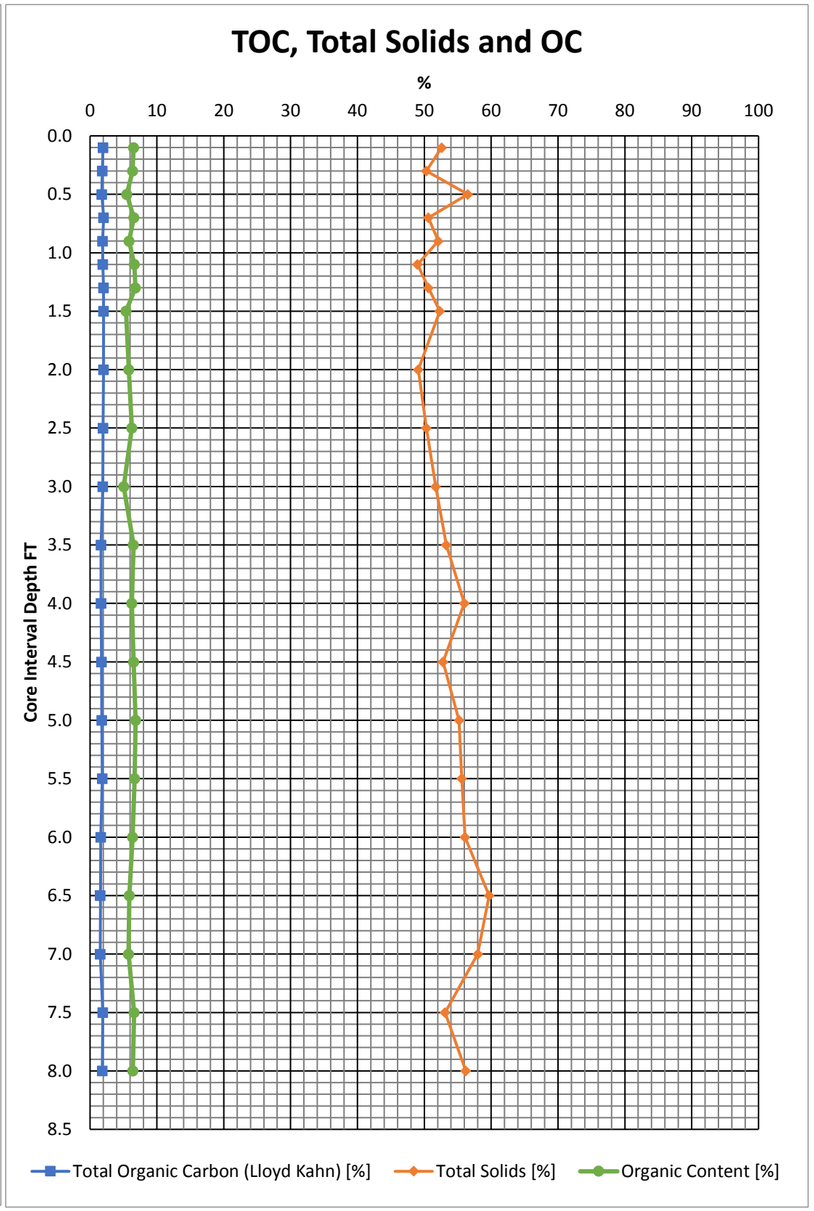
TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

Penobscot River Phase III Engineering Study
Penobscot River Estuary
Project no.: 3616166052

Figure A.3-50
Station ID: VW-02-01
Core ID: VW-02-01-B
Core Designation: Consolidated







TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

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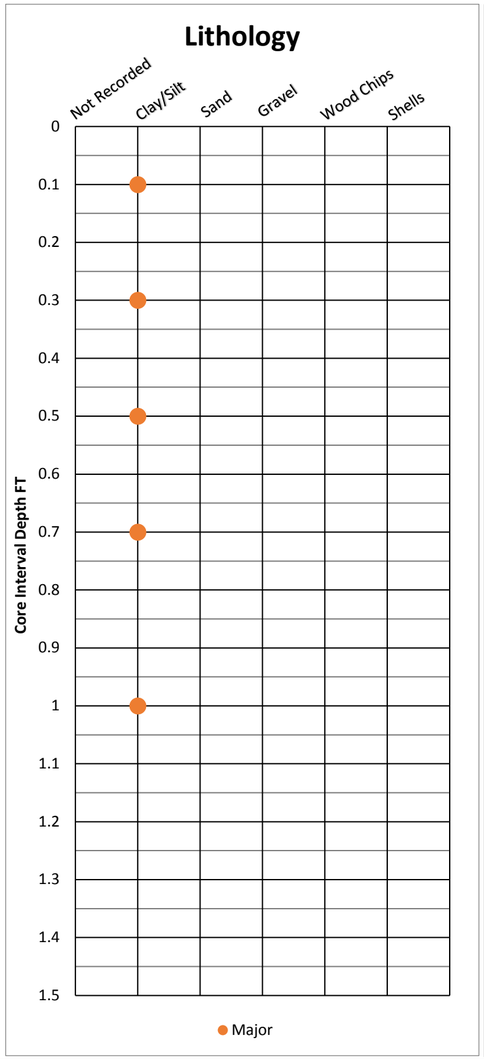
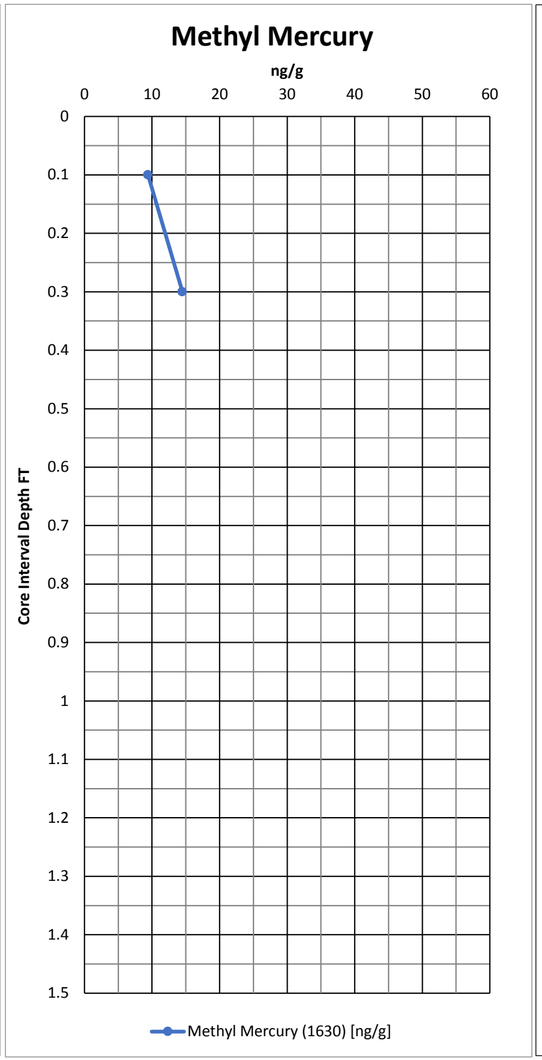
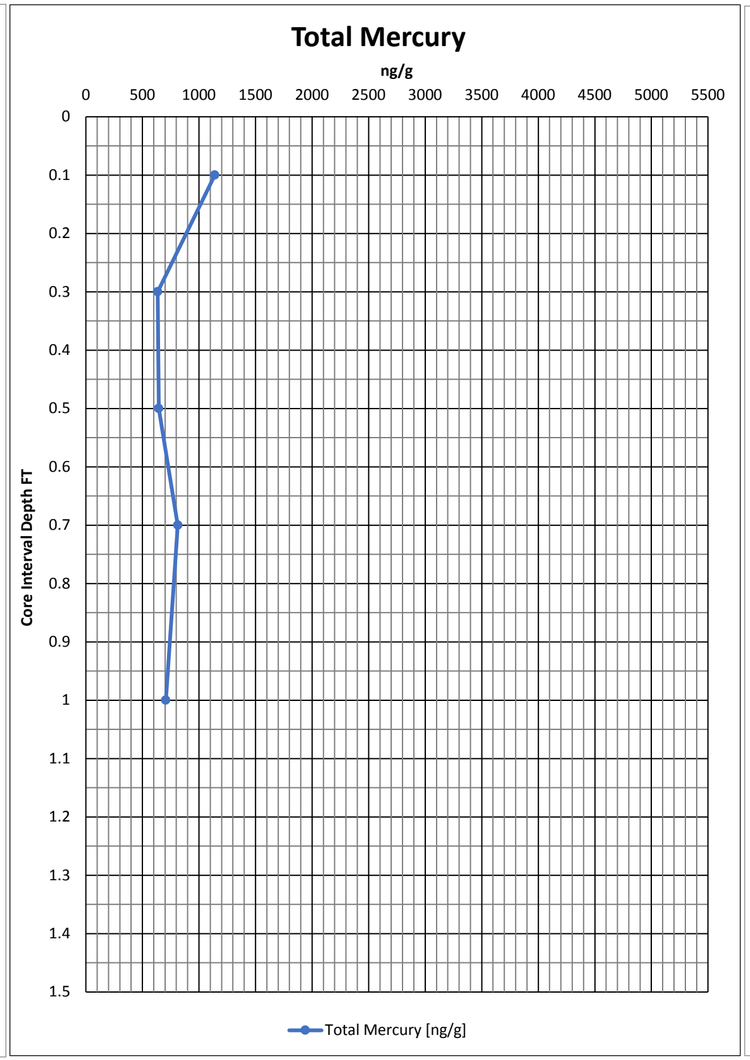
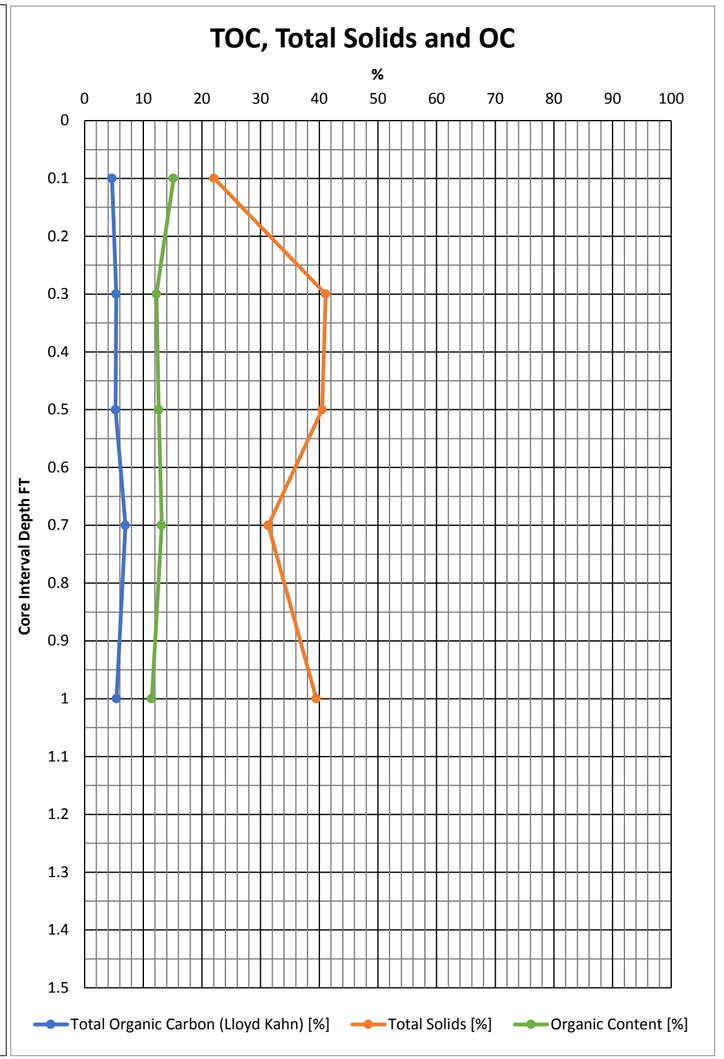
Figure A.3-51
Station ID: VW-14-01
Core ID: VW-14-01-F
Core Designation: Unconsolidated



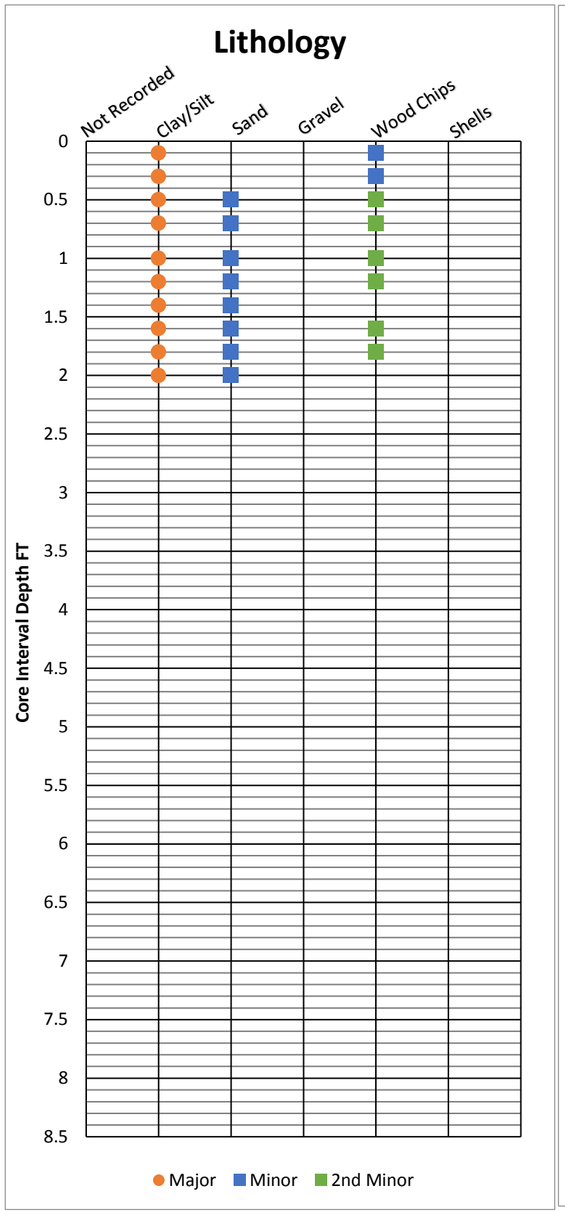


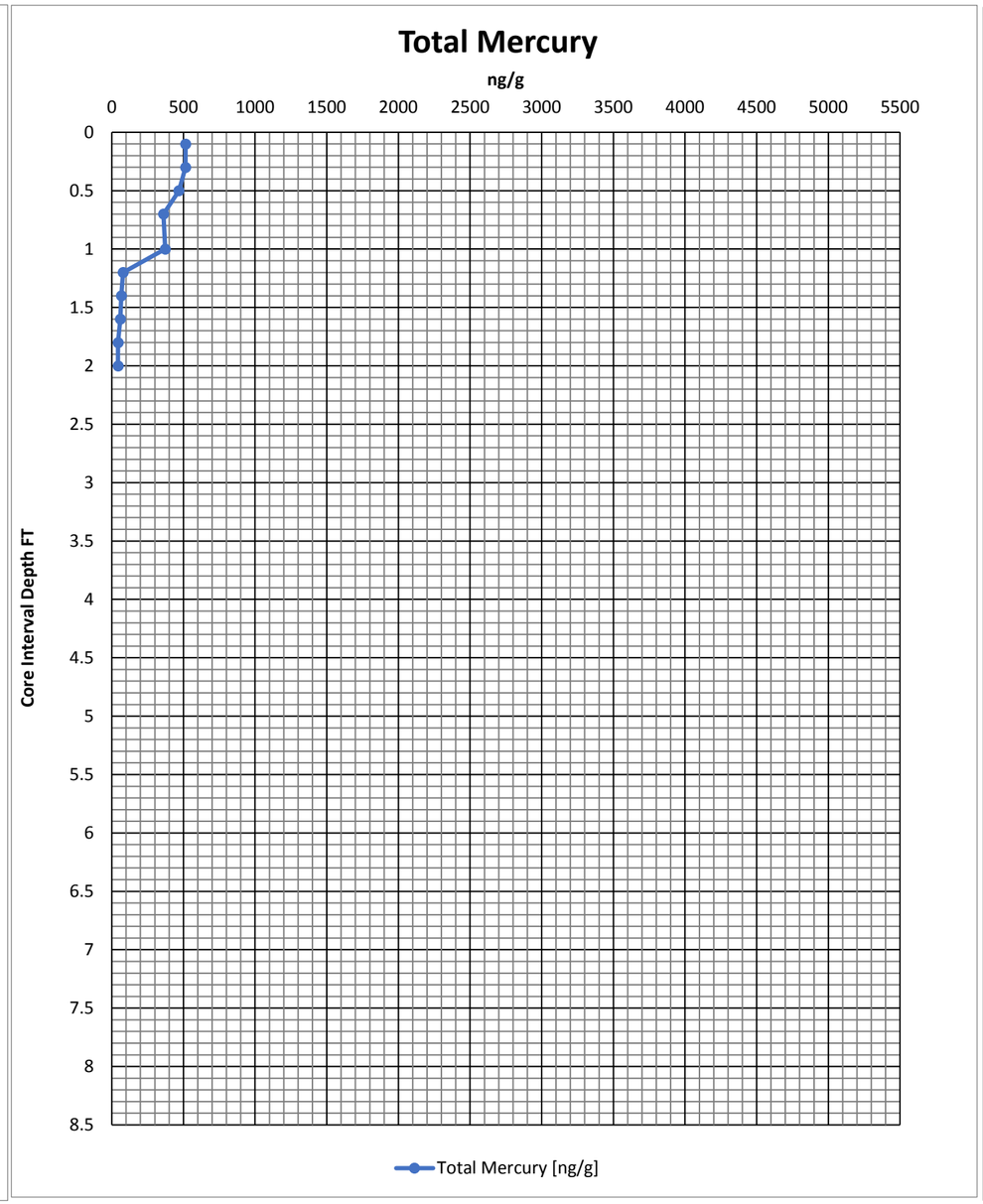


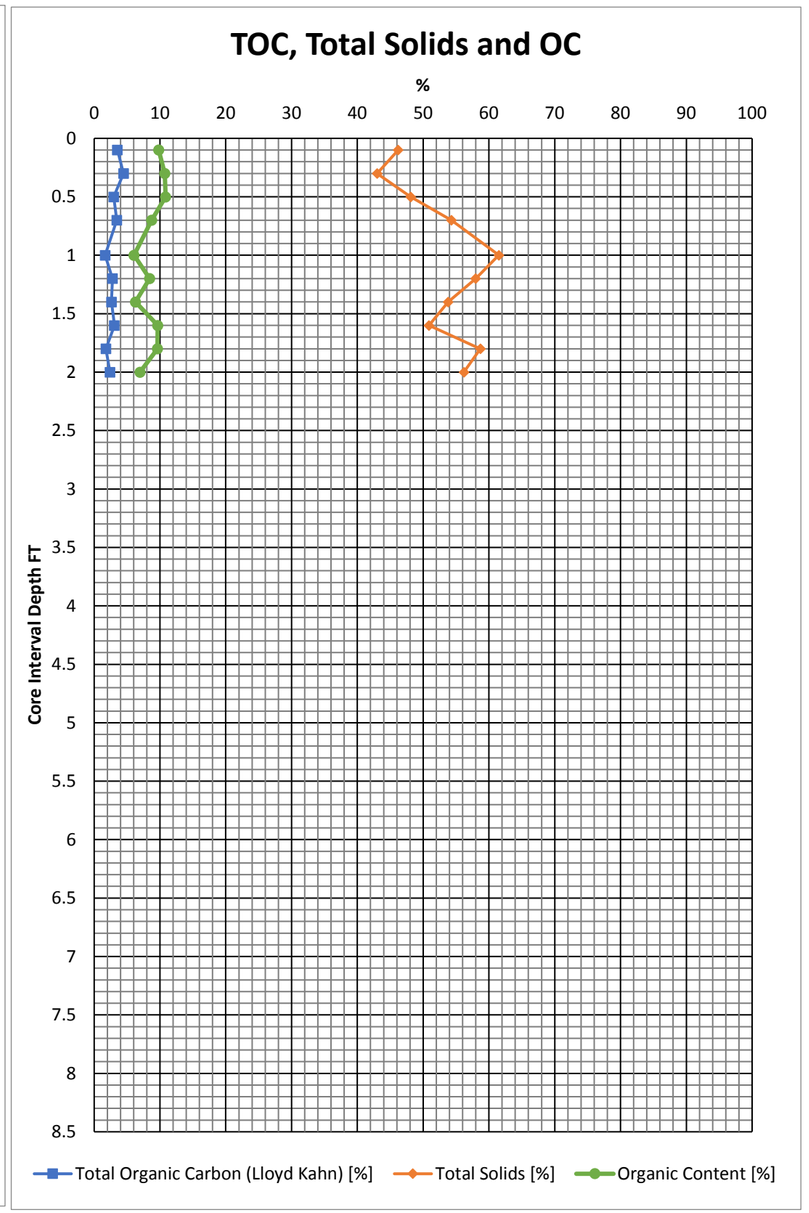


TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

Figure A.3-52
Station ID: VW-14-01
Core ID: VW-14-01-E
Core Designation: Consolidated







TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

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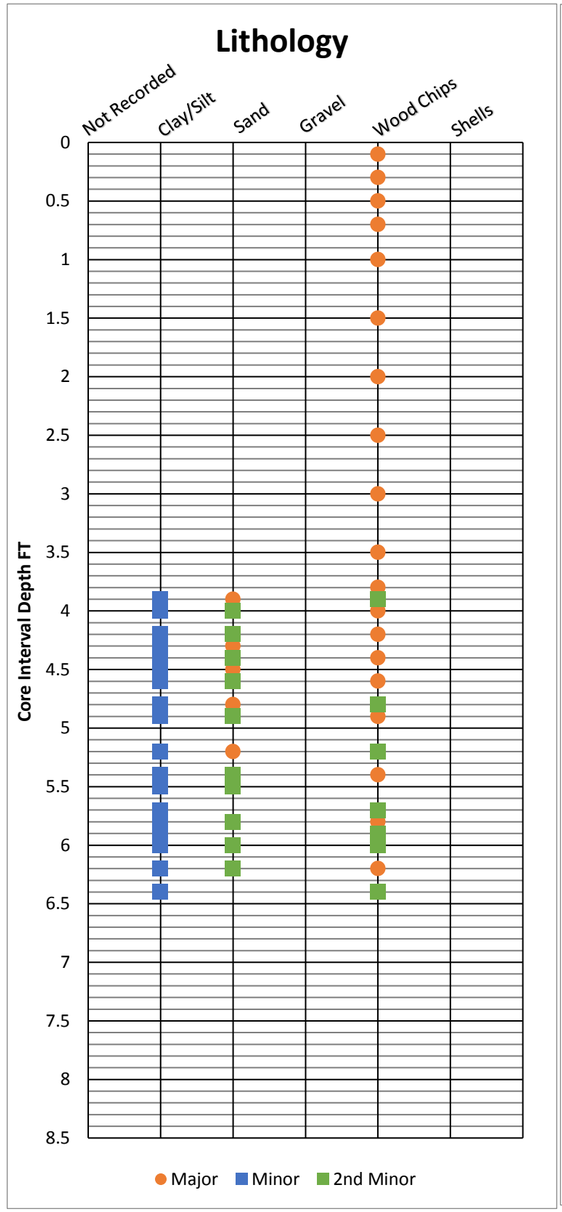
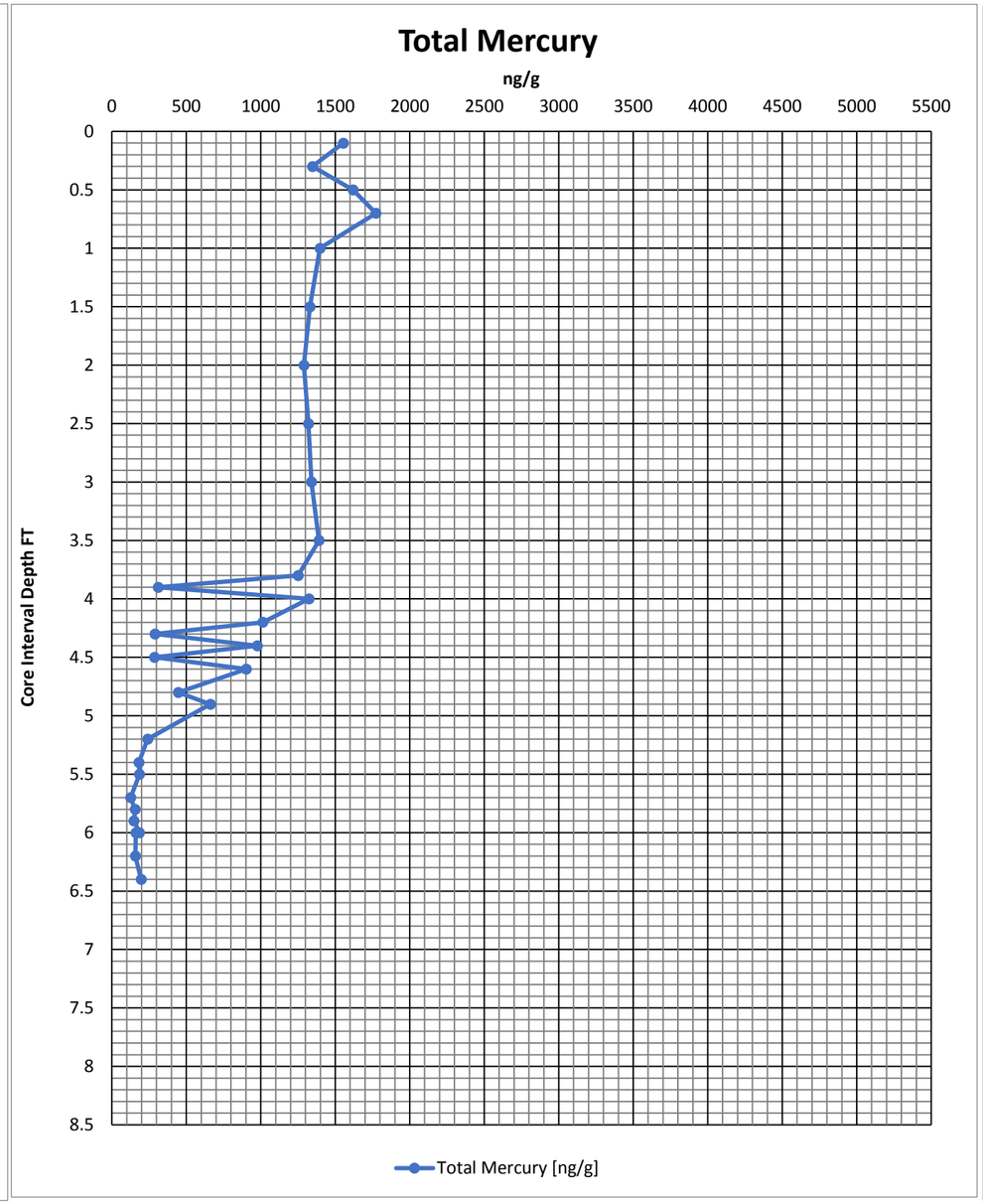
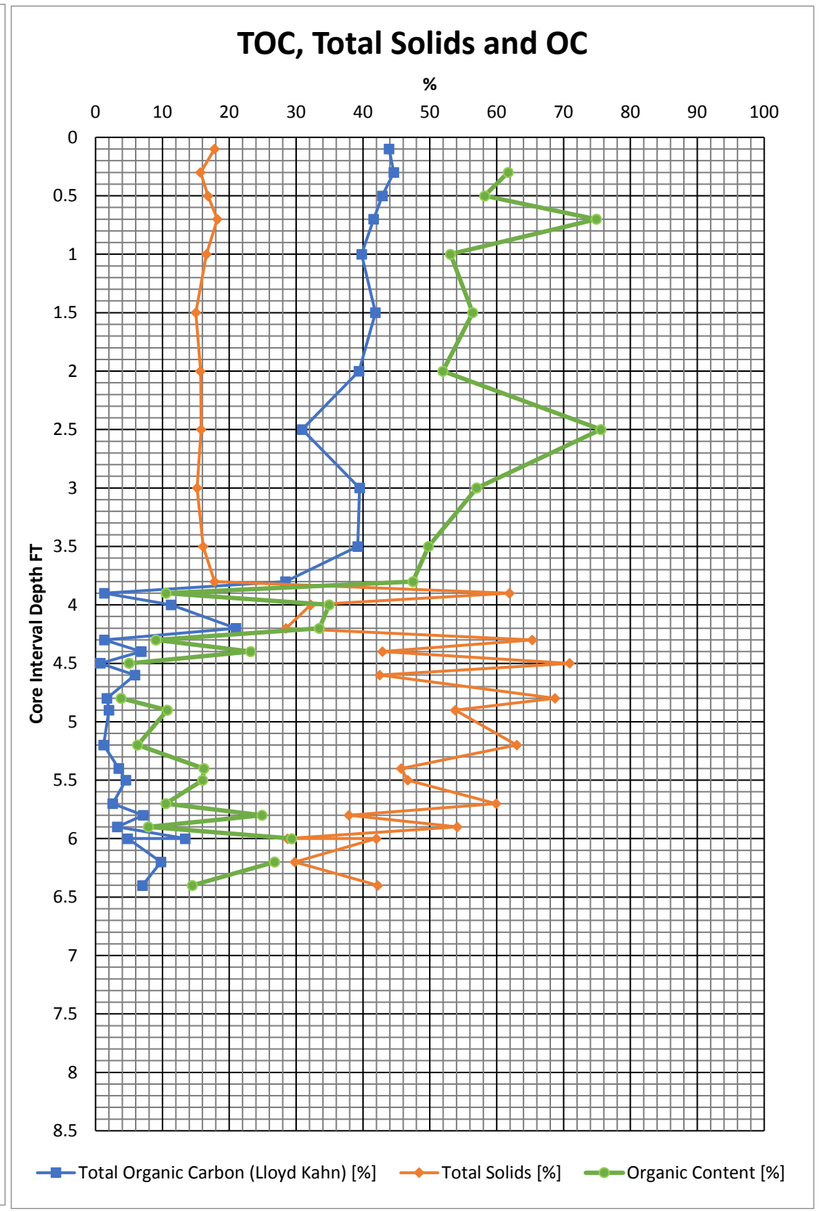
Figure A.3-53
Station ID: VE-05-01
Core ID: VE-05-01-E
Core Designation: Consolidated







TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

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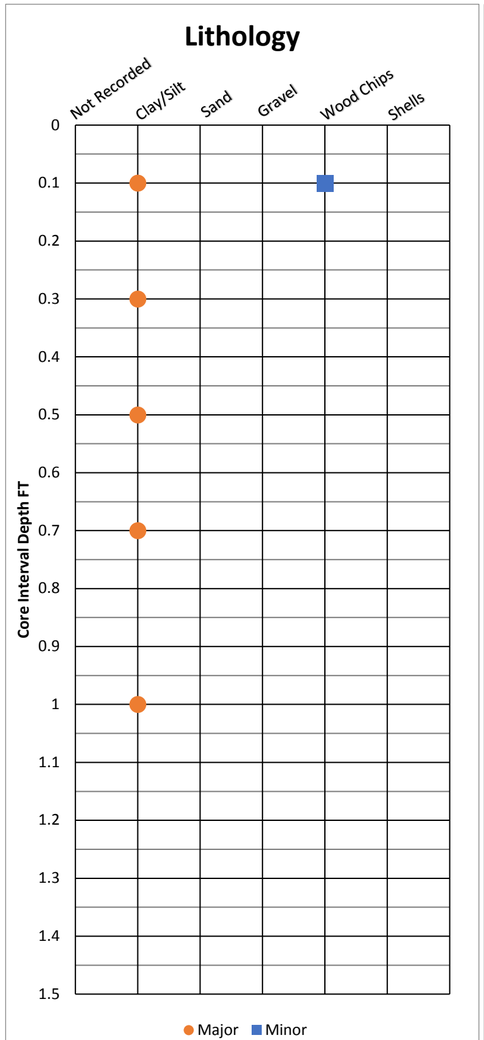
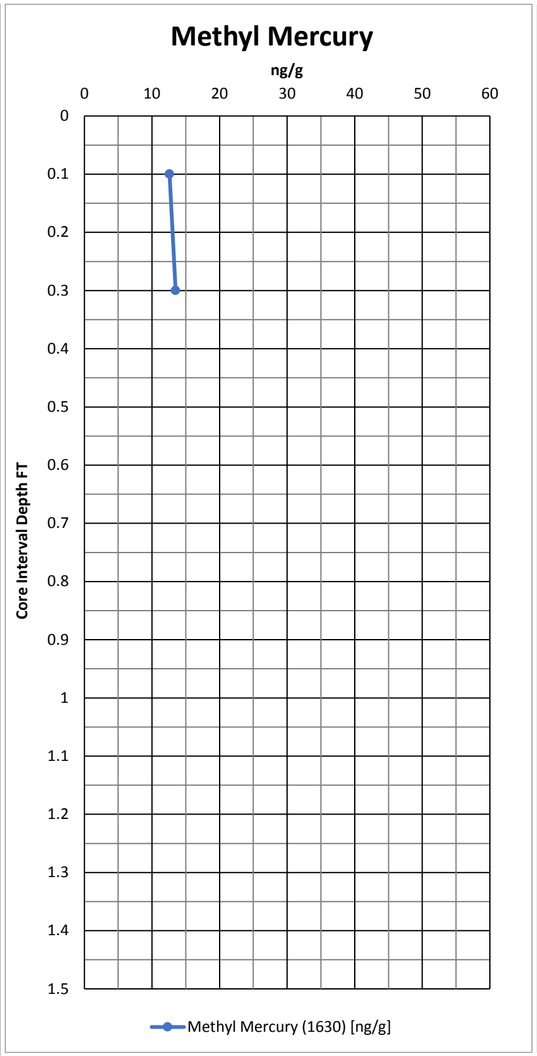
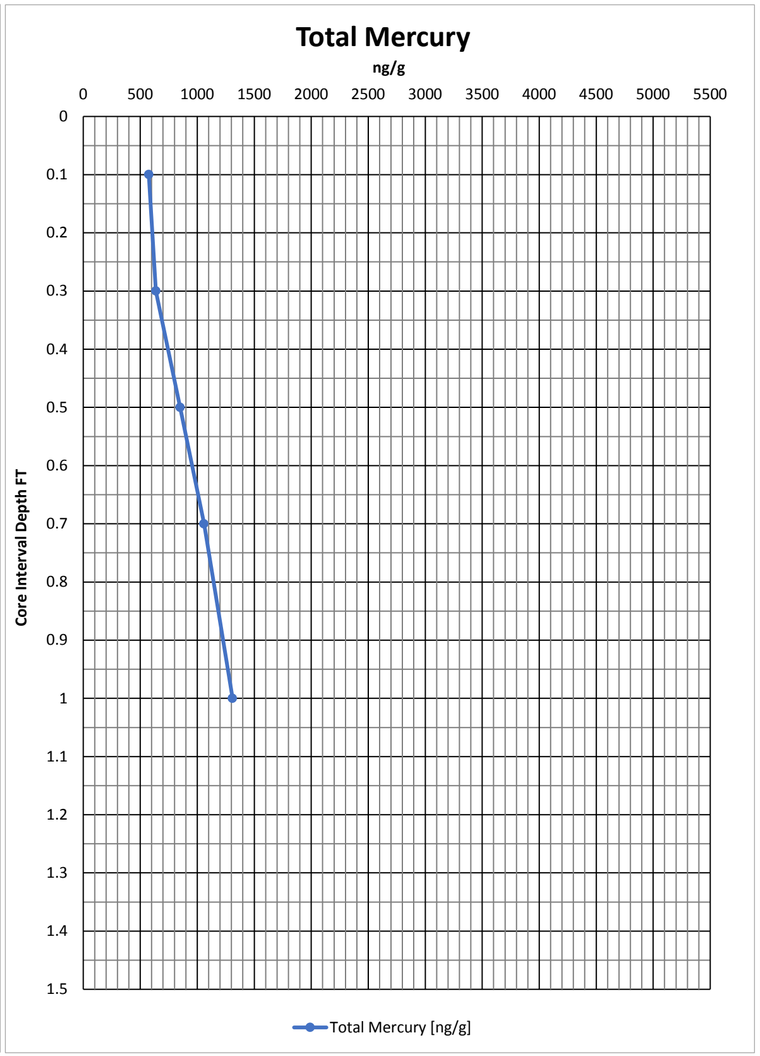
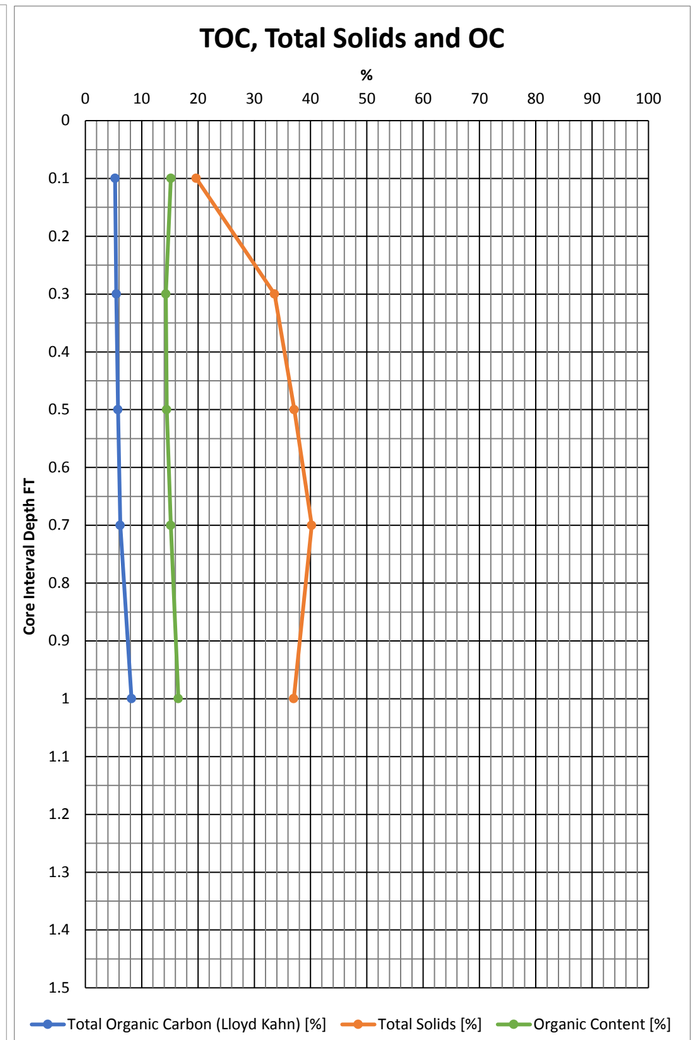
Figure A.3-54
Station ID: VE-09-01
Core ID: VE-09-01-E
Core Designation: Unconsolidated



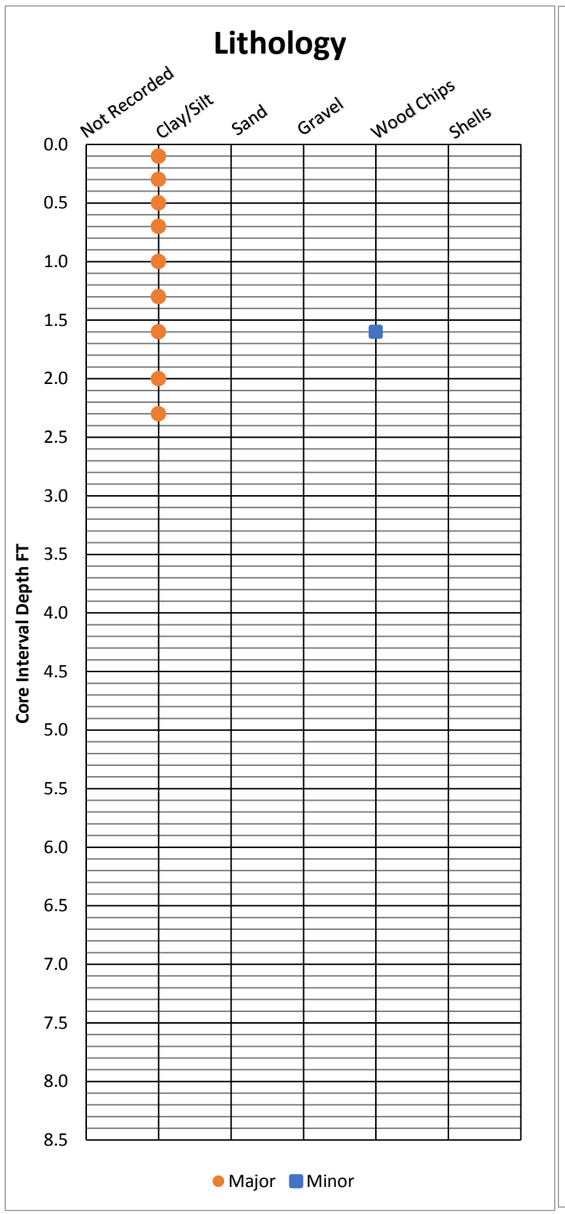


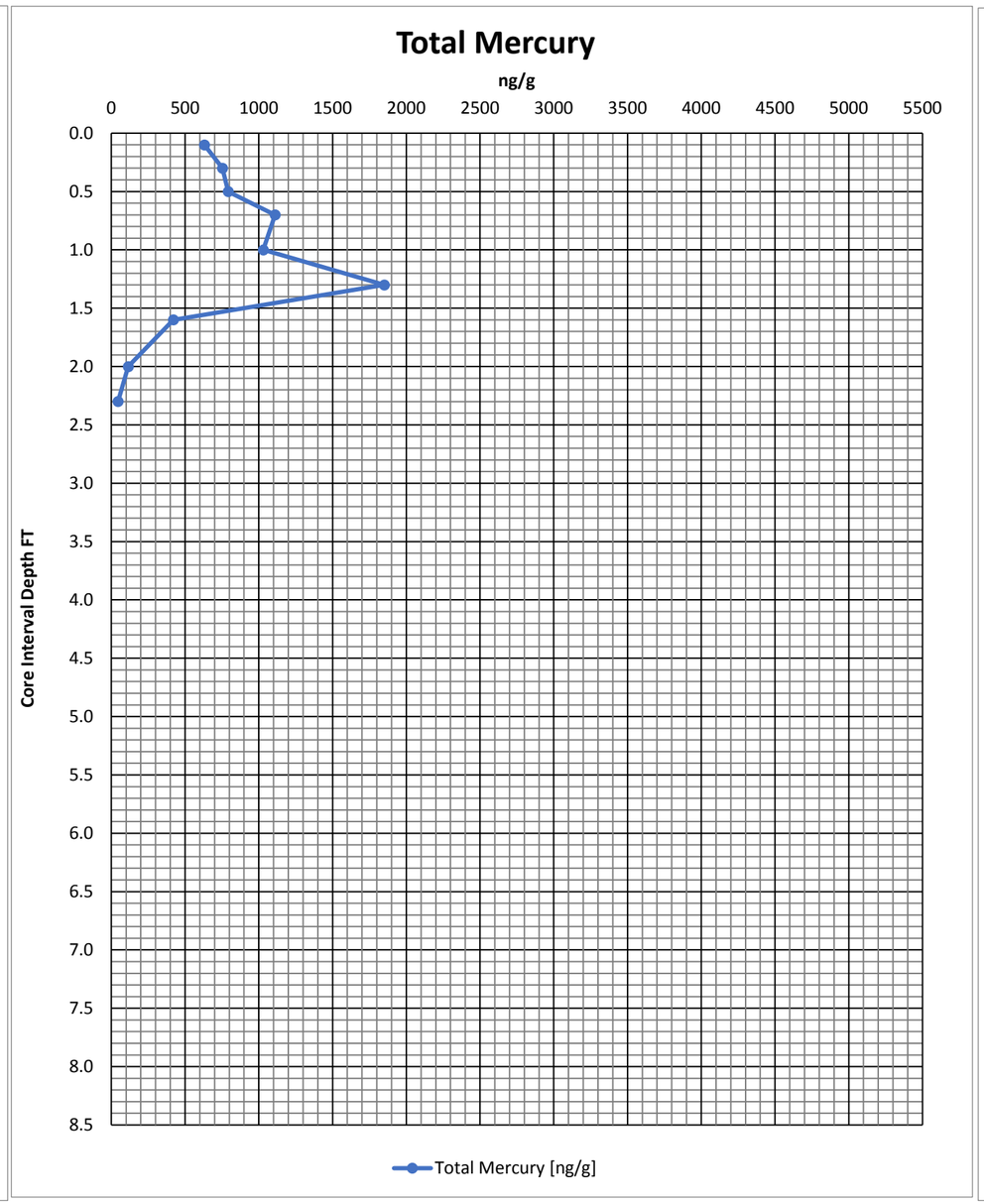


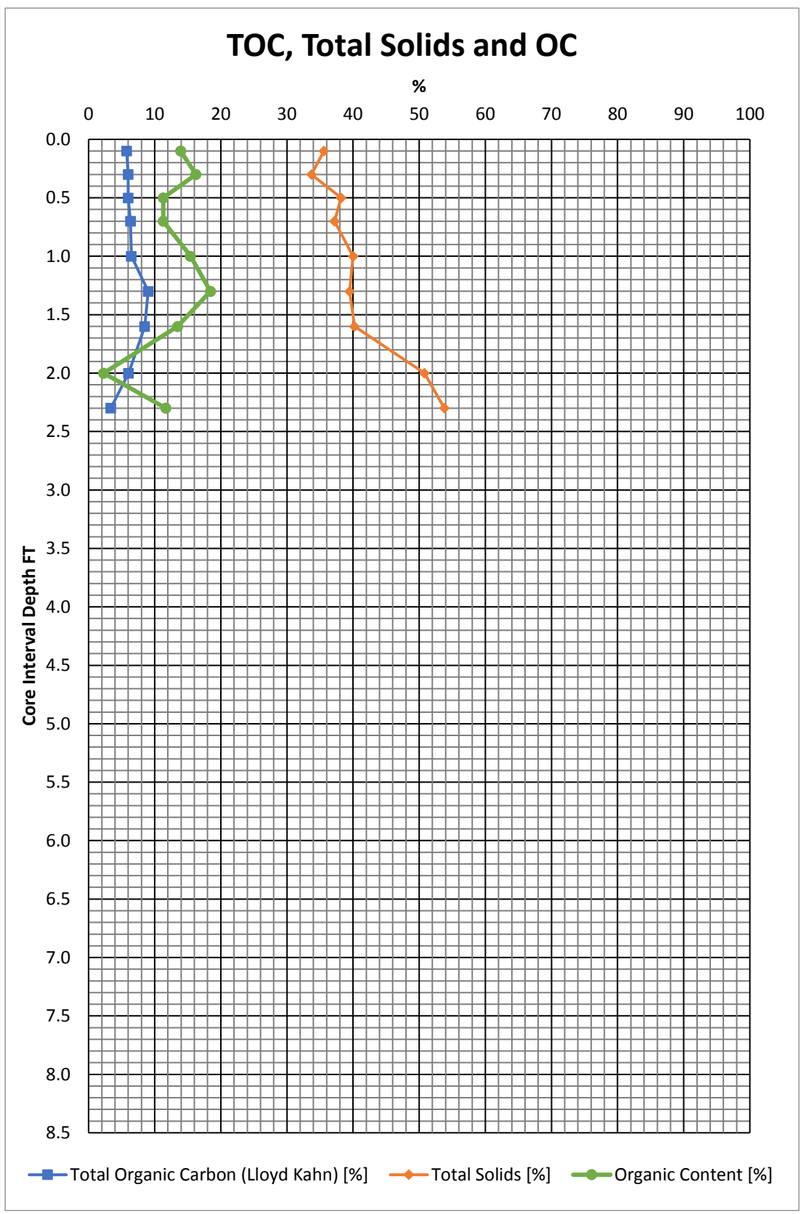


TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

Figure A.3-55
Station ID: VE-09-01
Core ID: VE-09-01-B
Core Designation: Consolidated



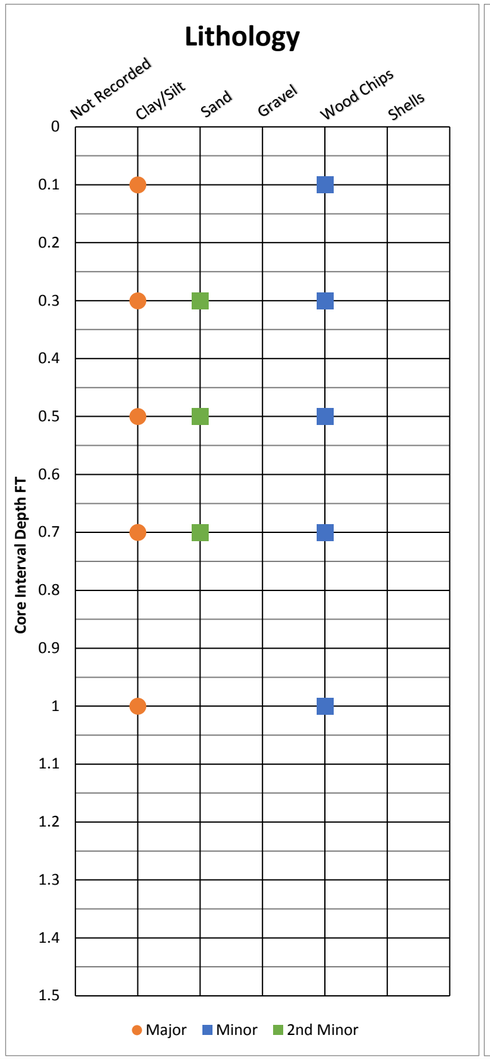


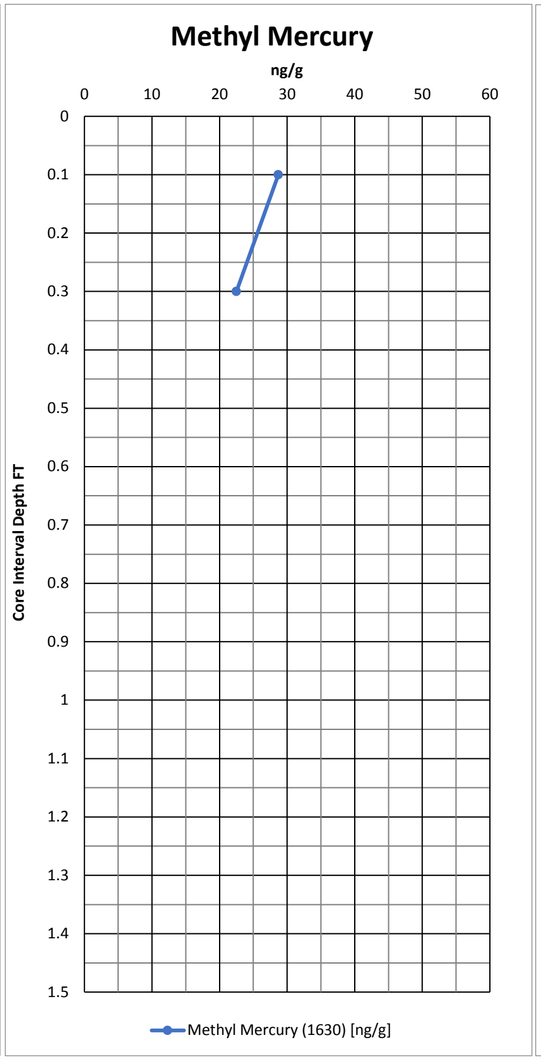


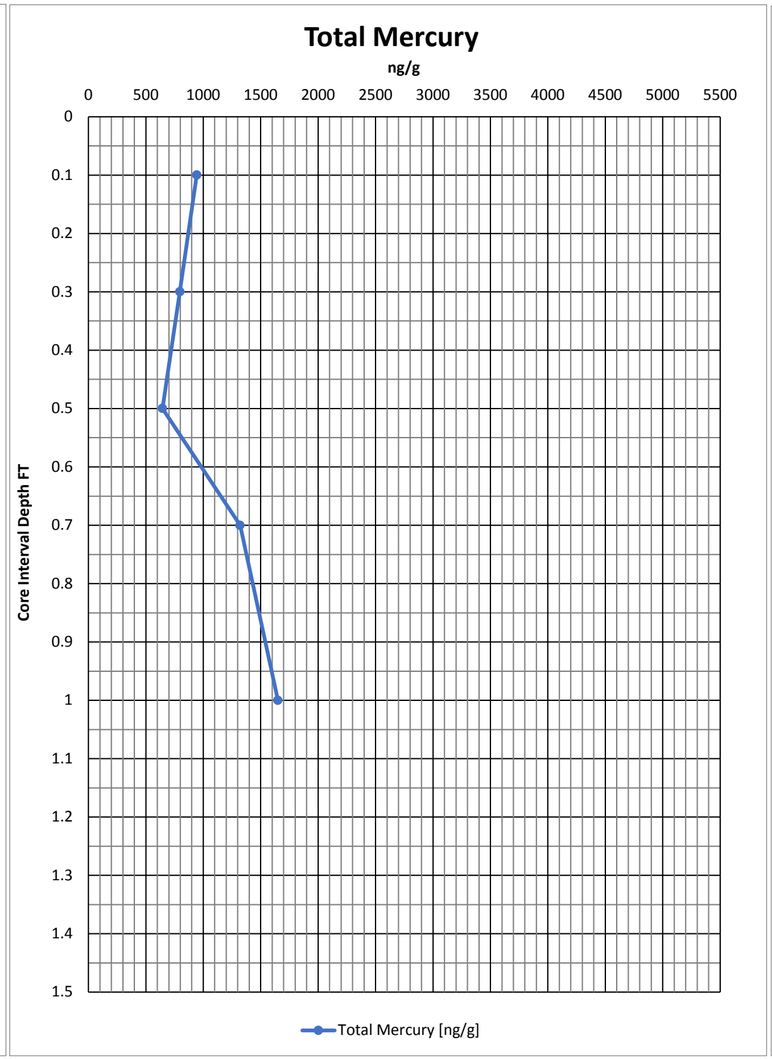
TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

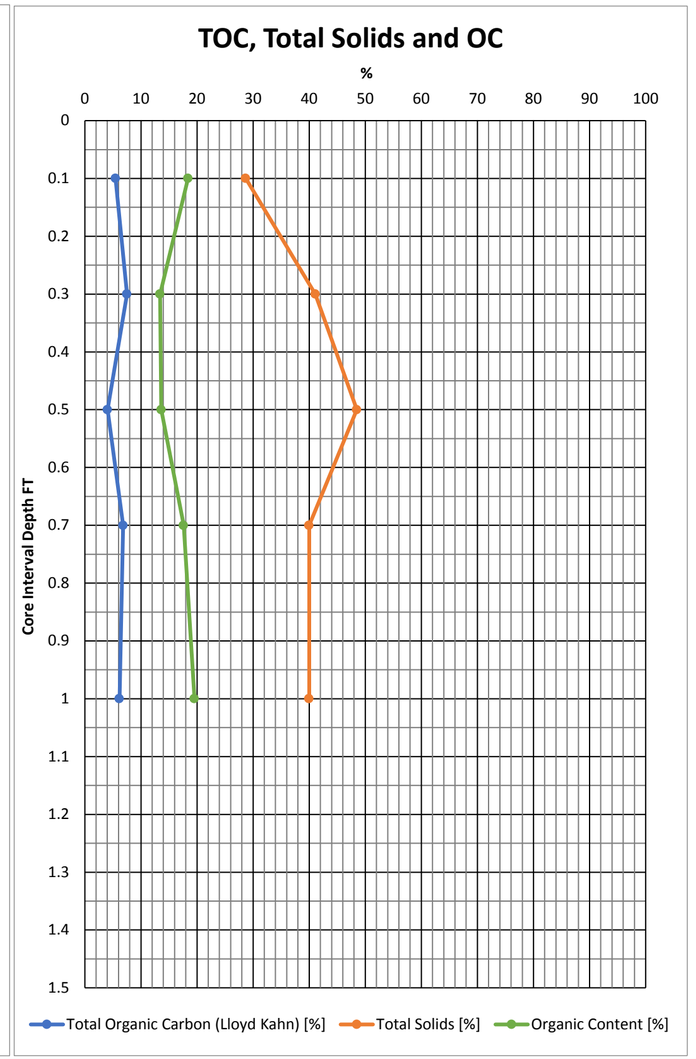
Issued: 5/17/2018 at 1:49 PM

Figure A.3-56
Station ID: VE-10-01
Core ID: VE-10-01-E
Core Designation: Unconsolidated





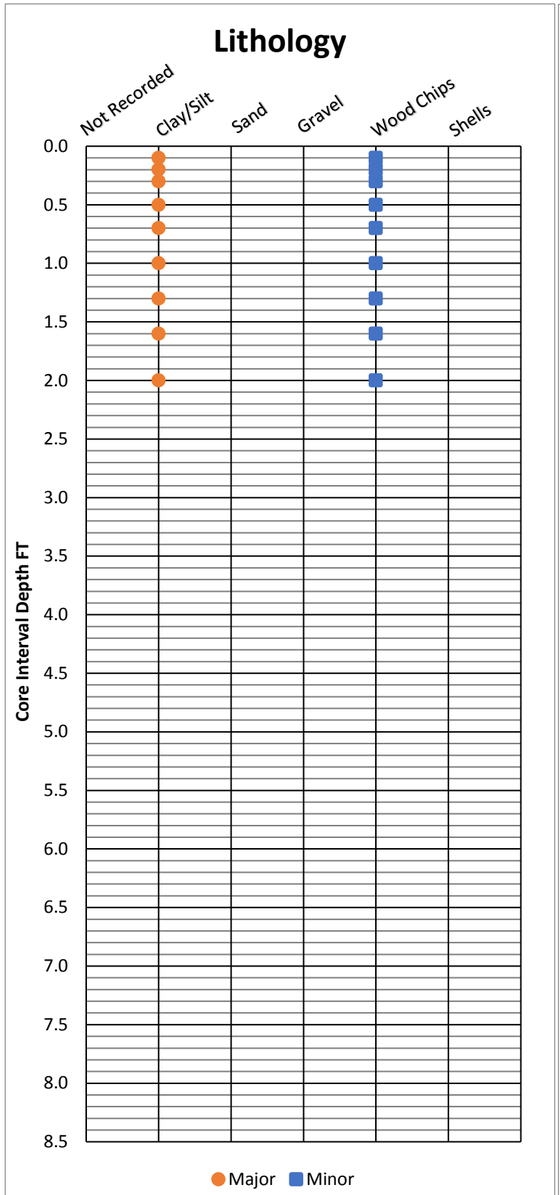


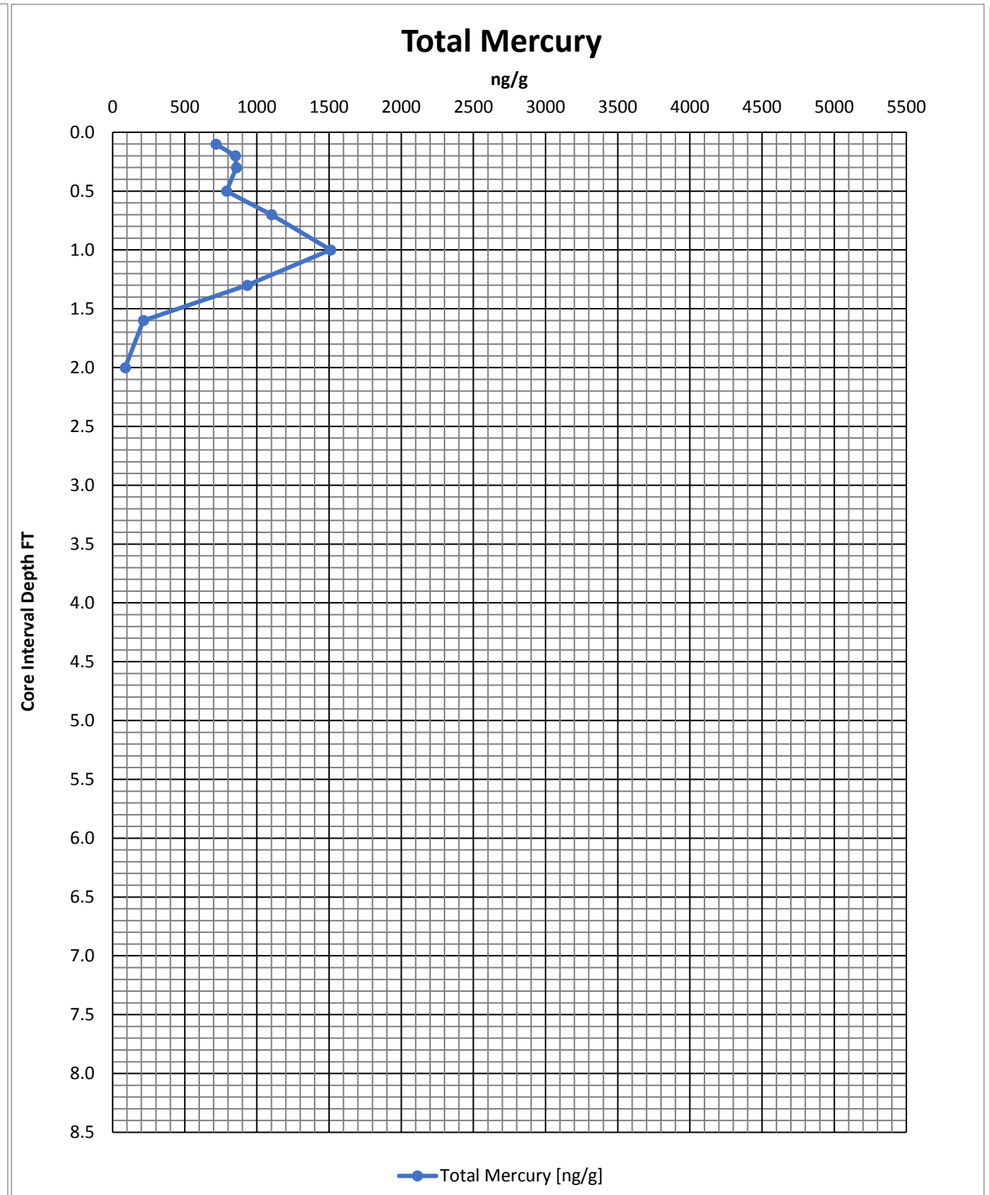


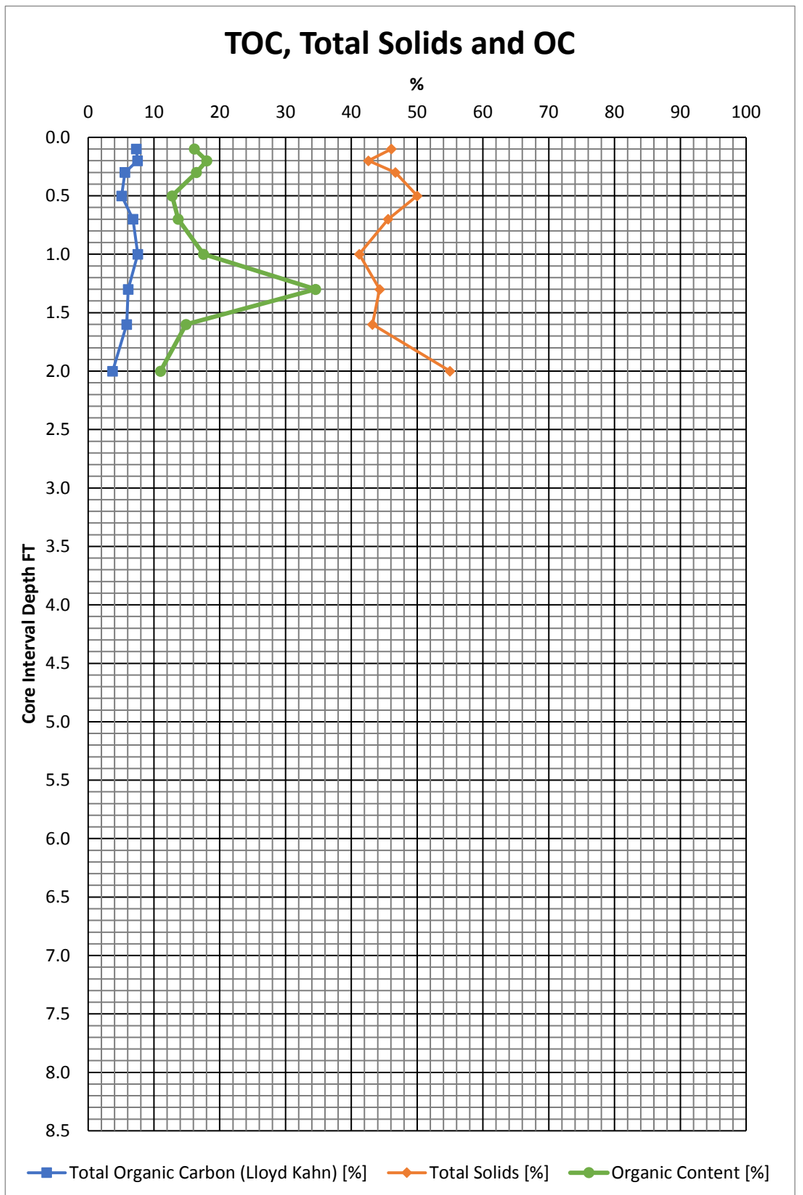
TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

Penobscot River Phase III Engineering Study
Penobscot River Estuary
Project no.: 3616166052

Figure A.3-57
Station ID: VE-10-01
Core ID: VE-10-01-C
Core Designation: Consolidated







TED Pull Date	1/15/2018	By	B. Colby-George
Data Entered	1/17/2018	By	K.Casey
Data Graphed	1/17/2018	By	K. Casey

Issued: 5/17/2018 at 1:49 PM

APPENDIX B

SEDIMENT GRAB SAMPLING METHODS AND FIELD DATA RECORDS

APPENDIX B-1

SEDIMENT GRAB SAMPLE COLLECTION AND PROCESSING METHODS

1.0 SURFACE GRAB SAMPLING METHODS

The procedures for collecting surface sediment grab samples with a ponar dredge, as well as the sample mixing and homogenization, were completed following the guidelines established in SOP S-6 Sediment Sampling. A ponar dredge is a heavyweight sediment sampling device with weighted jaws that are activated with a lever or spring. The ponar dredge was used to collect consolidated fine- to coarse-textured sediment to a depth approximately 0.3 feet below the mudline or sediment-water interface.

Station locations for surface grab sampling were based on review of intertidal and subtidal data collected to date in the Estuary. Based on that data review, selected management units were selected for sampling to improve spatial characterization. All equipment was decontaminated prior to use following the procedures presented in SOP S-17 Decontamination of Field Equipment. A new pair of nitrile gloves were worn by the sampling crew at each sampling location and coordinates were recorded on field data records (FDRs). Once the ponar dredge was deployed and retrieved, the sediment collected was transferred from the ponar dredge to a 2-gallon sterile plastic bucket. The sediment collected was visually characterized following the guidelines established in SOP S-7 Procedure for Description and Identification of Soils and recorded on FDRs. The Munsell color system (Firm 1975) and United States Department of Agriculture (USDA) soil classification system (Soil Survey Staff 2017) were referenced for additional color and texture characterization.

Surface grab samples were stored at the field station in a temperature-controlled refrigeration unit. Before submittal for laboratory analysis, sediment was homogenized by mixing with a stainless-steel drill bit or spoon for 3 minutes per gallon of sediment collected. Homogenized sediment was then aliquoted and placed in laboratory-provided sample jars. The surface grab samples were recorded following chain of custody protocol and sent to analytical laboratories by laboratory courier or by overnight shipment.

Sediment samples designated for chemical analysis were sent to Eurofins Frontier Global Sciences and Alpha Analytical Laboratories. Samples were analyzed for total mercury (Eurofins) by EPA method 1631 (Eurofins), total organic carbon by Lloyd Kahn method (Alpha Analytical), and total solids by ASTM 2540G (Alpha Analytical). Samples analyzed for organic content by ASTM D2974-C at 550^{o}C (ASTM 2013) were sent to the Amec Foster Wheeler Durham, NC, Sediment Laboratory.

2.0 FIELD DATA RECORDS

Station details, conditions, and observations were recorded on field data records and are presented in **Appendix B-2**.

3.0 REFERENCES

American Society for Testing and Materials (ASTM), 2013. Standard Test Methods for Moisture, Ash, and Organic matter of Peat and Other Organic Soils (ASTM Designation: D2974-13), ASTM International, West Conshohocken, Pennsylvania.

Munsell Color (Firm), 1975. *Munsell soil color charts*. Baltimore, MD: Munsell Color.

Soil Survey Staff. 2017. Web Soil Survey. Natural Resources Conservation Service, U.S. Department of Agriculture. http://websoilsurvey.nrcs.usda.gov.

APPENDIX B-2

SEDIMENT GRAB SAMPLE FIELD DATA RECORDS

Penobscot River Mercury Study - Phase III Engineering Study

02

SEDIMENT GRAB LOG

BU-08-01 BW

Owner: USDC, District of Maine	Project No.: 3616166052	Plan Volume: 16oz	Logger: M. MARTIN
Sub: ~~AquaSurvey~~ BW	WO: 70	Deploy No.: 3	Crew: TNG/JRC
Tablet #: —	Date: 09/11/2017	Time: 1350	Vessel: RV PAMOLA II

Coordinates: Lat — Long —

Location ID (GPS Point Name): BU-08-~~01~~ 02 KMC Sample Name: ~~BU-08-02~~ BU-08-02_091217_SED_03

Sub-tidal Location? Y (N)

Weather:	Winds: CALM	Waters: CALM	Traffic:	Water Temp: —°F

Measured Water Depth (ft.):	—
Correction to NAVD88 (+/- ft. from NAVD88):	—
Mudline (Corrected Depth) @ NAVD88:	—
Study Depth (-NAVD88):	—

Conditions: K. Casey 12/12/2017

All Recovered Quantities are in Percent

Deployment #	Recovery	Description	Sample ID
1	60%	Black, SILT, TRACE FINE SAND, 10YR 2/1	
2	40%	Black, SILT, TRACE FINE SAND 10YR 2/1	
3	75%	10YR 2/1, SILT, TRACE FINE SAND, TRACE GRAVEL	
4	20%	10YR 2/1, SILT, TRACE FINE SAND, NON COH NON PLAS	

LOC ID: BU-08-02

LATITUDE: 44.584026
LONGITUDE: -68.809732

K. Casey 12/28/2017

Number of containers and estimated amount:	—	3/4G	—	—	Grab Equipment
Type of container:	5-gal Bucket	2-gal Bucket	1-gal Bag	Other	Sampler Type: P. PONAR
					Capacity: —

Live Organisms Present	Y (N)
Oil-Like Present	Y (N)
Odor Present	Y (N)
Debris Present	Y (N)

Comments

- Area Was NOT ~~NOT~~ STRATIFIED IN PONARS MM

Photo Numbers

K. Casey 12/28/2017

Aboard Vessel Information Recorded by (F. Last; date):	M. MARTIN / 09/11/2017
Landside Information Recorded by (F. Last; date):	—
Clarifying Infromation Recoreded by (F. Last; date):	K. Casey 12/28/2017

Checked By (F. Last; date): B. Weyer 12/29/17

amec foster wheeler

Penobscot River Mercury Study - Phase III Engineering Study

SEDIMENT GRAB LOG

BH-01-01

Owner: USDC, District of Maine	Project No.: 3616166052	Plan Volume: 16 oz	Logger: M. Martin
Sub: ~~AquaSurvey~~ KE	WO: 4A-070	Deploy No.: 3	Crew: K. Casey
Tablet #: iPhone	Date: 08/19/2017	Time: 10:55	Vessel: RV Pamola II
Coordinates: Lat —	Long —		
Location ID (GPS Point Name): BH-01-01	Sample Name: —		Sub-tidal Location? Y (N)
Weather: 64° Cloudy	Winds: N/4 mph	Waters: Calm	Traffic: None	Water Temp: 59 °F

Measured Water Depth (ft.):	—
Correction to NAVD88 (+/- ft. from NAVD88):	—
Mudline (Corrected Depth) @ NAVD88:	—
Study Depth (-NAVD88):	—

Conditions: Sign stated not to enter cove also near osprey nest

All Recovered Quantities are in Percent

Deployment #	Recovery	Description	Sample ID

K. Casey 12/28/2017

Number of containers and estimated amount:	—	—	—	—
Type of container:	5-gal Bucket	2-gal Bucket	1-gal Bag	Other

Grab Equipment
Sampler Type: Petite Ponar
Capacity: 8 cm from the hinge

Live Organisms Present	Y	N
Oil-Like Present	Y	N
Odor Present	Y	N
Debris Present	Y	N

Photo Numbers

K. Casey 12/28/2017

Comments

Did not enter cove per call with Corry Platt

Aboard Note Taker: K. Casey; 08/19/2017
Clarifying Information Recorded by (F. Last; Date): K. Casey 12/28/2017

	Initials	Date
Prepared by:	—	—
Checked by:	B. WEYER	12/29/17

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Penobscot River Mercury Study - Phase III Engineering Study

SEDIMENT GRAB LOG

VN-10-02

Owner: USDC, District of Maine	Project No.: 3616166052	Plan Volume: 16 oz	Logger: M. Martin
Sub: ~~AquaSurvey~~ KC	WO: 4A-70	Deploy No.: 3	Crew: K. Casey
Tablet #: iPhone	Date: 08/19/17	Time: 0850	Vessel: RV Panola 2

Coordinates: Lat ~~44.567771801°~~ KMC Long ~~-68.773893130~~ KMC

Location ID (GPS Point Name): VN-10-02 Sample Name: VN-10-02_08192017_SED_03

Sub-tidal Location? Y (N)

Weather	Winds	Waters	Traffic	Water Temp
60's Fog	Calm	Calm	None	59 °F

Measured Water Depth (ft.):	7.3'
~~Tidal correction to OFF MLLW~~ Correction to NAVD88 (+/- ft. from NAVD88):	+10.7'
Mudline (Corrected Depth) @ ~~NAVD88~~ MLLW:	+3.4'
Study Depth ~~(-NAVD88)~~ MLLW:	+3.2'

Conditions: —

LOC ID: VN-10-02

LATITUDE: 44.567709
LONGITUDE: -68.773893

All Recovered Quantities are in Percent

Deployment #	Recovery	Description	Depth (cm) Sample ID
1	50%	10YR 4/2, silt, Non-cohesive, no plasticity	0-2cm
		10YR 2/1, silt, Non-cohesive, no plasticity, worm	1-2cm
2	50%	10YR 4/2, silt, Non-cohesive, no plasticity	0-1cm
		10YR 2/1, Silt, Non-cohesive, no plasticity	1-2cm
3	80%	10YR 4/2, silt, non-cohesive, no plasticity, roots	0-1cm
		10YR 2/1, silt, non-cohesive, no plasticity, roots	1-3cm

K. Casey 12/28/2017

Number of containers and estimated amount:	—	~1 gallon	—	—	Grab Equipment
Type of container:	5-gal Bucket	2-gal Bucket	1-gal Bag	Other	Sampler Type: Petite Ponar
					Capacity:

Live Organisms Present	(Y) N
Oil-Like Present	Y (N)
Odor Present	Y (N)
Debris Present	Y (N)

Photo Numbers

K. Casey 12/28/2017

Comments

worm

Samples: VN-10-02_08192017_SED_03 for Total Hg (Eurofins), TOC Lloyd-Khan (Alpha), and ASTM D2974@550°C (Amec FW - Durham)

Aboard Note Taker: K. Casey; 08/19/2017
Clarifying Information Recorded by: K. Casey 12/28/17

	Initials	Date
Prepared by:	~~KMC~~	
Checked by:	B. WEYER	12/29/17

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Penobscot River Mercury Study - Phase III Engineering Study

SEDIMENT GRAB LOG

ON-21-01

Owner: USDC, District of Maine	Project No.: 3616166052	Plan Volume: 16 oz	Logger: M. Martin
Sub: ~~AquaSurvey~~	WO: 4A-70	Deploy No.: 3	Crew: K. Casey
Tablet #: —	Date: 08/18/17	Time: 1310	Vessel: RV Pamola

Coordinates: **Lat** — **Long** —

Location ID (GPS Point Name): ON-21-01 Sample Name: ON-21-01_08192017_SED_03 Sub-tidal Location? (Y) N

Weather:	Winds:	Waters:	Traffic:	Water Temp:
Cloudy 60's	Calm	Calm	N/A	— °F

Measured Water Depth (ft.):	-12 FT
Tidal Correction to 0ft MLLW; Correction to ~~NAVD88 (+/- ft. from NAVD88)~~:	+2.0'
Mudline (Corrected Depth) @ ~~NAVD88~~: MLLW	-10.0'
Study Depth (~~NAVD88~~): MLLW	-10.1'

Conditions: —

LOC ID: ON-21-01

LATITUDE: 44.681813
LONGITUDE: -68.817441

All Recovered Quantities are in Percent

Deployment #	Recovery	Description	Sample ID
1	5%.	Cobble	
2	0%.	Clipped BUT only water	
3	10%.	or 10YR 5/2, Silt with ~~some~~ F-N sand, ↓ No Odor / Non plas / No odor / No organics / No wet	
4	0%.	No Recovery	
		K. Casey 12/28/2017	

Number of containers and estimated amount:	—	>1/4s	—	—	Grab Equipment
Type of container:	5-gal Bucket	2-gal Bucket	1-gal Bag	Other	Sampler Type: Petite ponar
					Capacity: —

Live Organisms Present	Y ~~N~~
Oil-Like Present	Y ~~N~~
Odor Present	Y ~~N~~
Debris Present	Y ~~N~~

Photo Numbers

K. Casey 12/28/2017

Comments

Samples: ON-21-01_08192017_SED_03 for Total Hg (Eurofins), TOC Lloyd-Khan (Alpha), and ASTM D2974 @ 550°C (AmecFw-Durham)

Clarifying Information Recorded by: K. Casey 12/28/2017

	Initials	Date
Prepared by:	MRM	08/18/17
Checked by:		

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Penobscot River Mercury Study - Phase III Engineering Study

SEDIMENT GRAB LOG

ON-22-01

Owner: USDC, District of Maine	Project No.: 3616166052	Plan Volume: 16oz.	Logger: M. [illegible]
Sub: ~~AquaSurvey~~	WO: 4A-70	Deploy No.: 3	Crew: K. Casey
Tablet #: N/A	Date: 08/18/17	Time: 1246	Vessel: RV Pomola

Coordinates: Lat — Long —

Location ID (GPS Point Name): ON-22-01 Sample Name: ON-22-01_08192017_SED_03 Sub-tidal Location? (Y) N

Weather: Rainy 60's	Winds: calm	Waters: calm	Traffic: None	Water Temp: — °F

Measured Water Depth (ft.):	16'
Tidal correction to 0 ft MLLW (ft) ~~Correction to NAVD88 (+/- ft. from NAVD88)~~:	+2.2'
Mudline (Corrected Depth) @ MLLW ~~NAVD88~~:	-13.8'
Study Depth (MLLW ~~-NAVD88~~):	-14.1'

Conditions: ~~K. Casey 12/28/2017~~

LOC ID: ON-22-01
LATITUDE: 44.686306
LONGITUDE: -68.822835

All Recovered Quantities are in Percent

Deployment #	Recovery	Description	Sample ID
1	100%	0-1 cm 10YR 6/4, Silt, 100% S, None plas, None cohesive, No odor	
	1-3cm	No organism, trace WCH on surface 1- 10YR 6/4, Silt, 100% ST, None p.a.s, None coh, No WCH,	
	2.5cm		
	3cm	10YR 3/2 Silt, 100%, No plas, Non coh, No odor, No organisms, No WCH,	
		~~K. Casey 12/28/2017~~	

Number of containers and estimated amount:	—	~1g	—	—
Type of container:	5-gal Bucket	(2-gal Bucket)	1-gal Bag	Other

Grab Equipment
Sampler Type: Pietz Ponar
Capacity: —

Live Organisms Present	Y (N)
Oil-Like Present	Y (N)
Odor Present	Y (N)
Debris Present	(Y) N — WCH

Photo Numbers

~~K. Casey 12/28/2017~~

Comments

Samples: ON-22-01_08192017_SED_03 for Total Hg (Eurofins), TOC Lloyd-Kahn (Alpha), and ASTM D2974 @ 550°C (AmecFW-Durham)

Clarifying Information Recorded by: K. Casey 12/28/17

	Initials	Date
Prepared by:	MKM	08/18/17
Checked by:	B. Weyan	12/29/17

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Penobscot River Mercury Study - Phase III Engineering Study

VN-10-01

SEDIMENT GRAB LOG

Owner: USDC, District of Maine	Project No.: 3616166052	Plan Volume: 16 oz	Logger: M. Martin
Sub: ~~AquaSurvey~~ KC	WO: 4A-070	Deploy No.: 3	Crew: K. Casey
Tablet #: iPhone	Date: 08/19/2017	Time: 09:32	Vessel: RV Pamola II

Coordinates: **Lat** — **Long** —

Location ID (GPS Point Name): VN-10-01 Sample Name: VN-10-01-08192017-SED-03 Sub-tidal Location? Y (N)

Weather	Winds	Waters	Traffic	Water Temp
62° Cloudy	NE 6mph	Calm	None	59 °F

Measured Water Depth (ft.):	8.2'
~~Tidal correction to get in MLLW (ft.):~~ ~~Correction to NAVD88 (+/- ft. from NAVD88):~~	+10.9'
Mudline (Corrected Depth) @ ~~NAVD88~~ MLLW:	+2.7'
Study Depth (~~NAVD88~~ MLLW):	+2.4'

Conditions: —

LOC ID: VN-10-01

LATITUDE: 44.570047
LONGITUDE: -68.785986

All Recovered Quantities are in Percent

Deployment #	Recovery	Description	Sample ID
1	100%	10YR 4/2, silt, non-cohesive, no plasticity, shrimp	0-1cm
		10YR 2/1, silt, non-cohesive, no plasticity, shrimp	1-8 3/8cm

K. Casey 12/28/2017

Number of containers and estimated amount:	—	~3/4 gallon	—	—
Type of container:	5-gal Bucket	2-gal Bucket	1-gal Bag	Other

Grab Equipment
Sampler Type: Petite Ponar
Capacity:

Live Organisms Present	(Y)	N
Oil-Like Present	Y	(N)
Odor Present	Y	(N)
Debris Present	Y	(N)

Photo Numbers Yes K. Casey 12/28/2017

Comments

Moved proposed location moved due to submerged cable line

Samples: VN-10-01-08192017_SED_03 for Total Hg (Eurofins), TOC Lloyd-Khan (Alpha), and ASTM D2974 @550°C (Amec FW-Durham)

Aboard Note Taker: K. Casey; 08/19/2017
Clarifying Information Recorded by: K. Casey 12/28/2017

	Initials	Date
Prepared by:	—	—
Checked by:		

ON-13-01

LOC ID: ON-13-01
LATITUDE: 44.7222597
LONGITUDE: -68.830948

amec foster wheeler

Penobscot River Mercury Study - Phase III Engineering Evaluation

SEDIMENT GRAB LOG

Owner: USDC, District of Maine | Project No. 3616166052 | Logger: KC + MM
Sub: ~~AquaSurvey~~ KC | WO: ~~3 - Geophysical~~ 4A-070 | Crew: AquaSurvey
Date: 08/12/2017 | Time: 8:45 | Vessel: RV Edison
Coordinates: Lat — | Long — | Plan Volume: 16oz
Sampling Station: ON-13-02 / Sample Name: ON-13-01_08192017_SED_03
Weather: 64° Cloudy | Winds: ESE 4 mph | Waters: Calm | Traffic: None | Water Temp: 73° F

Measured Water Depth [NAVD88]:	15.0
~~Tidal Correction to 0ft MLLW (FH)~~ Correction to NAVD88 (+/- ft. from NAVD88):	+0'
Mudline (Corrected Depth) @ NAVD88: MLLW	-15.0'
Study Depth (NAVD88): MLLW	-15.3'

Total Number of Deployments: 5

Conditions: K. Casey 12/28/2017

All Recovered Quantities are in Estimated Gallons

Deployment	Recovery	Description	Sample ID
1	0%	Nothing	
2	80%	← Same	
3	0%	wooden paddle in jaw	
4	0%	Nothing	
5	90%	Silt with Trace Fine Sands; Streaching with 10YR 5/4 in a pred. 10YR 4/1; Non-cohesive; non-plastic; slightly sulfer like odor	

K. Casey 12/28/2017

Number of containers:	1 ~ ½ full	—	—	—	Grab Equipment
Type of container:	2-gal bucket	liner bag	jar	other	Sampler Type: petite ponar
					Capacity:

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

N/A

Comments

Slightly sulfer like
Samples – ON-13-01_08192017_SED_03 = THg 1631 / TOC / 00974 @ 550°C
ON-13-01_08192017_SED_03_DUP = THg 1631

Aboard Boat: K. Casey; 08/12/2017
Clarifying Information Recorded by: K. Casey; 12/28/2017
Checked By: B. Weyer 12/29/17

amec foster wheeler

Penobscot River Mercury Study - Phase III Engineering Study

SEDIMENT GRAB LOG

BH-05-01

Owner: USDC, District of Maine	Project No.: 3616166052	Plan Volume: 16 oz	Logger: M. Martin
Sub: ~~AquaSurvey~~ KC	WO: 4A-070	Deploy No.: 3	Crew: K. Casey
Tablet #: iPhone	Date: 08/19/2017	Time: 11:10	Vessel: R.V. Pamola II

Coordinates: Lat ~~44.56992312°~~ KME Long ~~-68.792139 19°~~ KME

Location ID (GPS Point Name): BH-05-01 Sample Name: BH-05-01_08192017_SED03 Sub-tidal Location? (Y) N

Weather	Winds	Waters	Traffic	Water Temp
64° Cloudy	NE 4 mph	Calm	None	59 °F

Measured Water Depth (ft.): 28.6'

~~Tidal correction to 0 ft MLLW (ft):~~ +8.5'

~~Correction to NAVD88 (+/- ft. from NAVD88):~~

Mudline (Corrected Depth) @ ~~NAVD88~~ MLLW: -20.1'

Study Depth (~~-NAVD88~~) MLLW: -20.2'

Conditions:

K. Casey 12/28/2017

LOC ID: BH-05-01

LATITUDE: 44.569914
LONGITUDE: -68.792139

All Recovered Quantities are in Percent

Deployment #	Recovery	Description	Sample ID
1	10%	10YR 2/1, coarse sand, poorly graded, some gravel, occasional shells	0-3cm
2	5%	2 shells in jaw	retained
3	10%	10YR 5/1, medium gravel, some shells	retained

K. Casey 12/28/2017

Number of containers and estimated amount:	—	~1/4 gallon	—	—
Type of container:	5-gal Bucket	2-gal Bucket	1-gal Bag	Other

Grab Equipment
Sampler Type: Petite Ponar
Capacity: 8cm to hinge

Live Organisms Present	Y	(N)
Oil-Like Present	Y	(N)
Odor Present	Y	(N)
Debris Present	Y	(N)

Photo Numbers

K. Casey 12/28/2017

Comments

Samples - BH-05-01_08192017_SED_03 THg - 1631
TOC and D2974@550°C was not analyzed due to limited quantity

Aboard Note Taker: K. Casey; 08/19/2017
Clarifying Information Recorded by: K. Casey 12/28/17

	Initials	Date
Prepared by:	MKM	08/19/2017
Checked by:	B. WEYER	12/29/17

amec foster wheeler

Penobscot River Mercury Study - Phase III Engineering Study

SEDIMENT GRAB LOG

BH-08-01

Owner: USDC, District of Maine	Project No.: 3616166052	Plan Volume: 16 oz	Logger: M. Martin
Sub: ~~AquaSurvey~~ KC	WO: 70	Deploy No.: 3	Crew: K. Casey
Tablet #: iPhone	Date: 08/19/2017	Time: 09:50	Vessel: RV Pamola II

Coordinates: Lat ~~44.57020241~~ KMC Long ~~-68.78818419~~ KMC

Location ID (GPS Point Name): BH-08-01 Sample Name: BH-08-01_08192017_SED_03 Sub-tidal Location? (Y) N

Weather: 62° Cloudy	Winds: NE 6 mph	Waters: Calm	Traffic: None	Water Temp: 59 °F

Measured Water Depth (ft.):	13.0'
Tidal ~~Addtive~~ Correction to Off MLLW(ft) ~~Correction to NAVD88 (+/- ft. from NAVD88)~~:	+11.0'
Mudline (Corrected Depth) @ MLLW ~~NAVD88~~:	-2.0'
Study Depth (MLLW ~~-NAVD88~~):	-2.3'

Conditions: K. Casey 12/28/2017

LOC ID: BH-08-01
LATITUDE: 44.570193
LONGITUDE: -68.788184

All Recovered Quantities are in Percent

Deployment #	Recovery	Description	Sample ID
1	0%	—	—
2	5%	3 Gravel sized rocks	Not Retained
3	100%	0-4cm 10YR4/2 Silt with coarse sand / 80% silt 20% sand / non plas / non coh / No odor / No organisms	0-4cm
		4-8cm 10YR2/1 silt with coarse sand / 80% silt 20% sand / Non plas / Non coh / No odor / No organisms	4-8cm
		K. Casey 12/28/2017	

Number of containers and estimated amount:	—	1/2 gallon	—	—
Type of container:	5-gal Bucket	2-gal Bucket	1-gal Bag	Other

Grab Equipment
Sampler Type: Petite Ponar
Capacity: —

Live Organisms Present	(Y) N
Oil-Like Present	Y (N)
Odor Present	Y (N)
Debris Present	Y (N)

Photo Numbers

K. Casey 12/28/2017

Comments

Samples:
BH-08-01_08192017_SED_03 = THg 1631 / TOC / D2974 @ 550°C
BH-08-01_08192017_SED_03_MS = 1631
BH-08-01_08192017_SED_03_MD = 1631

Aboard Note Taker: K. Casey, 08/19/2017
Clarifying Information Recorded by: K. Casey 12/28/17

	Initials	Date
Prepared by:	MKM	08192017
Checked by:	B. WEYER	12/29/17

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Penobscot River Mercury Study - Phase III Engineering Study

WP-05-01

SEDIMENT GRAB LOG

Owner: USDC, District of Maine	Project No.: 3616166052	Plan Volume: 1602	Logger: Matt Martin
Sub: ~~AquaSurvey~~	WO: 4A-70	Deploy No.: 3	Crew: Karina Casey
Tablet #: —	Date: 08/18/17	Time: 1400	Vessel: RV Pamola II

Coordinates: Lat — Long —

Location ID (GPS Point Name): WP-05-01 Sample Name: — Sub-tidal Location? (Y) N

Weather: cloudy 60's	Winds: None	Waters: calm	Traffic: none	Water Temp: — °F

Measured Water Depth (ft.):	-10 ft
Tidal correction to MLLW; ~~Correction to NAVD88 (+/- ft. from NAVD88)~~:	+0.37 ft
Mudline (Corrected Depth) @ MLLW ~~NAVD88~~:	-9.6 ft
Study Depth (MLLW ~~-NAVD88~~):	-9.7 ft

Conditions: ~~K. Casey 12/28/17~~

LOC ID: WP-05-01

LATITUDE: 44.653857
LONGITUDE: -68.826505

All Recovered Quantities are in Percent

Deployment #	Recovery	Description	Sample ID
1	~~0% per~~ 2%	Cobble	
2	0-2cm 5%	Coarse sand, with cobble, No odor, No organisms, poorly graded. 10YR5/2	
3	5%	Cobble with Coarse sand, 10YR5/2 No organisms, No odor, poorly graded	
4	2%	0-1cm 10YR5/4 Silt, Non plas / Non coh. No odor / No organisms	
		1-2cm - 10YR5/1 Silt, Non plas / Non coh No odor / No organisms	

Number of containers and estimated amount:	—	—	—	—	Grab Equipment
Type of container:	5-gal Bucket	2-gal Bucket	(1-gal Bag)	Other	Sampler Type: Pinte Ponar Capacity: —

Live Organisms Present	Y (N)
Oil-Like Present	Y (N)
Odor Present	Y (N)
Debris Present	Y (N)

Photo Numbers

None

Comments

- Not Retained. Low Fines Mostly Cobble

Clarifying Information Recorded by (F. Last, Date): K. Casey 12/28/2017

	Initials	Date
Prepared by:	MKM	08-18-17
Checked by:	B. WEYER	12/29/17

APPENDIX C

GEOTECHNICAL TESTING

APPENDIX C-1

GEOTECHNICAL TESTING METHODS AND RESULTS

1.0 PURPOSE OF GEOTECHNICAL DATA COLLECTION

Sediment samples were collected for geotechnical analysis to assist in evaluation of remediation alternatives including subaqueous thin-layer capping. Testing stations were chosen based on potential consideration of capping alternatives. The following stations were selected for geotechnical analysis:

- ON-18-01
- ON-18-02
- WP-02-01
- WP-06-02
- FF-08-02
- MM-04-01
- BU-08-01
- BU-02-01
- VN-01-01
- VN-02-01
- VN-02-03
- VN-02-04
- VN-08-01
- VE-05-01
- VE-09-01
- VE-10-01
- VW-14-01

One of three replicate cores from each of the above referenced stations was sectioned and analysed for shear strength and wet density. Shear strength was measured with a laboratory miniature vane shear apparatus. Geotechnical testing was performed by Amec Foster Wheeler scientists at the field office. Prior to sectioning and geotechnical testing, cores were maintained in a vertical orientation in refrigerated storage in the Winterport, Maine field office.

2.0 TESTING METHODS

The following describes the procedures for sectioning cores and conducting geotechnical testing:

- Select cores were sectioned into 4-inch samples using a 12-inch compound miter saw.
- Cores was laid horizontally on the prep table for cutting, and each 4-inch segment was measured and cut individually.
- Sections were, at times, greater than 4 inches if there was a visible change in sample quality or if there was insufficient sample remaining for a subsequent 4-inch segment.
- A cap was placed on the exposed end of the core and on the bottom of each sample section.
- Each sample was cut and placed aside until all sections were cut. Only a single core of samples was cut and tested at a time.

- Once testing was complete on all samples from a single vibracore, another vibracore was cut – this process was repeated until all cores were tested.
- Samples were weighed using a gram scale to estimate of the in-situ wet density of the sediment.
- Measurements of each sample were obtained using a measuring tape.
- Weights were tared by weighing the liner section after removing the sample.
- Following weighing, samples were tested using the laboratory miniature vane shear apparatus.
- All tests were performed in accordance with ASTM 4648.
- Testing was performed by inserting a four-bladed vane into an undisturbed sample and rotating the vane at a constant rate to determine the torque required to shear a cylindrical area of the sample.
- Torque was measured by a calibrated spring and converted to an undrained shear strength.
- Select sections of cores were identified for potential further geotechnical testing.
- These sections were shipped to the Durham, NC laboratory via ground transportation; sediment was packaged in general accordance with ASTM D4220.

3.0 TESTING RESULTS

Geotechnical data are presented in **Appendix C-2**. Bearing capacity results are presented in **Appendix C-3**.

4.0 REFERENCES

American Society for Testing and Materials (ASTM), 2016. Standard Test Method for Laboratory Miniature Vane Shear Test for Saturated Fine-Grained Clayey Soil (ASTM Designation: D4648-16), ASTM International, West Conshohocken, Pennsylvania.

American Society for Testing and Materials (ASTM), 2014. Standard Practices for Preserving and Transporting Soil Samples (ASTM Designation: D4220-14), ASTM International, West Conshohocken, Pennsylvania.

APPENDIX C-2

GEOTECHNICAL RESULTS DATA SHEETS

MINI-VANE DATA SHEET

Project Name: Penobscot River Phase III Engineering Study
Project Number: 3616166052.04A.4A072
Technicians: B. Weyer / J. Cozens
Date: 10/17/2017

				PEAK STRENGTH				RESIDUAL STRENGTH				DENSITY MEASUREMENTS				
LINER	ELEVATION	SPRING #	VANE	START DEG	END DEG	TOTAL DEG	PEAK SHEAR STRENGTH (psf)	START DEG	END DEG	TOTAL DEG	RESIDUAL SHEAR STRENGTH (psf)	Ww + TARE (g)	TARE (g)	DIAMETER (IN)	LENGTH (IN)	WET DENSITY (PCF)
VE-09-01-A	0" - 4"	933-1	1 x 1	73	79	6	3.4	-	-	-	-	444.2	48.5	2.5	4.0	76.8
VE-09-01-A	4" - 8"	933-1	1 x 1	62	195	133	74.4	62	83	21	11.7	490.3	34.9	2.5	4.0	88.4
VE-09-01-A	8" - 12"	933-1	1 x 1	65	316	251	140.4	65	95	30	16.8	507.1	36	2.5	4.0	91.4
VE-09-01-A	12" - 16"	933-1	1/2 x 1	65	170	105	268.5	65	87	22	56.2	508.4	36.7	2.5	4.0	91.6
VE-09-01-A	16" - 20"	933-1	1/2 x 1	69	180	111	283.8	69	89	20	51.1	516.4	36.8	2.5	4.0	93.1
VE-09-01-A	20" - 24"	933-1	1/2 x 1	62	211	149	381.0	62	85	23	58.8	556	34.9	2.5	4.0	101.2
VE-09-01-A	24" - 27"	933-1	1/2 x 1	68	181	113	288.9	68	81	13	33.2	458	26.9	2.5	4.0	83.7

MINI-VANE DATA SHEET

Project Name: Penobscot River Phase III Engineering Study
Project Number: 3616166052.04A.4A072
Technicians: B. Weyer / J. Cozens
Date: 10/17/2017

				PEAK STRENGTH				RESIDUAL STRENGTH				DENSITY MEASUREMENTS				
LINER	ELEVATION	SPRING #	VANE	START DEG	END DEG	TOTAL DEG	PEAK SHEAR STRENGTH (psf)	START DEG	END DEG	TOTAL DEG	RESIDUAL SHEAR STRENGTH (psf)	Ww + TARE (g)	TARE (g)	DIAMETER (IN)	LENGTH (IN)	WET DENSITY (PCF)
MM-04-01-D	0" - 4"	933-1	1 x 1	57	176	119	66.5	57	57	0	0.0	462	35.5	2.5	4.0	82.8
MM-04-01-D	4" - 8"	933-1	1 x 1	65	213	148	82.8	65	84	19	10.6	490.1	35.5	2.5	4.0	88.2
MM-04-01-D	8" - 12"	933-1	1 x 1	45	264	219	122.5	45	89	44	24.6	496.1	36.1	2.5	4.0	89.3
MM-04-01-D	12" - 16"	933-1	1/2 x 1	47	99	52	29.1	47	52	5	2.8	494.1	36.2	2.5	4.0	88.9
MM-04-01-D	16" - 20"	933-1	1/2 x 1	45	129	84	47.0	45	56	11	6.2	493.5	35.4	2.5	4.0	88.9
MM-04-01-D	20" - 26"	933-1	1/2 x 1	48	151	103	57.6	48	64	16	8.9	804.4	52.6	2.5	6.0	97.3

MINI-VANE DATA SHEET

Project Name: Penobscot River Phase III Engineering Study
Project Number: 3616166052.04A.4A072
Technicians: B. Weyer / J. Cozens
Date: 10/17/2017

				PEAK STRENGTH				RESIDUAL STRENGTH				DENSITY MEASUREMENTS				
LINER	ELEVATION	SPRING #	VANE	START DEG	END DEG	TOTAL DEG	PEAK SHEAR STRENGTH (psf)	START DEG	END DEG	TOTAL DEG	RESIDUAL SHEAR STRENGTH (psf)	Ww + TARE (g)	TARE (g)	DIAMETER (IN)	LENGTH (IN)	WET DENSITY (PCF)
VN-02-04-E	0" - 4"	933-1	1 x 1	45	100	55	30.8	45	56	11	6.2	481.9	52.89	2.5	4.0	83.3
VN-02-04-E	4" - 8"	933-1	1 x 1	45	175	130	72.7	45	67	22	12.3	501.6	35.9	2.5	4.0	90.4
VN-02-04-E	8" - 12"	933-1	1 x 1	52	-	-	-	-	-	-	-	504.4	35.9	2.5	4.0	90.9
VN-02-04-E	12" - 16"	933-2	1 x 1	357	197	200	192.0	357	16	19	18.2	492.4	36.3	2.5	4.0	88.5
VN-02-04-E	16" - 20"	933-2	1/2 x 1	72	135	63	276.6	72	80	8	35.1	513.9	36.5	2.5	4.0	92.7
VN-02-04-E	20" - 24"	933-2	1/2 x 1	71	148	77	338.0	71	82	11	48.3	512.1	35.4	2.5	4.0	92.5
VN-02-04-E	24" - 29"	933-2	1/2 x 1	70	135	65	285.3	70	83	13	57.1	713.1	48.3	2.5	5.0	103.2

MINI-VANE DATA SHEET

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Technicians: B. Weyer / J. Cozens
Date: 10/17/2017

				PEAK STRENGTH				RESIDUAL STRENGTH				DENSITY MEASUREMENTS				
LINER	ELEVATION	SPRING #	VANE	START DEG	END DEG	TOTAL DEG	PEAK SHEAR STRENGTH (psf)	START DEG	END DEG	TOTAL DEG	RESIDUAL SHEAR STRENGTH (psf)	Ww + TARE (g)	TARE (g)	DIAMETER (IN)	LENGTH (IN)	WET DENSITY (PCF)
WP-02-01-C	0" - 4"	933-2	1 x 1	70	147	77	73.9	70	82	12	11.5	443.2	35.3	2.5	3.5	90.5
WP-02-01-C	4" - 8"	933-2	1 x 1	73	246	173	166.1	73	99	26	25.0	495.4	35.4	2.5	4.0	89.3
WP-02-01-C	8" - 12"	933-2	1/2 x 1	71	125	54	237.0	71	76	5	21.9	513.2	36.7	2.5	4.0	92.5
WP-02-01-C	12" - 16"	933-2	1/2 x 1	72	135	63	276.6	72	77	5	21.9	548	35.3	2.5	4.0	99.5
WP-02-01-C	16" - 20"	933-2	1/2 x 1	70	170	100	439.0	70	84	14	61.5	573.7	34.6	2.5	4.0	104.6
WP-02-01-C	20" - 24"	933-2	1/2 x 1	70	156	86	377.5	70	82	12	52.7	597.7	35.4	2.5	4.0	109.2
WP-02-01-C	24" - 27"	933-2	1/2 x 1	77	149	72	316.1	77	84	7	30.7	461.7	27.5	2.5	3.0	112.4

MINI-VANE DATA SHEET

Project Name: Penobscot River Phase III Engineering Study
Project Number: 3616166052.04A.4A072
Technicians: B. Weyer / J. Cozens
Date: 10/18/2017

				PEAK STRENGTH				RESIDUAL STRENGTH				DENSITY MEASUREMENTS				
LINER	ELEVATION	SPRING #	VANE	START DEG	END DEG	TOTAL DEG	PEAK SHEAR STRENGTH (psf)	START DEG	END DEG	TOTAL DEG	RESIDUAL SHEAR STRENGTH (psf)	Ww + TARE (g)	TARE (g)	DIAMETER (IN)	LENGTH (IN)	WET DENSITY (PCF)
VN-02-01-C	0" - 4"	933-1	1 x 1	42	122	80	44.7	42	53	11	6.2	479.3	47.6	2.5	4.0	83.8
VN-02-01-C	4" - 8"	933-1	1 x 1	42	221	179	100.1	42	67	25	14.0	526.3	36.6	2.5	4.0	95.1
VN-02-01-C	8" - 12"	933-2	1 x 1	43	177	134	128.7	43	68	25	24.0	510.6	36.4	2.5	4.0	92.1
VN-02-01-C	12"- 16"	933-2	1/2 x 1	43	91	48	210.7	43	47	4	17.6	518.6	35.6	2.5	4.0	93.8
VN-02-01-C	16" - 20"	933-2	1/2 x 1	43	112	69	302.9	43	52	9	39.5	544	35.9	2.5	4.0	98.6
VN-02-01-C	20" - 25.5"	933-2	1/2 x 1	43	136	93	408.3	43	56	13	57.1	809.6	48.4	2.5	5.5	107.5

MINI-VANE DATA SHEET

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Project Name: Penobscot River Phase III Engineering Study
Project Number: 3616166052.04A.4A072
Technicians: B. Weyer / J. Cozens
Date: 10/18/2017

				PEAK STRENGTH				RESIDUAL STRENGTH				DENSITY MEASUREMENTS				
LINER	ELEVATION	SPRING #	VANE	START DEG	END DEG	TOTAL DEG	PEAK SHEAR STRENGTH (psf)	START DEG	END DEG	TOTAL DEG	RESIDUAL SHEAR STRENGTH (psf)	Ww + TARE (g)	TARE (g)	DIAMETER (IN)	LENGTH (IN)	WET DENSITY (PCF)
VN-01-01-D	0" - 4"	933-1	1 x 1	10	80	70	39.1	10	21	11	6.2	459.9	34.8	2.5	4.0	82.5
VN-01-01-D	4" - 8"	933-1	1 x 1	7	209	202	113.0	7	41	34	19.0	-	-	-	-	-
VN-01-01-D	8" - 12"	933-1	1/2 x 1	5	75	70	179.0	5	11	6	15.3	509.6	35.7	2.5	4.0	92.0
VN-01-01-D	12"- 16"	933-1	1/2 x 1	5	65	60	153.4	5	17	12	30.7	510.4	36.4	2.5	4.0	92.0
VN-01-01-D	16" - 20"	933-1	1/2 x 1	6	97	91	232.7	6	21	15	38.4	-	-	-	-	-
VN-01-01-D	20" - 26"	933-1	1/2 x 1	5	75	70	179.0	5	24	19	48.6	702.6	56.1	2.5	6.0	83.7

MINI-VANE DATA SHEET

Project Name: Penobscot River Phase III Engineering Study
Project Number: 3616166052.04A.4A072
Technicians: B. Weyer / J. Cozens
Date: 10/18/2017

				PEAK STRENGTH				RESIDUAL STRENGTH				DENSITY MEASUREMENTS				
LINER	ELEVATION	SPRING #	VANE	START DEG	END DEG	TOTAL DEG	PEAK SHEAR STRENGTH (psf)	START DEG	END DEG	TOTAL DEG	RESIDUAL SHEAR STRENGTH (psf)	Ww + TARE (g)	TARE (g)	DIAMETER (IN)	LENGTH (IN)	WET DENSITY (PCF)
VN-08-01-C	0" - 4"	933-1	1 x 1	184	240	56	31.3	184	193	9	5.0	438.4	35.3	2.5	3.5	89.4
VN-08-01-C	4" - 8"	933-1	1 x 1	5	112	107	59.8	5	22	17	9.5	506.1	35.6	2.5	4.0	91.3
VN-08-01-C	8" - 12"	933-1	1/2 x 1	5	25	20	11.2	5	5	0	0.0	487.1	36.2	2.5	4.0	87.5
VN-08-01-C	12"- 16"	933-1	1 x 1	3	194	191	106.8	-	-	-	-	493.3	36	2.5	4.0	88.8
VN-08-01-C	16" - 20"	933-2	1 x 1	37	144	200	192.0	37	54	19	18.2	491.4	35.5	2.5	4.0	88.5
VN-08-01-C	20" - 24"	933-2	1 x 1	36	180+	180	172.8	-	-	-	-	571.1	39.7	2.5	4.5	91.7
VN-08-01-C	20" - 24"	933-2	1/2 x 1	36	92	56	245.8	36	44	8	35.1	571.1	39.7	2.5	4.5	91.7

MINI-VANE DATA SHEET

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Project Name: Penobscot River Phase III Engineering Study
Project Number: 3616166052.04A.4A072
Technicians: B. Weyer / J. Cozens
Date: 10/18/2017

				PEAK STRENGTH				RESIDUAL STRENGTH				DENSITY MEASUREMENTS				
LINER	ELEVATION	SPRING #	VANE	START DEG	END DEG	TOTAL DEG	PEAK SHEAR STRENGTH (psf)	START DEG	END DEG	TOTAL DEG	RESIDUAL SHEAR STRENGTH (psf)	Ww + TARE (g)	TARE (g)	DIAMETER (IN)	LENGTH (IN)	WET DENSITY (PCF)
VN-02-03-A	0" - 4"	933-1	1 x 1	95	170	75	41.9	95	103	8	4.5	421.7	35.9	2.5	3.5	85.6
VN-02-03-A	4" - 8"	933-1	1 x 1	95	227	132	73.8	95	110	15	8.4	508.2	36.2	2.5	4.0	91.6
VN-02-03-A	8" - 12"	933-1	1 x 1	95	274	179	100.1	95	123	28	15.7	498.5	35.3	2.5	4.0	89.9
VN-02-03-A	12"- 16"	933-1	1/2 x 1	93	143	50	127.8	93	103	10	25.6	508.6	36.4	2.5	4.0	91.7
VN-02-03-A	16" - 20"	933-1	1/2 x 1	93	225	132	337.5	93	122	29	74.1	529.4	36.7	2.5	4.0	95.6
VN-02-03-A	20" - 24"	933-1	1/2 x 1	93	227	134	342.6	93	111	18	46.0	526.4	35.3	2.5	4.0	95.3
VN-02-03-A	24" - 30"	933-1	1/2 x 1	93	233	140	358.0	93	111	18	46.0	890.9	55.8	2.5	6.0	108.1

MINI-VANE DATA SHEET

Project Name: Penobscot River Phase III Engineering Study
Project Number: 3616166052.04A.4A072
Technicians: B. Weyer / J. Cozens
Date: 10/18/2017

				PEAK STRENGTH				RESIDUAL STRENGTH				DENSITY MEASUREMENTS				
LINER	ELEVATION	SPRING #	VANE	START DEG	END DEG	TOTAL DEG	PEAK SHEAR STRENGTH (psf)	START DEG	END DEG	TOTAL DEG	RESIDUAL SHEAR STRENGTH (psf)	Ww + TARE (g)	TARE (g)	DIAMETER (IN)	LENGTH (IN)	WET DENSITY (PCF)
VE-10-01-A	0" - 4"	933-1	1 x 1	98	300	180+	VANE SPRING COMBINATION REACHED MAX TORQUE BEFORE SHEARING					403.7	35.9	2.5	3.4	84.6
VE-10-01-A	4" - 8"	933-2	1 x 1	55	300	180+	VANE SPRING COMBINATION REACHED MAX TORQUE BEFORE SHEARING					499.1	34.5	2.5	4.0	90.2
VE-10-01-A	8" - 12"	933-3	1 x 1	56	300	180+	VANE SPRING COMBINATION REACHED MAX TORQUE BEFORE SHEARING					502.3	36.1	2.5	4.0	90.5
VE-10-01-A	12" - 18"	933-4	1/2 x 1/2	73	290	180+	VANE SPRING COMBINATION REACHED MAX TORQUE BEFORE SHEARING					-	-	-	-	-
VE-10-01-A	18" - 22"	933-4	1 x 1	75	233	158	758.1	75	86	11	26.4	565.7	36	2.5	4.0	102.8
VE-10-01-A	22" - 25"	933-4	1 x 1	70	245	175	839.7	VANE HITTING OBSTRUCTION. RESIDUAL NOT RUN.				LARGE VOIDS AND WOOD CHUNK IN BOTOM OF SAMPLE. NOT RECORDED				

MINI-VANE DATA SHEET

amec foster wheeler

Project Name: Penobscot River Phase III Engineering Study
Project Number: 3616166052.04A.4A072
Technicians: B. Weyer / J. Cozens
Date: 10/18/2017

				PEAK STRENGTH				RESIDUAL STRENGTH				DENSITY MEASUREMENTS				
LINER	ELEVATION	SPRING #	VANE	START DEG	END DEG	TOTAL DEG	PEAK SHEAR STRENGTH (psf)	START DEG	END DEG	TOTAL DEG	RESIDUAL SHEAR STRENGTH (psf)	Ww + TARE (g)	TARE (g)	DIAMETER (IN)	LENGTH (IN)	WET DENSITY (PCF)
BU-08-01-C	0" - 4"	933-2	1/2 x 1	17	55	38	333.6	17	23	6	26.3	432.3	34.5	2.5	3.5	88.3
BU-08-01-C	4" - 8"	933-2	1 x 1	17	180+	180+	VANE SPRING COMBINATION REACHED MAX TORQUE BEFORE SHEARING					554.9	35.9	2.5	4.0	100.7
BU-08-01-C	8" - 12"	933-2	1/2 x 1	19	114	95	834.1	19	33	14	61.5	533.8	35.3	2.5	4.0	96.8
BU-08-01-C	12" - 16"	933-2	1/2 x 1	19	125	106	930.7	19	37	18	79.0	560.7	36	2.5	4.0	101.9
BU-08-01-C	16" - 20"	933-2	1/2 x 1	19	149	130	1141.4	19	33	14	61.5	NOT MEASURED				
BU-08-01-C	20" - 23"	933-2	1/2 x 1	11	51	40	351.2	11	18	7	30.7	LARGE VOID IN BOTTOM OF SAMPLE. NOT RECORDED.				

MINI-VANE DATA SHEET

Project Name: Penobscot River Phase III Engineering Study
Project Number: 3616166052.04A.4A072
Technicians: B. Weyer / J. Cozens
Date: 10/18/2017

				PEAK STRENGTH				RESIDUAL STRENGTH				DENSITY MEASUREMENTS				
LINER	ELEVATION	SPRING #	VANE	START DEG	END DEG	TOTAL DEG	PEAK SHEAR STRENGTH (psf)	START DEG	END DEG	TOTAL DEG	RESIDUAL SHEAR STRENGTH (psf)	Ww + TARE (g)	TARE (g)	DIAMETER (IN)	LENGTH (IN)	WET DENSITY (PCF)
BU-02-01-B2	0" - 4"	933-2	1 x 1	50	95	45	86.4	50	54	4	3.8	574	53.4	3.875	2.5	67.3
BU-02-01-B2	4" - 12"	SAVED FOR LABORATORY TESTING														
BU-02-01-B2	12" - 16"	933-2	1 x 1	55	119	64	122.9	50	70	20	19.2	814.4	54.00	3.875	4.0	61.4
BU-02-01-B2	16" - 24"	SAVED FOR LABORATORY TESTING														
BU-02-01-B2	24" - 27.5"	933-2	1 x 1	50	180	130	249.7	50	80	30	28.8	731.9	45.7	3.875	3.5	63.4

MINI-VANE DATA SHEET

Project Name: Penobscot River Phase III Engineering Study
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				PEAK STRENGTH				RESIDUAL STRENGTH				DENSITY MEASUREMENTS				
LINER	ELEVATION	SPRING #	VANE	START DEG	END DEG	TOTAL DEG	PEAK SHEAR STRENGTH (psf)	START DEG	END DEG	TOTAL DEG	RESIDUAL SHEAR STRENGTH (psf)	Ww + TARE (g)	TARE (g)	DIAMETER (IN)	LENGTH (IN)	WET DENSITY (PCF)
WP-06-02-B	0" - 4"	LOST MATERIAL DURING CUTTING. NOT ENOUGH SAMPLET TO PERFORM TEST														
WP-06-02-B	4" - 8"	933-1	1 x 1	16	75	59	66.0	16	18	2	1.1	750.0	57.3	3.875	4.0	56.0
WP-06-02-B	8" - 12"	933-1	1 x 1	16	57	41	45.9	16	16	0	0.0	727.7	54.2	3.875	4.0	54.4
WP-06-02-B	12" - 16"	933-1	1 x 1	14	58	44	49.2	14	14	0	0.0	782.1	56.4	3.875	4.0	58.6
WP-06-02-B	16" - 20"	933-1	1 x 1	14	47	33	36.9	14	14	0	0.0	785.0	55.3	3.875	4.0	59.0
WP-06-02-B	20" - 24"	933-1	1 x 1	16	55	39	43.6	16	16	0	0.0	VOIDS IN SAMPLE. NOT RECORDED.				
WP-06-02-B	24" - 28"	LARGE VOIDS VISIBLE IN SAMPLE. SEGMENT NOT TESTED										VOIDS IN SAMPLE. NOT RECORDED.				
WP-06-02-B	28" - 32"	933-1	1 x 1	13	106	93	104.0	13	21	8	4.5	797.7	55.9	3.875	4.0	59.9
WP-06-02-B	32" - 35.75"	933-1	1 x 1	14	62	48	53.7	14	22	8	4.5	VOIDS IN SAMPLE. NOT RECORDED.				
WP-06-02B	36" - 40"	933-2	1 x 1	50	100	50	96.0	50	56	6	5.8	LARGE VOIDS IN SAMPLE. NOT RECORDED.				
WP-06-02B	40" - 44"	933-2	1 x 1	50	92	42	80.7	50	54	4	3.8	777.5	53.1	3.875	3.5	66.9
WP-06-02B	44" - 48"	933-2	1 x 1	50	180	130	249.7	50	57	7	6.7	1128.2	54.8	3.875	4.0	86.7
WP-06-02B	48" - 52"	933-2	1 x 1	50	115	65	124.8	50	58	8	7.7	918.5	57	3.875	4.0	69.6
WP-06-02B	52" - 56"	933-2	1 x 1	50	151	101	194.0	50	61	11	10.6	899.1	55.6	3.875	4.0	68.2
WP-06-02B	56" - 60"	933-2	1 x 1	50	172	122	234.3	50	69	19	18.2	939.2	56.7	3.875	4.0	71.3

MINI-VANE DATA SHEET

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Date: 10/18/2017

				PEAK STRENGTH				RESIDUAL STRENGTH				DENSITY MEASUREMENTS				
LINER	ELEVATION	SPRING #	VANE	START DEG	END DEG	TOTAL DEG	PEAK SHEAR STRENGTH (psf)	START DEG	END DEG	TOTAL DEG	RESIDUAL SHEAR STRENGTH (psf)	Ww + TARE (g)	TARE (g)	DIAMETER (IN)	LENGTH (IN)	WET DENSITY (PCF)
VW-14-01-D	0" - 4"	933-2	1 x 1	50	232	182	349.5	50	75	25	24.0	669.4	57.3	3.875	3.0	65.9
VW-14-01-D	4" - 8"	933-3	1 x 1	20	144	124	343.9	20	56	36	49.9	977.6	62.4	3.875	4.0	73.9
VW-14-01-D	8" - 12"	933-3	1 x 1	45	119	74	205.2	45	54	9	12.5	1080.2	59.1	3.875	4.0	82.5
VW-14-01-D	12" - 16"	933-3	1 x 1	45	144	99	274.6	45	49	4	5.5	1084.6	64.7	3.875	4.0	82.4
VW-14-01-D	16" - 20"	933-3	1 x 1	41	163	122	338.4	41	54	13	18.0	1670.8	96.6	3.875	6.5	78.3

MINI-VANE DATA SHEET

Project Name: Penobscot River Phase III Engineering Study
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Technicians: B. Weyer / J. Cozens
Date: 10/19/2017

				PEAK STRENGTH				RESIDUAL STRENGTH				DENSITY MEASUREMENTS				
LINER	ELEVATION	SPRING #	VANE	START DEG	END DEG	TOTAL DEG	PEAK SHEAR STRENGTH (psf)	START DEG	END DEG	TOTAL DEG	RESIDUAL SHEAR STRENGTH (psf)	Ww + TARE (g)	TARE (g)	DIAMETER (IN)	LENGTH (IN)	WET DENSITY (PCF)
ON-18-02-B	0" - 4"	933-1	1 x 1	14	115	101	113.0	14	35	11	42.7	618.7	51.6	3.875	3.5	52.4
ON-18-02-B	4" - 12"	SEGMENT SAVED FOR LABORATORY TESTING														
ON-18-02-B	12" - 16"	LARGE GRAVEL COBBLES IN SAMPLE. SEGMENT NOT TESTED														

MINI-VANE DATA SHEET

Project Name: Penobscot River Phase III Engineering Study
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				PEAK STRENGTH				RESIDUAL STRENGTH				DENSITY MEASUREMENTS				
LINER	ELEVATION	SPRING #	VANE	START DEG	END DEG	TOTAL DEG	PEAK SHEAR STRENGTH (psf)	START DEG	END DEG	TOTAL DEG	RESIDUAL SHEAR STRENGTH (psf)	Ww + TARE (g)	TARE (g)	DIAMETER (IN)	LENGTH (IN)	WET DENSITY (PCF)
FF-08-02-E	0' - 4"	933-1	1 x 1	14	36	22	24.6	14	16	2	1.1	812.6	72.1	3.875	4.0	59.8
FF-08-02-E	4" - 8"	933-1	1 x 1	14	68	54	60.4	14	18	4	2.2	833.3	76.6	3.875	4.0	61.1
FF-08-02-E	8" - 12"	933-1	1 x 1	15	80	65	72.7	15	22	7	3.9	832.6	80.7	3.875	4.0	60.8
FF-08-02-E	12" - 16"	933-1	1 x 1	15	91	76	85.0	15	21	6	3.4	891.5	78.3	3.875	4.0	65.7
FF-08-02-E	20" - 24"	933-2	1 x 1	48	116	68	130.6	POSSIBLE ROOTS IN SAMPLE. NEEDLE JUMPING DURING TEST INDICATES VANE CAUGHT ON OBSTRUCTION. DATA NOT RECORDED.				906.7	73.0	3.875	4.0	67.4
FF-08-02-E	32" - 36"	933-2	1 x 1	54	180+	180+	VANE SPRING COMBINATION REACHED MAX TORQUE BEFORE SHEARING. SANDY MATERIAL					1098.0	74.0	3.875	4.0	82.7
FF-08-02-E	44" - 48"	933-3	1/2 x 1	44	89	45	570.6	44	77	33	209.2	1060.1	74.3	3.875	4.0	79.7
FF-08-02-E	56" - 60"	933-3	1/2 x 1	44	86	42	532.5	44	48	4	25.4	1044.3	74.4	3.875	4.0	78.4
FF-08-02-E	64" - 68.5"	933-3	1/2 x 1	44	92	48	608.6	44	49	5	31.7	1226.6	93.0	3.875	4.5	81.4

MINI-VANE DATA SHEET

Project Name: Penobscot River Phase III Engineering Study
Project Number: 3616166052.04A.4A072
Technicians: B. Weyer / J. Cozens
Date: 10/19/2017

				PEAK STRENGTH				RESIDUAL STRENGTH				DENSITY MEASUREMENTS				
LINER	ELEVATION	SPRING #	VANE	START DEG	END DEG	TOTAL DEG	PEAK SHEAR STRENGTH (psf)	START DEG	END DEG	TOTAL DEG	RESIDUAL SHEAR STRENGTH (psf)	Ww + TARE (g)	TARE (g)	DIAMETER (IN)	LENGTH (IN)	WET DENSITY (PCF)
ON-18-01-D	0" - 4"	933-1	1 x 1	17	49	32	35.8	17	19	2	1.1	853.7	78.9	3.875	4.0	62.6
ON-18-01-D	4" - 8"	933-1	1 x 1	18	50	32	35.8	18	24	6	3.4	800.4	70.4	3.875	4.0	59.0
ON-18-01-D	8" - 12"	933-1	1 x 1	18	78	60	67.1	18	24	6	3.4	818.3	75.9	3.875	4.0	60.0
ON-18-01-D	12" - 16"	933-1	1 x 1	18	88	70	78.3	18	24	6	3.4	801.8	74.8	3.875	4.0	58.7
ON-18-01-D	16" - 20"	933-1	1 x 1	18	75	57	63.8	POSSIBLE OBSTRUCTION DURING TESTING. DATA NOT RECORDED				841.4	70.1	3.875	4.0	62.3
ON-18-01-D	20" - 24"	933-1	1 x 1	18	99	81	90.6	18	25	7	3.9	838.8	71.0	3.875	4.0	62.0
ON-18-01-D	24" - 28"	933-1	1 x 1	15	96	81	90.6	15	23	8	4.5	832.5	70.9	3.875	4.0	61.5
ON-18-01-D	28" - 36"	933-1	1 x 1	16	108	92	102.9	16	25	9	5.0	1171.7	103.6	3.875	5.5	62.8
ON-18-01-D	40" - 44"	933-2	1 x 1	46	175	129	247.8	POSSIBLE OBSTRUCTION DURING TESTING. DATA NOT RECORDED				VOIDS IN SAMPLE. NOT RECORDED.				
ON-18-01-D	48" - 52"	933-2	1/2 x 1	47	87	40	351.2	47	55	8	35.1	847.2	70.4	3.875	4.0	62.8
ON-18-01-D	56" - 60"	933-2	1/2 x 1	47	89	42	368.8	47	52	5	21.9	790.1	71.9	3.875	4.0	58.0
ON-18-01-D	64" - 68"	933-1	1/2 x 1	14	81	67	342.6	14	20	6	15.3	803.6	70.6	3.875	4.0	59.2
ON-18-01-D	68" - 72"	933-1	1/2 x 1	13	55	42	214.8	13	16	3	7.7	VOIDS IN SAMPLE. NOT RECORDED.				
ON-18-01-D	80" - 84"	933-1	1/2 x 1	14	92	78	398.8	14	23	9	23.0	849.1	83.3	3.875	4.0	61.9

FORM SL-1: MOISTURE CONTENT TEST

(In General Accordance with ASTM D2216)

PROJECT NAME: PENOBSCOT RIVER PHASE III ENGINEERING STUDY
PROJECT NUMBER: 3616166052

				DATE:	12/4/2017	12/4/2017	12/5/2017	12/5/2017	12/5/2017	12/5/2017	12/5/2017	
				TIME:	10:20	17:20	08:35	09:35	10:50	11:50	12:50	
				ELAPSED TIME (mins):	0	420	480	540	600	660	720	
CORE LOCATION	**SEDIMENT TYPE**	**SAMPLE DEPTH (IN)**	**TARE WEIGHT (g)**	**TARE + WET SOIL (g)**	**1 TARE + DRY SOIL (g)**	**2 TARE + DRY SOIL (g)**	**3 TARE + DRY SOIL (g)**	**4 TARE + DRY SOIL (g)**	**5 TARE + DRY SOIL (g)**	**6 TARE + DRY SOIL (g)**	**PERCENT CHANGE (%)**	**MOISTURE CONTENT (%)**
VE-10-01-A	Silt & wood waste	0-4	1.89	161.47	76.29	76.41	76.31	76.36	76.26	76.25	0.006	115
WP-06-02-B	Silt & wood fines	4-8	2.23	210.25	67.18	67.31	67.20	67.24	67.17	67.16	0.005	220
VN-02-03-F	Silt & wood waste	4-8	1.52	136.48	56.63	56.75	56.68	56.72	56.68	56.66	0.015	145
FF-08-02-E	Silt & wood waste	8-12	1.81	142.91	60.05	60.04	60.11	60.04	60.04	60.03	0.007	142
BU-02-01-B2	Silt & wood waste	0-4	2.25	122.85	43.94	44.00	44.02	43.99	43.95	43.94	0.008	189
ON-18-01-D	Silt & wood fines	0-4	2.27	189.49	80.12	80.11	80.17	80.11	80.11	80.11	0.000	141
VE-05-01-E	Wood waste	10.6-14.4	1.85	43.44	6.11	6.1	6.08	6.07	6.06	6.06	0.000	888
VE-05-01-E	Wood waste	14.4-17.8	1.85	601.22	62.31	62.28	62.27	62.24	62.24	62.24	0.000	892

Abbreviations:
% = Percent
g = grams
IN = inches

Prepared by: KMC 12/5/2017
Checked by: BJW 12/8/2017

FORM SL-2: MATERIAL DENSITY TEST
(In General Accordance with ASTM D7263)

PROJECT NAME: PENOBSCOT RIVER PHASE III ENGINEERING STUDY
PROJECT NUMBER: 3616166052

CORE LOCATION	SEDIMENT TYPE	SAMPLE DEPTH (IN)	TARE + WET SOIL (g)	TARE + DRY SOIL (g)	LENGTH				DIAMETER				WET DENSITY			MOISTURE CONTENT (%)[1]	DRY DENSITY		
					LENGTH 1 (IN)	LENGTH 2 (IN)	LENGTH 3 (IN)	AVERAGE LENGTH (IN)	DIAMETER 1 (IN)	DIAMETER 2 (IN)	DIAMETER 3 (IN)	AVERAGE DIAMETER (IN)	Math. Calculated (g/in^3)	Math. Calculated (lb/ft^3)	Math. Calculated (kg/m^3)		Math. Calculated (lb/ft^3)	Math. Calculated (kg/m^3)	Recommended for Calculations (kg/m^3)[2]
VE-10-01-A	Silt & wood waste	0-4	403.7	35.9	3.375	NC	NC	3.375	2.625	NC	NC	2.625	20	77	1,229	115	36	573	782
WP-06-02-B	Silt & wood fines	4-8	750	57.3	4	NC	NC	4	3.5	NC	NC	3.5	18	69	1,099	220	21	343	523
VN-02-03-F	Silt & wood waste	4-8	508.2	36.2	4	NC	NC	4	2.625	NC	NC	2.625	22	83	1,331	145	34	544	772
FF-08-02-E	Silt & wood waste	8-12	832.6	80.7	4	NC	NC	4	3.5	NC	NC	3.5	20	74	1,193	142	31	492	697
BU-02-01-B2	Silt & wood waste	0-4	574.0	53.4	2.5	NC	NC	2.5	3.5	NC	NC	3.5	22	82	1,321	189	29	457	679
ON-18-01-D	Silt & wood fines	0-4	853.7	78.9	4	NC	NC	4	3.5	NC	NC	3.5	20	77	1,229	141	32	511	722
VE-05-01-E	Wood waste	10.6-14.4	628	71.65	3.567	3.588	3.606	3.587	3.602	3.605	3.603	3.603	15	58	929	888	6	94	171
VE-05-01-E	Wood waste	14.4-17.8	601.22	62.24	3.444	3.464	3.379	3.429	3.452	3.486	3.442	3.46	17	64	1,021	893	6	103	184

Notes:
1. Source data = FORM SL-1: MOISTURE CONTENT TEST provided in Appendix C of the 2017 Intertidal and Subtidal Sediment Characterization Report (Amec Foster Wheeler 2018).
2. Mathematically calculated dry density does not account for the transition from in-situ to landside measurements (e.g., pore water loss, handling, etc.). To account for compositional variability, pore water loss, handling, field processing, and material types examined, a percent increase to dry density is recommended. Such as: VE-10-01-A, ~25% (more silt than wood waste core composition); WP-06-02-B, ~35% (more silt than wood waste core composition); VN-02-03-F, ~30% (more silt than wood waste core composition); FF-08-02-E, ~30% (pore water loss and more silt than wood waste core composition); BU-02-01-B2, ~30% (pore water loss and more silt than wood waste core composition); ON-18-01-D, ~30% (more silt than wood waste core composition); and VE-05-01, ~45% (pore water loss, abundant wood waste, and delay in sample processing from time of core collection).

Prepared by: BJW 12/8/2017
Checked By: DRY 12/8/2017

Abbreviations:
% = Percent
g = grams
g/in^3 = grams per cubic inch
in = inch
kg/m^3 = kilograms per cubic meter
lb/ft^3 = pounds per cubic foot
NC = not collected

APPENDIX C-3

DESIGN CALCULATION: BEARING CAPACITY OF SEDIMENTS IN RIVER ESTUARY SYSTEM

Amec Foster Wheeler Design Calculation or Analysis Cover Sheet

Project : **Penobscot Phase III Engineering Study**	Calc/Analysis No. **G-001**	Amec Foster Wheeler Project No. **3616-16-6052**
Title: **Bearing Capacity of Sediments in River Estuary System**		Page 1 of 6

Computer Software and Version No.

Microsoft Excel

Purpose and Objective

To assess the bearing capacity of the sediments throughout different areas of the river estuary system for suitability of backfilling in areas of dredging and to cap in areas where no dredging is to be performed. The assessment of bearing capacity provides evidence of the strength of the river bottom sediment and its ability to withstand the placement of new material and to what degree the material will settle or compress.

Summary of Conclusion

All analyses returned factor of safety values greater than 3.0. Based on the soil properties used for these analyses, the sediments will provide sufficient support for the proposed cap in the evaluated areas of the river estuary system.

Revision Log

Rev. No.	Revision Description:
0	Original Issue

Rev. No.	Originator (Print) Brian Weyer Sign / Date	Checker (Print) Tim Boschmans Sign / Date	Independent Technical Reviewer (Print) Bon Lien Sign / Date
0	5/24/18	5/24/2018	5/24/18

Contents

Figures

1.0 Purpose

Geotechnical field testing was conducted with other ongoing field work in the fall of 2017. Details of the geotechnical testing are presented in the 2017 Intertidal and Subtidal Sediment Characterization Report in Section 2.2, 5.4, Appendix C-1 and C-2. Coring stations where geotechnical cores were obtained are shown in the attached Figure 1. The purpose of obtaining cores and testing for geotechnical parameters was to assess the bearing capacity of the sediments throughout different areas of the river estuary system for suitability of backfilling in areas of dredging and to cap in areas where no dredging is to be performed. The assessment of bearing capacity provides evidence of the strength of the river bottom sediment and its ability to withstand the placement of new material and to what degree the material will settle or compress.

2.0 Proposed Cap Design Criteria

Due to the presence of contamination in the river bottom sediments, select areas of the river estuary system are being evaluated for capping and dredging/backfill to lower the average contamination levels for benthic organisms. In areas where capping is being evaluated, clean material will be placed on top of the river bottom sediment bed. Areas of dredging/backfill will first be dredged to a select depth and the area backfilled with the same thickness of clean material.

For the purposes of these calculations, two cap materials were evaluated. Condition 1 cap consists of a clean, silty sand material with a unit weight of 110 pounds per cubic foot (pcf) placed in a uniform 0.5 foot thick layer. Condition 2 cap consists of a poorly graded gravel with a unit weight of 125 pcf placed in a uniform 0.5 foot thick layer.

The materials selected for evaluation are historically available in the project area and region. The evaluation of these materials will provide an upper and lower bounds of material for capping, if the alternative is found to be feasible.

3.0 Assumptions

Listed below are assumption used in the presented calculations:

1. Bearing failure occurs by local bearing failure mechanisms.

2. The soil properties and parameters for analysis are based on limited geotechnical field laboratory testing performed on vibracores obtained from different areas within the river estuary system.

3. For the purpose of this evaluation, all areas are submerged (both intertidal and subtidal).

4. Cap materials will be placed in passes of 3-ft wide strips over the surface of the in place sediments.

5. Analysis is performed using a 6 inch thick cap overlying the existing river bottom sediments without removal of sediment prior to capping has been evaluated.

6. These analyses do not take into account hydrographic factors including storm events, wave action or tidal fluctuations, which are performed by other project team members.

4.0 Soil Properties

Field testing was performed on select vibracores recovered during the field work performed by Amec Foster Wheeler in the summer and fall of 2017. The following field laboratory tests were performed by Amec Foster Wheeler in a temporary laboratory setup in the Winterport Field Station. Peak strength and residual test strengths were obtained through testing. Only peak shear strength data was used in this evaluation. All tests were performed in accordance with applicable ASTM standards.

- Laboratory Miniature Vane Shear Test (ASTM D4648)
- Density (ASTM D7263)

The following table represents the soil properties used for calculation of bearing capacity. Soil properties are based on laboratory testing results. For the purposes of these calculations, only the undrained shear strength properties of the material were used, with no friction angle. This is a conservative approach for design as it does not account for the frictional properties of the silty sediment. These calculations assume a total stress (S_u, φ=0) analysis.

The core from station VE-05-01 was mainly wood waste material and testing was not performed due to the granular nature of the material. The laboratory miniature vane shear test is appropriate for testing fine-grained materials only and testing granular material would only provide erroneous results. Testing was performed on the core from station VE-10-01, but obstructions were encountered in the sample that skewed the testing results. No results for this core in the upper 12 inches were recorded due to the obstructions.

Two evaluations were performed for bearing capacity based on cap material types. Condition 1 consisted of a 0.5 foot thick sand cap placed over the sediment bed with a total unit weight of 110 pcf. Condition 2 consisted of a 0.5 foot thick gravel cap placed over the sediment bed with a total unit weight of 125 pcf. Values calculated are based on an average unit weight and cohesion of the upper 12 inches of tested material from each coring station.

5.0 Bearing Capacity Calculations

A modified version of Terzhagi's bearing capacity method for local failure detailed in Reference 1 was utilized. This method is the most conservative as it does not take into account any frictional resistance of the material and relies solely on the cohesive strength. The materials within the river estuary are typically silt with organic debris that typically have some frictional strength. Equation 1 was used to calculate the ultimate bearing capacity.

$$q_u = \frac{2}{3} c N_c \qquad (1)$$

Where:

q_u = ultimate bearing capacity
c = cohesion of soil (S_u from vane shear test)
N_c = $2+\pi$

The FOS against bearing capacity failure for all 3 analysis cases was calculated using Equation 2.

$$FOS = \frac{q_u}{w_{cap}} \qquad (2)$$

Where:
q_u = ultimate bearing capacity
w_{cap} = weight of cap

6.0 Conclusions and Results

All analyses returned factor of safety values greater than 3.0. Based on the soil properties used for these analyses, the sediments will provide sufficient support for the proposed cap in the evaluated areas of the river estuary system. The following table presents the bearing capacity results for each coring station evaluated.

7.0 References

1. Palermo, M., Maynord, S., Miller, J., and Reible, D. 1998. “Guidance for In-Situ Subaqueous Capping of Contaminated Sediments,” EPA 905-B96-004. Great Lakes National Program Office, Chicago, IL.

BEARING CAPACITY CALCULATIONS

Project Name: Penobscot River Phase III Engineering Study
Project Number: 3616-16-6052

CAP PROPERTIES

Thickness of Cap (Sand Layer)	0.5	feet	
Thickness of Cap (Gravel Layer)	0.5	feet	
Cap (sand) submerged unit weight	47.6	pcf	estimated total unit weight = 110pcf
Cap (gravel) submerged unit weight	62.6	pcf	estimated total unit weight = 125pcf
Width of Cap placed per pass	3	feet	
Foundation Depth below sediment surface	0	feet	
Weight of Cap (Sand)	23.8	psf	
Weight of Cap (Gravel)	31.3	psf	

		Material Properties				Bearing Capacity Factors			Modified Bearing Capacity Factors				Condition 1	Condition 2
Reach	**Core**	γ_{moist} **sediment** pcf	γ_{sub} **sediment** pcf[1]	**Cohesion** psf	**ϕ** degrees	N_c	N_q	N_γ	N_c'	N_q'	N_γ'	**Bearing Capacity** psf	**Factor of Safety**	**Factor of Safety**
Orrington	ON-18-01	60.5	15	46	0	5.14	0.00	0.00	5.14	0.00	0.00	158	6.6	5.0
Orrington	ON-18-02	52.4	15	113	0	5.14	0.00	0.00	5.14	0.00	0.00	387	16.3	12.4
Winterport	WP-02-01	90.8	28.4	159	0	5.14	0.00	0.00	5.14	0.00	0.00	545	22.9	17.4
Winterport	WP-06-02	55.2	15	56	0	5.14	0.00	0.00	5.14	0.00	0.00	192	8.1	6.1
Frankfort Flats	FF-08-02	60.6	15	53	0	5.14	0.00	0.00	5.14	0.00	0.00	182	7.6	5.8
Mendall Marsh	MM-04-01	86.8	24.4	91	0	5.14	0.00	0.00	5.14	0.00	0.00	312	13.1	10.0
Bucksport	BU-02-01	67.3	4.9	86	0	5.14	0.00	0.00	5.14	0.00	0.00	295	12.4	9.4
Bucksport	BU-08-01	95.3	32.9	583	0	5.14	0.00	0.00	5.14	0.00	0.00	1999	84.0	63.9
Verona Northeast	VN-01-01	87.3	24.9	110	0	5.14	0.00	0.00	5.14	0.00	0.00	377	15.8	12.0
Verona Northeast	VN-02-01	90.3	27.9	91	0	5.14	0.00	0.00	5.14	0.00	0.00	312	13.1	10.0
Verona Northeast	VN-02-03	89	26.6	72	0	5.14	0.00	0.00	5.14	0.00	0.00	247	10.4	7.9
Verona Northeast	VN-02-04	88.2	25.8	52	0	5.14	0.00	0.00	5.14	0.00	0.00	178	7.5	5.7
Verona Northeast	VN-08-01	89.4	27	34	0	5.14	0.00	0.00	5.14	0.00	0.00	117	4.9	3.7
Verona East	VE-05-01	-	-	-	0	5.14	0.00	0.00	5.14	0.00	0.00	-	-	-
Verona East	VE-09-01	85.5	23.1	73	0	5.14	0.00	0.00	5.14	0.00	0.00	250	10.5	8.0
Verona East	VE-10-01	-	-	-	0	5.14	0.00	0.00	5.14	0.00	0.00	-	-	-
Verona West	VW-14-01	74.1	11.7	300	0	5.14	0.00	0.00	5.14	0.00	0.00	1029	43.2	32.9

Notes:

1. Calculated value based on unit weight of water = 62.4 pcf. Value assumed as 15 pcf is Column C value less than 62.4 pcf.

Prepared By: BJW Date: 5/8/2018
Checked By: TWB Date: 5/8/2018

ON-18-02
ON-18-01
WP-02-01
WP-06-02
FF-08-02
MM-04-01
BU-08-01
BU-02-01
VN-01-01
VN-02-04
VN-02-03
VN-02-01
VN-08-01
VE-05-01
VE-09-01
VW-14-01
VE-10-01

1A
69
139
15
174
175
Lebanon Rd
Airport Rd
Fort Knox Rd
Duck Cove Rd
Acadia Hwy
Loggin Rd
Silver Lake
Bucksport

Legend
- Core Station
- Reach Boundary
- Marsh Platform

amec foster wheeler

N

0 0.5 1 2
Miles
0 0.75 1.5 3
Kilometers

Bathymetry
Water Depth feet (MLLW)
0 6 12 18 30 60 120 600

Figure 1
Geotechnical Core Stations

2017 Mobile Sediment Characterization
Penobscot River Phase III Engineering Study

Project: 3616166052	Prepared/Date: KMC 5/1/2018	Checked/Date:	NAD83 State Plane Maine East, US Survey Feet

Document:R:\Comm-Ind\Projects\Clients M to S\Penobscot\(GIS)\Work Order 4A-060\GeoTech_Density_Cores\GeoTech_Density_Cores.mxd 5/1/2018 2:48:14 PM karina.casey

APPENDIX D

LABORATORY ANALYTICAL AND DATA VALIDATION REPORT

APPENDIX D-1

ANALYTICAL LABORATORY REPORTS
(ELECTRONIC DELIVERABLE PROVIDED ON DISK)

APPENDIX D-2

ANALYTICAL DATA VALIDATION REPORTS

Data Validation Summary
2017 Intertidal and Subtidal Sediment Characterization – Report 1
Penobscot River Estuary Phase III – Engineering Evaluation
Penobscot River, Maine

1.0 INTRODUCTION

Sediment samples were collected in August, September and October 2017 from the Penobscot River located in Maine. Samples were analyzed by Eurofins Frontier Global Sciences, Inc. (Eurofins) located in Bothell, Washington and included in sample delivery groups (SDGs) 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, and 1711082. Samples were also analyzed by Alpha Analytical located in Mansfield, Massachusetts and are reported in SDGs L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690, and L1739692. Samples were analyzed by one or more of the following: Clean Water Act (CWA, 2012) or Standard Methods for the Examination of Water and Wastewater (SM, 2014):

Laboratory	Parameter	Analytical Method	Validation Level
Eurofins	Mercury, total	CWA 1631B (Hot aqua regia digestion)	10% Stage III/ 90% Stage IIB
Alpha Analytical	TOC	Lloyd Kahn	10% Stage III/ 90% Stage IIB
Eurofins/Alpha	% Solids	SM2540B	10% Stage III/ 90% Stage IIB

A Stage IIb data validation was completed on all SDGs**.** A Stage III data validation was performed on ten percent of samples. Data validation was completed using National Functional Guidelines for Inorganic Superfund Data Review (USEPA, 2014) and EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures (USEPA, 2013) where applicable. Data quality evaluations were completed using quality control (QC) limits specified in the draft Penobscot River Estuary Phase III Engineering Evaluation Quality Assurance Project Plan (QAPP) [Amec Foster Wheeler, 2016]. The project laboratory reported results using a combination of two detection limits including the reporting limit (RL) and the method detection limit (MDL). Results for compounds that are not detected in samples are reported as U qualified results at the RL. Positive detections between the MDL and RL are qualified as estimated (J) by the laboratory.

Data validation review and qualification actions are discussed in the following subsections. It should be noted that only instances that result in an impact to data quality are presented in this report. There may be QC elements outside of QAPP and/or method control limits not presented in this report since there is no impact to data quality. Samples included in this data evaluation are presented in Table 1.

Data qualifications were completed if necessary in accordance with the guidelines or the professional judgment of the project chemist. The following qualifiers as applied during data validation or reported by the laboratory are included in the final data set:

J = The reported concentration is considered an estimated value

Validation reason codes were applied to results associated with QC measurements outside project QC goals. The validation qualification actions and associated validation reason codes applied to sample results are summarized on Table 2. The following data validation reason codes were applied to one or more sample results:

HT = Holding time exceeded
LD = Lab Duplicate limit exceeded
MS-H = MS and/or MSD recovery high
MS-RPD = MS/MSD RPD limit exceeded
TEMP = Sample temperature upon receipt exceeded range

A complete summary of final sample results is provided in Table 3.

Data were evaluated based on the following parameters:

* Data Completeness and Chain of Custody
  Holding Times and Preservation
* Blanks
* Initial Calibration
* Continuing Calibration
* Laboratory Control Sample (LCS)
  Matrix Spike/Matrix Spike Duplicates (MS/MSD)
  Laboratory Duplicates
* Field Duplicates
* Detection Limits
* Sample Result Verification/Electronic Evaluation Verification (EDD)
* Ongoing Precision Recovery

* = indicates that criteria were met and/or no impact to data quality for this parameter

With the exception of the following items discussed below, results were determined to be usable as reported by the laboratory.

2.0 Mercury – 1631

Sample Preservation

SDG 1708709 – Samples were received above acceptable temperature at 10.2°C. J-qualify mercury in samples VN-10-01_08192017_SED_03, BH-05-01_08192017_SED_03, ON-13-01_08192017_SED_03, ON-13-01_08192017_SED_03_DUP, ON-21-01_08192017_SED_03, BH-08-01_08192017_SED_03, ON-22-01_08192017_SED_03, and VN-10-02_08192017_SED_03.

Matrix Spike

SDG 1711005 – Sample WP-06-02-F-17_SED_03-05 was used for MS/MSD analysis. The MS/MSD RPD (28%) was above the QC limit of 25%. Based on professional judgment, the mercury for sample WP-06-02-F-17_SED_03-05 was qualified estimated (J) due to the imprecision.

3.0 Total Organic Carbon (TOC) – Lloyd Kahn

Holding Times and Preservation

SDG L1732496 – Total organic carbon for each sample in SDG L1732496 was analyzed beyond technical hold time. The results for TOC in sample BU-08-01_091217_SED_03 were qualified as estimated (J).

Laboratory Duplicate/ Replicate

SDG L1733614 – Sample burn replicate RPD for sample BU-05-01-A-17_SED_05-07 (39%) exceeded the QC limit of 30%. All TOC results for sample BU-05-01-A-17_SED_05-07 were qualified as estimated (J) due to imprecision.

SDG L1733615 – Sample BU-09-01-C-17_SED_03-05 selected by the laboratory for duplicate analysis. The RPD for TOC Rep 1 (26%) exceeded the QC limit of 25%. The TOC Rep 1 and average TOC results were qualified as estimated (J) due to imprecision.

SDG L1733615 – Sample burn replicate RPDs for samples BU-09-01-C-17_SED_05-07 (57%), BU-09-01-C-17_SED_07-10 (32%), and BU-09-01-C-17_SED_20-30 (45%) exceeded the QC limit of 30%. All TOC results for samples BU-09-01-C-17_SED_05-07, BU-09-01-C-17_SED_07-10, and BU-09-01-C-17_SED_20-30 were qualified as estimated (J) due to imprecision.

SDG L1733622 – Sample burn replicate RPD for sample ON-19-01-A-17_SED_10-15 (66%) exceeded the QC limit of 30%. All TOC results for sample ON-19-01-A-17_SED_10-15 were qualified as estimated (J) due to imprecision.

SDG L1739534 – Sample burn replicate RPD for sample BU-02-01-E-17_SED_03-05 (33%) exceeded the QC limit of 30%. All TOC results for sample BU-02-01-E-17_SED_03-05 were qualified as estimated (J) due to imprecision.

SDG L1739538 – Sample FF-08-02-G-17_SED_03-05 selected by the laboratory for duplicate analysis. The RPD for TOC Rep 2 (29%) exceeded the QC limit of 25%. The TOC Rep 2 and average TOC results were qualified as estimated (J) due to imprecision.

SDG L1739655 – Sample VE-10-01-E-17_SED_07-10 selected by the laboratory for duplicate analysis. The RPD for TOC Rep 1 (26%) exceeded the QC limit of 25%. The TOC Rep 1 and average TOC results were qualified as estimated (J) due to imprecision.

Matrix Spike

SDG L1733613 – Sample BU-01-01-C-17_SED_00-01 used as source for MS. The MS recoveries for TOC Rep 1 (142%) and Rep 2 (184%) were above the upper QC limit of 125%. The MS recoveries do not apply because the sample concentration was > 4X the spike amount added. Based on professional judgement the TOC results for sample BU-01-01-C-17_SED_00-01 do not need to be qualified.

SDG L1733615 – Sample BU-09-01-C-17_SED_03-05 used as source for MS. The MS recovery for TOC Rep 1 (253%) was above the upper QC limit of 125%. The MS recoveries do not apply because the

sample concentration was > 4X the spike amount added. Based on professional judgement the TOC results for sample BU-09-01-C-17_SED_03-05 do not need to be qualified.

SDG L1733616 – Sample BU-10-01-A-17_SED_00-01 used as source for MS. The MS recovery for TOC Rep 1 (220%) was above the upper QC limit of 125%. The MS recovery for TOC Rep 2 (0%) was below the lower QC limit of 75%. The MS recoveries do not apply because the sample concentration was > 4X the spike amount added. Based on professional judgement the TOC results for sample BU-10-01-A-17_SED_00-01 do not need to be qualified.

SDG L1739125 – Sample FF-07-02-B-17_SED_75-78 used as source for MS. The MS recoveries for TOC Rep 1 (129%) and Rep 2 (139%) were above the upper QC limit of 125%. All TOC results for sample FF-07-02-B-17_SED_75-78 were qualified as estimated (J) due to the potential high bias.

SDG L1739538 – Sample FF-08-02-G-17_SED_03-05 used as source for MS. The MS recovery for TOC Rep 2 (0%) was below the lower QC limit of 75%. The MS recovery does not apply because the sample concentration was > 4X the spike amount added. Based on professional judgement the TOC results for sample FF-08-02-G-17_SED_03-05 do not need to be qualified.

SDG L1739655 – Sample VE-10-01-E-17_SED_07-10 used as source for MS. The MS recovery for TOC Rep 2 (0%) was below the lower QC limit of 75%. The MS recovery does not apply because the sample concentration was > 4X the spike amount added. Based on professional judgement the TOC results for sample VE-10-01-E-17_SED_07-10 do not need to be qualified.

SDG L1739657 – Sample VN-01-01-B-17_SED_01-03 used as source for MS. The MS recovery for TOC Rep 1 (164%) was above the upper QC limit of 125%. TOC Rep 1 and the average TOC results for sample VN-01-01-B-17_SED_01-03 were qualified as estimated (J) due to the potential high bias.

SDG L1739661 – Sample VN-03-01-D-17_SED_07-10 used as source for MS. The MS recovery for TOC Rep 1 (72%) and Rep 2 (28%) were below the lower QC limit of 75%. The MS recoveries do not apply because the sample concentration was > 4X the spike amount added. Based on professional judgement the TOC results for sample VN-03-01-D-17_SED_07-10 do not need to be qualified.

4.0 Percent Solids – 2540G

Holding Times and Preservation

SDG 1708709 – Percent total solids for each sample in SDG 1708709 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG 1708709 – Samples were received above acceptable temperature at 10.2°C. J-qualify total solids in samples VN-10-01_08192017_SED_03, BH-05-01_08192017_SED_03, ON-13-01_08192017_SED_03, ON-13-01_08192017_SED_03_DUP, ON-21-01_08192017_SED_03, BH-08-01_08192017_SED_03, ON-22-01_08192017_SED_03, and VN-10-02_08192017_SED_03.

SDG 1709528 – Percent total solids for each sample in SDG 1709528 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG 1709561 – Percent total solids for each sample in SDG 1709561 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG 1709575 – Percent total solids for each sample in SDG 1709575 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG 1709576 – Percent total solids for each sample in SDG 1709576 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG 1709577 – Percent total solids for each sample in SDG 1709577 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG 1709579 – Percent total solids for each sample in SDG 1709579 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG 1709581 – Percent total solids for each sample in SDG 1709581 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG 1711005 – Percent total solids for each sample in SDG 1711005 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG 1711043 – Percent total solids for each sample in SDG 1711043 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG 1711044 – Percent total solids for each sample in SDG 1711044 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG 1711045 – Percent total solids for each sample in SDG 1711045 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG 1711048 – Percent total solids for each sample in SDG 1711048 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG 1711049 – Percent total solids for each sample in SDG 1711049 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG 1711051 – Percent total solids for each sample in SDG 1711051 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG 1711052 – Percent total solids for each sample in SDG 1711052 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG 1711053 – Percent total solids for each sample in SDG 1711053 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG 1711054 – Percent total solids for each sample in SDG 1711054 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG 1711055 – Percent total solids for each sample in SDG 1711055 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG 1711072 – Percent total solids for each sample in SDG 1711072 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG 1711074 – Percent total solids for each sample in SDG 1711074 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG 1711075 – Percent total solids for each sample in SDG 1711075 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG 1711076 – Percent total solids for each sample in SDG 1711076 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG 1711078 – Percent total solids for each sample in SDG 1711078 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG 1711079 – Percent total solids for each sample in SDG 1711079 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG 1711080 – Percent total solids for each sample in SDG 1711080 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG 1711081 – Percent total solids for each sample in SDG 1711081 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG 1711082 – Percent total solids for each sample in SDG 1711082 was analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

SDG L1732496 – Percent total solids for the sample in SDG L1732496 was analyzed beyond technical hold time. The result for total solids in sample BU-08-01_091217_SED_03 was qualified as estimated (J).

References:

Amec Foster Wheeler, 2016. "Draft Penobscot River Estuary Phase III – Engineering Study Quality Assurance Project Plan", Penobscot River, Maine, July 2016.

U.S. Environmental Protection Agency (USEPA), 2004. "Final Update IIIB and Method 9071B of Final Update IIIA"; Test Methods for Evaluating Solid Waste Physical/Chemical Methods SW-846; Office of Solid Waste and Emergency Response, EPA-SW-846-03-03B; November 2004.

U.S. Environmental Protection Agency (USEPA), 2009. "Guidance for Labeling Externally Validated Laboratory Analytical data for Superfund Use"; Office of Solid Waste and Emergency Response; EPA 540-R-08-005; January 13, 2009.

U.S. Environmental Protection Agency (USEPA), 2014. "National Functional Guidelines for Inorganic Superfund Data Review"; Office of Superfund Remediation and Technology Innovation; EPA-540-R-013-001; August 2014.

U.S. Environmental Protection Agency (USEPA), 2013. "EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures"; Quality Assurance Unit Staff; Office of Environmental Measurement and Evaluation; April 22, 2013.

Data Validator: Elizabeth Penta December 26, 2017

elizabeth penta

Senior Reviewer: Denise King December 28, 2017

Denise King

TABLE 1
DATA VALIDATION SUMMARY
2017 INTERTIDAL AND SUBTIDAL SEDIMENT
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690 and L1739692

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	TOC Lloyd-Kahn Count
1708709	SED	VN-10-01	VN-10-01_08192017_SED_03	8/19/2017	FS	1	1	
1708709	SED	BH-05-01	BH-05-01_08192017_SED_03	8/19/2017	FS	1	1	
1708709	SED	ON-13-01	ON-13-01_08192017_SED_03	8/19/2017	FS	1	1	
1708709	SED	ON-13-01	ON-13-01_08192017_SED_03_DUP	8/19/2017	FD	1	1	
1708709	SED	ON-21-01	ON-21-01_08192017_SED_03	8/19/2017	FS	1	1	
1708709	SED	BH-08-01	BH-08-01_08192017_SED_03	8/19/2017	FS	1	1	
1708709	SED	ON-22-01	ON-22-01_08192017_SED_03	8/19/2017	FS	1	1	
1708709	SED	VN-10-02	VN-10-02_08192017_SED_03	8/19/2017	FS	1	1	
1709528	SED	BU-08-01	BU-08-01_091217_SED_03	9/12/2017	FS	1	1	
1709561	SED	ON-19-01-A	ON-19-01-A-17_SED_00-01	9/19/2017	FS	1	1	
1709561	SED	ON-19-01-A	ON-19-01-A-17_SED_01-03	9/19/2017	FS	1	1	
1709561	SED	ON-19-01-A	ON-19-01-A-17_SED_03-05	9/19/2017	FS	1	1	
1709561	SED	ON-19-01-A	ON-19-01-A-17_SED_05-07	9/19/2017	FS	1	1	
1709561	SED	ON-19-01-A	ON-19-01-A-17_SED_07-10	9/19/2017	FS	1	1	
1709561	SED	ON-19-01-A	ON-19-01-A-17_SED_10-15	9/19/2017	FS	1	1	
1709575	SED	FF-06-01-A	FF-06-01-A-17_SED_00-01	9/19/2017	FS	1	1	
1709575	SED	FF-06-01-A	FF-06-01-A-17_SED_01-03	9/19/2017	FS	1	1	
1709575	SED	FF-06-01-A	FF-06-01-A-17_SED_03-05	9/19/2017	FS	1	1	
1709575	SED	FF-06-01-A	FF-06-01-A-17_SED_05-07	9/19/2017	FS	1	1	
1709575	SED	FF-06-01-A	FF-06-01-A-17_SED_07-10	9/19/2017	FS	1	1	
1709575	SED	FF-06-01-A	FF-06-01-A-17_SED_10-15	9/19/2017	FS	1	1	
1709575	SED	FF-06-01-A	FF-06-01-A-17_SED_15-20	9/19/2017	FS	1	1	
1709576	SED	BU-09-01-C	BU-09-01-C-17_SED_00-01	9/19/2017	FS	1	1	

TABLE 1
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PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690 and L1739692

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	TOC Lloyd-Kahn Count
1709576	SED	BU-09-01-C	BU-09-01-C-17_SED_01-03	9/19/2017	FS	1	1	
1709576	SED	BU-09-01-C	BU-09-01-C-17_SED_03-05	9/19/2017	FS	1	1	
1709576	SED	BU-09-01-C	BU-09-01-C-17_SED_05-07	9/19/2017	FS	1	1	
1709576	SED	BU-09-01-C	BU-09-01-C-17_SED_07-10	9/19/2017	FS	1	1	
1709576	SED	BU-09-01-C	BU-09-01-C-17_SED_10-15	9/19/2017	FS	1	1	
1709576	SED	BU-09-01-C	BU-09-01-C-17_SED_15-20	9/19/2017	FS	1	1	
1709576	SED	BU-09-01-C	BU-09-01-C-17_SED_20-30	9/19/2017	FS	1	1	
1709576	SED	BU-09-01-C	BU-09-01-C-17_SED_30-40	9/19/2017	FS	1	1	
1709576	SED	BU-09-01-C	BU-09-01-C-17_SED_40-50	9/19/2017	FS	1	1	
1709577	SED	BU-05-01-A	BU-05-01-A-17_SED_00-01	9/19/2017	FS	1	1	
1709577	SED	BU-05-01-A	BU-05-01-A-17_SED_01-03	9/19/2017	FS	1	1	
1709577	SED	BU-05-01-A	BU-05-01-A-17_SED_03-05	9/19/2017	FS	1	1	
1709577	SED	BU-05-01-A	BU-05-01-A-17_SED_05-07	9/19/2017	FS	1	1	
1709577	SED	BU-05-01-A	BU-05-01-A-17_SED_07-10	9/19/2017	FS	1	1	
1709577	SED	BU-05-01-A	BU-05-01-A-17_SED_10-15	9/19/2017	FS	1	1	
1709577	SED	BU-05-01-A	BU-05-01-A-17_SED_15-20	9/19/2017	FS	1	1	
1709579	SED	BU-01-01-C	BU-01-01-C-17_SED_00-01	9/19/2017	FS	1	1	
1709579	SED	BU-01-01-C	BU-01-01-C-17_SED_01-03	9/19/2017	FS	1	1	
1709579	SED	BU-01-01-C	BU-01-01-C-17_SED_03-05	9/19/2017	FS	1	1	
1709579	SED	BU-01-01-C	BU-01-01-C-17_SED_05-07	9/19/2017	FS	1	1	
1709579	SED	BU-01-01-C	BU-01-01-C-17_SED_07-10	9/19/2017	FS	1	1	
1709579	SED	BU-01-01-C	BU-01-01-C-17_SED_10-15	9/19/2017	FS	1	1	
1709579	SED	BU-01-01-C	BU-01-01-C-17_SED_15-20	9/19/2017	FS	1	1	

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PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690 and L1739692

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	TOC Lloyd-Kahn Count
1709581	SED	BU-10-01-A	BU-10-01-A-17_SED_00-01	9/20/2017	FS	1	1	
1709581	SED	BU-10-01-A	BU-10-01-A-17_SED_01-03	9/20/2017	FS	1	1	
1709581	SED	BU-10-01-A	BU-10-01-A-17_SED_03-05	9/20/2017	FS	1	1	
1709581	SED	BU-10-01-A	BU-10-01-A-17_SED_05-07	9/20/2017	FS	1	1	
1709581	SED	BU-10-01-A	BU-10-01-A-17_SED_07-10	9/20/2017	FS	1	1	
1709581	SED	BU-10-01-A	BU-10-01-A-17_SED_10-15	9/20/2017	FS	1	1	
1709581	SED	BU-10-01-A	BU-10-01-A-17_SED_15-20	9/20/2017	FS	1	1	
1709581	SED	BU-10-01-A	BU-10-01-A-17_SED_20-30	9/20/2017	FS	1	1	
1709581	SED	BU-10-01-A	BU-10-01-A-17_SED_30-40	9/20/2017	FS	1	1	
1709581	SED	BU-10-01-A	BU-10-01-A-17_SED_40-50	9/20/2017	FS	1	1	
1709581	SED	BU-10-01-A	BU-10-01-A-17_SED_50-60	9/20/2017	FS	1	1	
1709581	SED	BU-10-01-A	BU-10-01-A-17_SED_60-70	9/20/2017	FS	1	1	
1709581	SED	BU-10-01-A	BU-10-01-A-17_SED_70-80	9/20/2017	FS	1	1	
1710899	SED	FF-07-02-B	FF-07-02-B-17_SED_30-33	10/18/2017	FS	1	1	
1710899	SED	FF-07-02-B	FF-07-02-B-17_SED_33-35	10/18/2017	FS	1	1	
1710899	SED	FF-07-02-B	FF-07-02-B-17_SED_35-38	10/18/2017	FS	1	1	
1710899	SED	FF-07-02-B	FF-07-02-B-17_SED_38-40	10/18/2017	FS	1	1	
1710899	SED	FF-07-02-B	FF-07-02-B-17_SED_40-43	10/18/2017	FS	1	1	
1710899	SED	FF-07-02-B	FF-07-02-B-17_SED_43-45	10/18/2017	FS	1	1	
1710899	SED	FF-07-02-B	FF-07-02-B-17_SED_45-48	10/18/2017	FS	1	1	
1710899	SED	FF-07-02-B	FF-07-02-B-17_SED_48-50	10/18/2017	FS	1	1	
1710899	SED	FF-07-02-B	FF-07-02-B-17_SED_50-53	10/18/2017	FS	1	1	
1710899	SED	FF-07-02-B	FF-07-02-B-17_SED_50-53_DUP	10/18/2017	FD	1	1	

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SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690 and L1739692

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	TOC Lloyd-Kahn Count
1710899	SED	FF-07-02-B	FF-07-02-B-17_SED_53-55	10/18/2017	FS	1	1	
1710899	SED	FF-07-02-B	FF-07-02-B-17_SED_55-58	10/18/2017	FS	1	1	
1710899	SED	FF-07-02-B	FF-07-02-B-17_SED_58-60	10/18/2017	FS	1	1	
1710899	SED	FF-07-02-B	FF-07-02-B-17_SED_60-63	10/18/2017	FS	1	1	
1710899	SED	FF-07-02-B	FF-07-02-B-17_SED_63-65	10/18/2017	FS	1	1	
1710899	SED	FF-07-02-B	FF-07-02-B-17_SED_65-68	10/18/2017	FS	1	1	
1710899	SED	FF-07-02-B	FF-07-02-B-17_SED_68-70	10/18/2017	FS	1	1	
1710899	SED	FF-07-02-B	FF-07-02-B-17_SED_70-73	10/18/2017	FS	1	1	
1710899	SED	FF-07-02-B	FF-07-02-B-17_SED_73-75	10/18/2017	FS	1	1	
1710899	SED	FF-07-02-B	FF-07-02-B-17_SED_75-78	10/18/2017	FS	1	1	
1710899	SED	FF-07-02-B	FF-07-02-B-17_SED_75-78_DUP	10/18/2017	FD	1	1	
1710899	SED	FF-07-02-B	FF-07-02-B-17_SED_78-80	10/18/2017	FS	1	1	
1710899	SED	FF-07-02-B	FF-07-02-B-17_SED_80-83	10/18/2017	FS	1	1	
1711005	SED	WP-06-02-F	WP-06-02-F-17_SED_03-05	10/27/2017	FS	1	1	
1711043	SED	VW-02-01-E	VW-02-01-E-17_SED_03-05	10/27/2017	FS	1	1	
1711044	SED	VW-14-01-F	VW-14-01-F-17_SED_03-05	10/27/2017	FS	1	1	
1711044	SED	VW-14-01-F	VW-14-01-F-17_SED_05-07	10/27/2017	FS	1	1	
1711044	SED	VW-14-01-F	VW-14-01-F-17_SED_07-10	10/27/2017	FS	1	1	
1711045	SED	WP-02-01-D	WP-02-01-D-17_SED_03-05	10/26/2017	FS	1	1	
1711045	SED	WP-02-01-D	WP-02-01-D-17_SED_05-07	10/26/2017	FS	1	1	
1711045	SED	WP-02-01-D	WP-02-01-D-17_SED_07-10	10/26/2017	FS	1	1	
1711045	SED	WP-02-01-D	WP-02-01-D-17_SED_01-03	10/26/2017	FS	1	1	
1711048	SED	VE-09-01-E	VE-09-01-E-17_SED_03-05	10/26/2017	FS	1	1	

TABLE 1
DATA VALIDATION SUMMARY
2017 INTERTIDAL AND SUBTIDAL SEDIMENT
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SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690 and L1739692

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	TOC Lloyd-Kahn Count
1711048	SED	VE-09-01-E	VE-09-01-E-17_SED_05-07	10/26/2017	FS	1	1	
1711048	SED	VE-09-01-E	VE-09-01-E-17_SED_07-10	10/26/2017	FS	1	1	
1711048	SED	VE-09-01-E	VE-09-01-E-17_SED_01-03	10/26/2017	FS	1	1	
1711049	SED	VE-10-01-E	VE-10-01-E-17_SED_03-05	10/26/2017	FS	1	1	
1711049	SED	VE-10-01-E	VE-10-01-E-17_SED_05-07	10/26/2017	FS	1	1	
1711049	SED	VE-10-01-E	VE-10-01-E-17_SED_07-10	10/26/2017	FS	1	1	
1711049	SED	VE-10-01-E	VE-10-01-E-17_SED_07-10_DUP	10/26/2017	FD	1	1	
1711051	SED	VN-01-01-B	VN-01-01-B-17_SED_03-05	10/26/2017	FS	1	1	
1711051	SED	VN-01-01-B	VN-01-01-B-17_SED_05-07	10/26/2017	FS	1	1	
1711051	SED	VN-01-01-B	VN-01-01-B-17_SED_07-10	10/26/2017	FS	1	1	
1711052	SED	VN-02-01-A	VN-02-01-A-17_SED_03-05	10/25/2017	FS	1	1	
1711052	SED	VN-02-01-A	VN-02-01-A-17_SED_05-07	10/25/2017	FS	1	1	
1711052	SED	VN-02-01-A	VN-02-01-A-17_SED_07-10	10/25/2017	FS	1	1	
1711053	SED	VN-03-01-D	VN-03-01-D-17_SED_03-05	10/26/2017	FS	1	1	
1711053	SED	VN-03-01-D	VN-03-01-D-17_SED_05-07	10/26/2017	FS	1	1	
1711053	SED	VN-03-01-D	VN-03-01-D-17_SED_07-10	10/26/2017	FS	1	1	
1711053	SED	VN-03-01-D	VN-03-01-D-17_SED_07-10_DUP	10/26/2017	FD	1	1	
1711054	SED	VN-02-04-B	VN-02-04-B-17_SED_03-05	10/25/2017	FS	1	1	
1711054	SED	VN-02-04-B	VN-02-04-B-17_SED_05-07	10/25/2017	FS	1	1	
1711054	SED	VN-02-04-B	VN-02-04-B-17_SED_07-10	10/25/2017	FS	1	1	
1711055	SED	VN-02-03-A	VN-02-03-A-17_SED_03-05	10/25/2017	FS	1	1	
1711055	SED	VN-02-03-A	VN-02-03-A-17_SED_05-07	10/25/2017	FS	1	1	
1711055	SED	VN-02-03-A	VN-02-03-A-17_SED_05-07_DUP	10/25/2017	FD	1	1	

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SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690 and L1739692

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	TOC Lloyd-Kahn Count
1711055	SED	VN-02-03-A	VN-02-03-A-17_SED_07-10	10/25/2017	FS	1	1	
1711072	SED	FF-08-02-G	FF-08-02-G-17_SED_03-05	10/26/2017	FS	1	1	
1711072	SED	FF-08-02-G	FF-08-02-G-17_SED_03-05_DUP	10/26/2017	FD	1	1	
1711072	SED	FF-08-02-G	FF-08-02-G-17_SED_05-07	10/26/2017	FS	1	1	
1711074	SED	BU-08-01-E	BU-08-01-E-17_SED_03-05	10/25/2017	FS	1	1	
1711074	SED	BU-08-01-E	BU-08-01-E-17_SED_05-07	10/25/2017	FS	1	1	
1711074	SED	BU-08-01-E	BU-08-01-E-17_SED_07-10	10/25/2017	FS	1	1	
1711075	SED	MM-04-01-F	MM-04-01-F-17_SED_03-05	10/26/2017	FS	1	1	
1711075	SED	MM-04-01-F	MM-04-01-F-17_SED_05-07	10/26/2017	FS	1	1	
1711075	SED	MM-04-01-F	MM-04-01-F-17_SED_01-03_DUP	10/26/2017	FD	1	1	
1711076	SED	BU-02-01-E	BU-02-01-E-17_SED_03-05	10/25/2017	FS	1	1	
1711078	SED	BH-03-01-E	BH-03-01-E-17_SED_03-05	10/25/2017	FS	1	1	
1711078	SED	BH-03-01-E	BH-03-01-E-17_SED_03-05_DUP	10/25/2017	FD	1	1	
1711078	SED	BH-03-01-E	BH-03-01-E-17_SED_05-07	10/25/2017	FS	1	1	
1711078	SED	BH-03-01-E	BH-03-01-E-17_SED_01-03	10/25/2017	FS	1	1	
1711079	SED	ON-18-02-E	ON-18-02-E-17_SED_03-05	10/26/2017	FS	1	1	
1711079	SED	ON-18-02-E	ON-18-02-E-17_SED_05-07	10/26/2017	FS	1	1	
1711079	SED	ON-18-02-E	ON-18-02-E-17_SED_07-10	10/26/2017	FS	1	1	
1711080	SED	VN-08-01-E	VN-08-01-E-17_SED_03-05	10/26/2017	FS	1	1	
1711080	SED	VN-08-01-E	VN-08-01-E-17_SED_05-07	10/26/2017	FS	1	1	
1711080	SED	VN-08-01-E	VN-08-01-E-17_SED_05-07_DUP	10/26/2017	FD	1	1	
1711081	SED	ON-18-01-F	ON-18-01-F-17_SED_03-05	10/26/2017	FS	1	1	
1711081	SED	ON-18-01-F	ON-18-01-F-17_SED_05-07	10/26/2017	FS	1	1	

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SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	TOC Lloyd-Kahn Count
1711081	SED	ON-18-01-F	ON-18-01-F-17_SED_07-10	10/26/2017	FS	1	1	
1711081	SED	ON-18-01-F	ON-18-01-F-17_SED_07-10_DUP	10/26/2017	FD	1	1	
1711082	SED	ON-10-01-C	ON-10-01-C-17_SED_03-05	10/27/2017	FS	1	1	
L1729881	SED	BH-08-01	BH-08-01_08192017_SED_03	8/19/2017	FS	1		1
L1729881	SED	ON-13-01	ON-13-01_08192017_SED_03	8/19/2017	FS	1		1
L1729881	SED	ON-21-01	ON-21-01_08192017_SED_03	8/19/2017	FS	1		1
L1729881	SED	ON-22-01	ON-22-01_08192017_SED_03	8/19/2017	FS	1		1
L1729881	SED	VN-10-01	VN-10-01_08192017_SED_03	8/19/2017	FS	1		1
L1729881	SED	VN-10-02	VN-10-02_08192017_SED_03	8/19/2017	FS	1		1
L1732496	SED	BU-08-01	BU-08-01_091217_SED_03	9/12/2017	FS	1		1
L1733613	SED	BU-01-01-C	BU-01-01-C-17_SED_00-01	9/19/2017	FS	1		1
L1733613	SED	BU-01-01-C	BU-01-01-C-17_SED_01-03	9/19/2017	FS	1		1
L1733613	SED	BU-01-01-C	BU-01-01-C-17_SED_03-05	9/19/2017	FS	1		1
L1733613	SED	BU-01-01-C	BU-01-01-C-17_SED_05-07	9/19/2017	FS	1		1
L1733613	SED	BU-01-01-C	BU-01-01-C-17_SED_07-10	9/19/2017	FS	1		1
L1733613	SED	BU-01-01-C	BU-01-01-C-17_SED_10-15	9/19/2017	FS	1		1
L1733613	SED	BU-01-01-C	BU-01-01-C-17_SED_15-20	9/19/2017	FS	1		1
L1733614	SED	BU-05-01-A	BU-05-01-A-17_SED_00-01	9/19/2017	FS	1		1
L1733614	SED	BU-05-01-A	BU-05-01-A-17_SED_01-03	9/19/2017	FS	1		1
L1733614	SED	BU-05-01-A	BU-05-01-A-17_SED_03-05	9/19/2017	FS	1		1
L1733614	SED	BU-05-01-A	BU-05-01-A-17_SED_05-07	9/19/2017	FS	1		1
L1733614	SED	BU-05-01-A	BU-05-01-A-17_SED_07-10	9/19/2017	FS	1		1
L1733614	SED	BU-05-01-A	BU-05-01-A-17_SED_10-15	9/19/2017	FS	1		1

Created by: BCG 12/22/2017
Checked by: EP 12/26/2017

TABLE 1
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SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690 and L1739692

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	TOC Lloyd-Kahn Count
L1733614	SED	BU-05-01-A	BU-05-01-A-17_SED_15-20	9/19/2017	FS	1		1
L1733615	SED	BU-09-01-C	BU-09-01-C-17_SED_00-01	9/19/2017	FS	1		1
L1733615	SED	BU-09-01-C	BU-09-01-C-17_SED_01-03	9/19/2017	FS	1		1
L1733615	SED	BU-09-01-C	BU-09-01-C-17_SED_03-05	9/19/2017	FS	1		1
L1733615	SED	BU-09-01-C	BU-09-01-C-17_SED_05-07	9/19/2017	FS	1		1
L1733615	SED	BU-09-01-C	BU-09-01-C-17_SED_07-10	9/19/2017	FS	1		1
L1733615	SED	BU-09-01-C	BU-09-01-C-17_SED_10-15	9/19/2017	FS	1		1
L1733615	SED	BU-09-01-C	BU-09-01-C-17_SED_15-20	9/19/2017	FS	1		1
L1733615	SED	BU-09-01-C	BU-09-01-C-17_SED_20-30	9/19/2017	FS	1		1
L1733615	SED	BU-09-01-C	BU-09-01-C-17_SED_30-40	9/19/2017	FS	1		1
L1733615	SED	BU-09-01-C	BU-09-01-C-17_SED_40-50	9/19/2017	FS	1		1
L1733616	SED	BU-10-01-A	BU-10-01-A-17_SED_00-01	9/20/2017	FS	1		1
L1733616	SED	BU-10-01-A	BU-10-01-A-17_SED_01-03	9/20/2017	FS	1		1
L1733616	SED	BU-10-01-A	BU-10-01-A-17_SED_03-05	9/20/2017	FS	1		1
L1733616	SED	BU-10-01-A	BU-10-01-A-17_SED_05-07	9/20/2017	FS	1		1
L1733616	SED	BU-10-01-A	BU-10-01-A-17_SED_07-10	9/20/2017	FS	1		1
L1733616	SED	BU-10-01-A	BU-10-01-A-17_SED_10-15	9/20/2017	FS	1		1
L1733616	SED	BU-10-01-A	BU-10-01-A-17_SED_15-20	9/20/2017	FS	1		1
L1733616	SED	BU-10-01-A	BU-10-01-A-17_SED_20-30	9/20/2017	FS	1		1
L1733616	SED	BU-10-01-A	BU-10-01-A-17_SED_30-40	9/20/2017	FS	1		1
L1733616	SED	BU-10-01-A	BU-10-01-A-17_SED_40-50	9/20/2017	FS	1		1
L1733616	SED	BU-10-01-A	BU-10-01-A-17_SED_50-60	9/20/2017	FS	1		1
L1733616	SED	BU-10-01-A	BU-10-01-A-17_SED_60-70	9/20/2017	FS	1		1

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SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690 and L1739692

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	TOC Lloyd-Kahn Count
L1733616	SED	BU-10-01-A	BU-10-01-A-17_SED_70-80	9/20/2017	FS	1		1
L1733617	SED	FF-06-01-A	FF-06-01-A-17_SED_00-01	9/19/2017	FS	1		1
L1733617	SED	FF-06-01-A	FF-06-01-A-17_SED_01-03	9/19/2017	FS	1		1
L1733617	SED	FF-06-01-A	FF-06-01-A-17_SED_03-05	9/19/2017	FS	1		1
L1733617	SED	FF-06-01-A	FF-06-01-A-17_SED_05-07	9/19/2017	FS	1		1
L1733617	SED	FF-06-01-A	FF-06-01-A-17_SED_07-10	9/19/2017	FS	1		1
L1733617	SED	FF-06-01-A	FF-06-01-A-17_SED_10-15	9/19/2017	FS	1		1
L1733617	SED	FF-06-01-A	FF-06-01-A-17_SED_15-20	9/19/2017	FS	1		1
L1733622	SED	ON-19-01-A	ON-19-01-A-17_SED_00-01	9/19/2017	FS	1		1
L1733622	SED	ON-19-01-A	ON-19-01-A-17_SED_01-03	9/19/2017	FS	1		1
L1733622	SED	ON-19-01-A	ON-19-01-A-17_SED_03-05	9/19/2017	FS	1		1
L1733622	SED	ON-19-01-A	ON-19-01-A-17_SED_05-07	9/19/2017	FS	1		1
L1733622	SED	ON-19-01-A	ON-19-01-A-17_SED_07-10	9/19/2017	FS	1		1
L1733622	SED	ON-19-01-A	ON-19-01-A-17_SED_10-15	9/19/2017	FS	1		1
L1739125	SED	FF-07-02-B	FF-07-02-B-17_SED_30-33	10/18/2017	FS	1		1
L1739125	SED	FF-07-02-B	FF-07-02-B-17_SED_33-35	10/18/2017	FS	1		1
L1739125	SED	FF-07-02-B	FF-07-02-B-17_SED_35-38	10/18/2017	FS	1		1
L1739125	SED	FF-07-02-B	FF-07-02-B-17_SED_38-40	10/18/2017	FS	1		1
L1739125	SED	FF-07-02-B	FF-07-02-B-17_SED_40-43	10/18/2017	FS	1		1
L1739125	SED	FF-07-02-B	FF-07-02-B-17_SED_43-45	10/18/2017	FS	1		1
L1739125	SED	FF-07-02-B	FF-07-02-B-17_SED_45-48	10/18/2017	FS	1		1
L1739125	SED	FF-07-02-B	FF-07-02-B-17_SED_48-50	10/18/2017	FS	1		1
L1739125	SED	FF-07-02-B	FF-07-02-B-17_SED_50-53	10/18/2017	FS	1		1

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DATA VALIDATION SUMMARY
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SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	TOC Lloyd-Kahn Count
L1739125	SED	FF-07-02-B	FF-07-02-B-17_SED_53-55	10/18/2017	FS	1		1
L1739125	SED	FF-07-02-B	FF-07-02-B-17_SED_55-58	10/18/2017	FS	1		1
L1739125	SED	FF-07-02-B	FF-07-02-B-17_SED_58-60	10/18/2017	FS	1		1
L1739125	SED	FF-07-02-B	FF-07-02-B-17_SED_60-63	10/18/2017	FS	1		1
L1739125	SED	FF-07-02-B	FF-07-02-B-17_SED_63-65	10/18/2017	FS	1		1
L1739125	SED	FF-07-02-B	FF-07-02-B-17_SED_65-68	10/18/2017	FS	1		1
L1739125	SED	FF-07-02-B	FF-07-02-B-17_SED_68-70	10/18/2017	FS	1		1
L1739125	SED	FF-07-02-B	FF-07-02-B-17_SED_70-73	10/18/2017	FS	1		1
L1739125	SED	FF-07-02-B	FF-07-02-B-17_SED_73-75	10/18/2017	FS	1		1
L1739125	SED	FF-07-02-B	FF-07-02-B-17_SED_75-78	10/18/2017	FS	1		1
L1739125	SED	FF-07-02-B	FF-07-02-B-17_SED_78-80	10/18/2017	FS	1		1
L1739125	SED	FF-07-02-B	FF-07-02-B-17_SED_80-83	10/18/2017	FS	1		1
L1739533	SED	BH-03-01-E	BH-03-01-E-17_SED_00-01	10/25/2017	FS	1		1
L1739533	SED	BH-03-01-E	BH-03-01-E-17_SED_01-03	10/25/2017	FS	1		1
L1739533	SED	BH-03-01-E	BH-03-01-E-17_SED_03-05	10/25/2017	FS	1		1
L1739533	SED	BH-03-01-E	BH-03-01-E-17_SED_05-07	10/25/2017	FS	1		1
L1739534	SED	BU-02-01-E	BU-02-01-E-17_SED_00-01	10/25/2017	FS	1		1
L1739534	SED	BU-02-01-E	BU-02-01-E-17_SED_01-03	10/25/2017	FS	1		1
L1739534	SED	BU-02-01-E	BU-02-01-E-17_SED_03-05	10/25/2017	FS	1		1
L1739535	SED	BU-08-01-E	BU-08-01-E-17_SED_00-01	10/25/2017	FS	1		1
L1739535	SED	BU-08-01-E	BU-08-01-E-17_SED_01-03	10/25/2017	FS	1		1
L1739535	SED	BU-08-01-E	BU-08-01-E-17_SED_03-05	10/25/2017	FS	1		1
L1739535	SED	BU-08-01-E	BU-08-01-E-17_SED_05-07	10/25/2017	FS	1		1

TABLE 1
DATA VALIDATION SUMMARY
2017 INTERTIDAL AND SUBTIDAL SEDIMENT
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690 and L1739692

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	TOC Lloyd-Kahn Count
L1739535	SED	BU-08-01-E	BU-08-01-E-17_SED_07-10	10/25/2017	FS	1		1
L1739538	SED	FF-08-02-G	FF-08-02-G-17_SED_00-01	10/26/2017	FS	1		1
L1739538	SED	FF-08-02-G	FF-08-02-G-17_SED_01-03	10/26/2017	FS	1		1
L1739538	SED	FF-08-02-G	FF-08-02-G-17_SED_03-05	10/26/2017	FS	1		1
L1739538	SED	FF-08-02-G	FF-08-02-G-17_SED_05-07	10/26/2017	FS	1		1
L1739539	SED	MM-04-01-F	MM-04-01-F-17_SED_00-01	10/26/2017	FS	1		1
L1739539	SED	MM-04-01-F	MM-04-01-F-17_SED_01-03	10/26/2017	FS	1		1
L1739539	SED	MM-04-01-F	MM-04-01-F-17_SED_03-05	10/26/2017	FS	1		1
L1739539	SED	MM-04-01-F	MM-04-01-F-17_SED_05-07	10/26/2017	FS	1		1
L1739574	SED	ON-10-01-C	ON-10-01-C-17_SED_00-01	10/27/2017	FS	1		1
L1739574	SED	ON-10-01-C	ON-10-01-C-17_SED_01-03	10/27/2017	FS	1		1
L1739574	SED	ON-10-01-C	ON-10-01-C-17_SED_03-05	10/27/2017	FS	1		1
L1739575	SED	ON-18-01-F	ON-18-01-F-17_SED_00-01	10/26/2017	FS	1		1
L1739575	SED	ON-18-01-F	ON-18-01-F-17_SED_01-03	10/26/2017	FS	1		1
L1739575	SED	ON-18-01-F	ON-18-01-F-17_SED_03-05	10/26/2017	FS	1		1
L1739575	SED	ON-18-01-F	ON-18-01-F-17_SED_05-07	10/26/2017	FS	1		1
L1739575	SED	ON-18-01-F	ON-18-01-F-17_SED_07-10	10/26/2017	FS	1		1
L1739576	SED	ON-18-02-E	ON-18-02-E-17_SED_00-01	10/26/2017	FS	1		1
L1739576	SED	ON-18-02-E	ON-18-02-E-17_SED_01-03	10/26/2017	FS	1		1
L1739576	SED	ON-18-02-E	ON-18-02-E-17_SED_03-05	10/26/2017	FS	1		1
L1739576	SED	ON-18-02-E	ON-18-02-E-17_SED_05-07	10/26/2017	FS	1		1
L1739576	SED	ON-18-02-E	ON-18-02-E-17_SED_07-10	10/26/2017	FS	1		1
L1739654	SED	VE-09-01-E	VE-09-01-E-17_SED_00-01	10/26/2017	FS	1		1

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SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	TOC Lloyd-Kahn Count
L1739654	SED	VE-09-01-E	VE-09-01-E-17_SED_01-03	10/26/2017	FS	1		1
L1739654	SED	VE-09-01-E	VE-09-01-E-17_SED_03-05	10/26/2017	FS	1		1
L1739654	SED	VE-09-01-E	VE-09-01-E-17_SED_05-07	10/26/2017	FS	1		1
L1739654	SED	VE-09-01-E	VE-09-01-E-17_SED_07-10	10/26/2017	FS	1		1
L1739655	SED	VE-10-01-E	VE-10-01-E-17_SED_00-01	10/26/2017	FS	1		1
L1739655	SED	VE-10-01-E	VE-10-01-E-17_SED_01-03	10/26/2017	FS	1		1
L1739655	SED	VE-10-01-E	VE-10-01-E-17_SED_03-05	10/26/2017	FS	1		1
L1739655	SED	VE-10-01-E	VE-10-01-E-17_SED_05-07	10/26/2017	FS	1		1
L1739655	SED	VE-10-01-E	VE-10-01-E-17_SED_07-10	10/26/2017	FS	1		1
L1739657	SED	VN-01-01-B	VN-01-01-B-17_SED_00-01	10/26/2017	FS	1		1
L1739657	SED	VN-01-01-B	VN-01-01-B-17_SED_01-03	10/26/2017	FS	1		1
L1739657	SED	VN-01-01-B	VN-01-01-B-17_SED_03-05	10/26/2017	FS	1		1
L1739657	SED	VN-01-01-B	VN-01-01-B-17_SED_05-07	10/26/2017	FS	1		1
L1739657	SED	VN-01-01-B	VN-01-01-B-17_SED_07-10	10/26/2017	FS	1		1
L1739658	SED	VN-02-01-A	VN-02-01-A-17_SED_00-01	10/25/2017	FS	1		1
L1739658	SED	VN-02-01-A	VN-02-01-A-17_SED_01-03	10/25/2017	FS	1		1
L1739658	SED	VN-02-01-A	VN-02-01-A-17_SED_03-05	10/25/2017	FS	1		1
L1739658	SED	VN-02-01-A	VN-02-01-A-17_SED_05-07	10/25/2017	FS	1		1
L1739658	SED	VN-02-01-A	VN-02-01-A-17_SED_07-10	10/25/2017	FS	1		1
L1739659	SED	VN-02-03-A	VN-02-03-A-17_SED_00-01	10/25/2017	FS	1		1
L1739659	SED	VN-02-03-A	VN-02-03-A-17_SED_01-03	10/25/2017	FS	1		1
L1739659	SED	VN-02-03-A	VN-02-03-A-17_SED_03-05	10/25/2017	FS	1		1
L1739659	SED	VN-02-03-A	VN-02-03-A-17_SED_05-07	10/25/2017	FS	1		1

TABLE 1
DATA VALIDATION SUMMARY
2017 INTERTIDAL AND SUBTIDAL SEDIMENT
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690 and L1739692

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	TOC Lloyd-Kahn Count
L1739659	SED	VN-02-03-A	VN-02-03-A-17_SED_07-10	10/25/2017	FS	1		1
L1739660	SED	VN-02-04-B	VN-02-04-B-17_SED_00-01	10/25/2017	FS	1		1
L1739660	SED	VN-02-04-B	VN-02-04-B-17_SED_01-03	10/25/2017	FS	1		1
L1739660	SED	VN-02-04-B	VN-02-04-B-17_SED_03-05	10/25/2017	FS	1		1
L1739660	SED	VN-02-04-B	VN-02-04-B-17_SED_05-07	10/25/2017	FS	1		1
L1739660	SED	VN-02-04-B	VN-02-04-B-17_SED_07-10	10/25/2017	FS	1		1
L1739661	SED	VN-03-01-D	VN-03-01-D-17_SED_00-01	10/26/2017	FS	1		1
L1739661	SED	VN-03-01-D	VN-03-01-D-17_SED_01-03	10/26/2017	FS	1		1
L1739661	SED	VN-03-01-D	VN-03-01-D-17_SED_03-05	10/26/2017	FS	1		1
L1739661	SED	VN-03-01-D	VN-03-01-D-17_SED_05-07	10/26/2017	FS	1		1
L1739661	SED	VN-03-01-D	VN-03-01-D-17_SED_07-10	10/26/2017	FS	1		1
L1739662	SED	VN-04-01-E	VN-04-01-E-17_SED_00-01	10/26/2017	FS	1		1
L1739662	SED	VN-04-01-E	VN-04-01-E-17_SED_01-03	10/26/2017	FS	1		1
L1739662	SED	VN-04-01-E	VN-04-01-E-17_SED_03-05	10/26/2017	FS	1		1
L1739662	SED	VN-04-01-E	VN-04-01-E-17_SED_05-07	10/26/2017	FS	1		1
L1739662	SED	VN-04-01-E	VN-04-01-E-17_SED_07-10	10/26/2017	FS	1		1
L1739686	SED	VN-04-02-C	VN-04-02-C-17_SED_00-01	10/27/2017	FS	1		1
L1739686	SED	VN-04-02-C	VN-04-02-C-17_SED_01-03	10/27/2017	FS	1		1
L1739686	SED	VN-04-02-C	VN-04-02-C-17_SED_03-05	10/20/2017	FS	1		1
L1739686	SED	VN-04-02-C	VN-04-02-C-17_SED_05-07	10/20/2017	FS	1		1
L1739686	SED	VN-04-02-C	VN-04-02-C-17_SED_07-10	10/20/2017	FS	1		1
L1739687	SED	VN-08-01-E	VN-08-01-E-17_SED_00-01	10/26/2017	FS	1		1
L1739687	SED	VN-08-01-E	VN-08-01-E-17_SED_01-03	10/26/2017	FS	1		1

TABLE 1
DATA VALIDATION SUMMARY
2017 INTERTIDAL AND SUBTIDAL SEDIMENT
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690 and L1739692

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	TOC Lloyd-Kahn Count
L1739687	SED	VN-08-01-E	VN-08-01-E-17_SED_03-05	10/26/2017	FS	1		1
L1739687	SED	VN-08-01-E	VN-08-01-E-17_SED_05-07	10/26/2017	FS	1		1
L1739688	SED	VW-14-01-F	VW-14-01-F-17_SED_00-01	10/27/2017	FS	1		1
L1739688	SED	VW-14-01-F	VW-14-01-F-17_SED_01-03	10/27/2017	FS	1		1
L1739688	SED	VW-14-01-F	VW-14-01-F-17_SED_03-05	10/27/2017	FS	1		1
L1739688	SED	VW-14-01-F	VW-14-01-F-17_SED_05-07	10/27/2017	FS	1		1
L1739688	SED	VW-14-01-F	VW-14-01-F-17_SED_07-10	10/27/2017	FS	1		1
L1739689	SED	WP-02-01-D	WP-02-01-D-17_SED_00-01	10/26/2017	FS	1		1
L1739689	SED	WP-02-01-D	WP-02-01-D-17_SED_01-03	10/26/2017	FS	1		1
L1739689	SED	WP-02-01-D	WP-02-01-D-17_SED_03-05	10/26/2017	FS	1		1
L1739689	SED	WP-02-01-D	WP-02-01-D-17_SED_05-07	10/26/2017	FS	1		1
L1739689	SED	WP-02-01-D	WP-02-01-D-17_SED_07-10	10/26/2017	FS	1		1
L1739690	SED	WP-06-02-F	WP-06-02-F-17_SED_00-01	10/27/2017	FS	1		1
L1739690	SED	WP-06-02-F	WP-06-02-F-17_SED_01-03	10/27/2017	FS	1		1
L1739690	SED	WP-06-02-F	WP-06-02-F-17_SED_03-05	10/27/2017	FS	1		1
L1739692	SED	VW-02-01-E	VW-02-01-E-17_SED_00-01	10/27/2017	FS	1		1
L1739692	SED	VW-02-01-E	VW-02-01-E-17_SED_01-03	10/27/2017	FS	1		1
L1739692	SED	VW-02-01-E	VW-02-01-E-17_SED_03-05	10/27/2017	FS	1		1

Notes:
Count = # of analytes
FS = Field Sample
FD = Field Duplicate
SDG = Sample Delivery Group
SED = Sediment
TOC = Total Organic Carbon

Created by: BCG 12/22/2017
Checked by: EP 12/26/2017

TABLE 2
DATA VALIDATION SUMMARY
2017 INTERTIDAL AND SUBTIDAL SEDIMENT CHARACTERIZATION – REPORT 1
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690, and L1739692

SDG	Analysis Method	Lab Sample ID	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
L1732496	2540G	L1732496-01	BU-08-02_091217_SED_03	T	Percent Solids, Residual	38.5		38.5	J	HT	PERCENT
L1732496	LLOYD_KAHN	L1732496-01	BU-08-02_091217_SED_03	T	Total Organic Carbon	4.225		4.225	J	HT	PERCENT
L1733614	LLOYD_KAHN	L1733614-04	BU-05-01-A-17_SED_05-07	T	Total Organic Carbon	8.36		8.36	J	LD	PERCENT
L1733615	LLOYD_KAHN	L1733615-03	BU-09-01-C-17_SED_03-05	T	Total Organic Carbon	15.4		15.4	J	LD	PERCENT
L1733615	LLOYD_KAHN	L1733615-04	BU-09-01-C-17_SED_05-07	T	Total Organic Carbon	7.175		7.175	J	LD	PERCENT
L1733615	LLOYD_KAHN	L1733615-05	BU-09-01-C-17_SED_07-10	T	Total Organic Carbon	2.555		2.555	J	LD	PERCENT
L1733615	LLOYD_KAHN	L1733615-08	BU-09-01-C-17_SED_20-30	T	Total Organic Carbon	3.705		3.705	J	LD	PERCENT
L1733622	LLOYD_KAHN	L1733622-06	ON-19-01-A-17_SED_10-15	T	Total Organic Carbon	0.2845		0.2845	J	LD	PERCENT
L1739125	LLOYD_KAHN	L1739125-19	FF-07-02-B-17_SED_75-78	T	Total Organic Carbon	2.855		2.855	J	MS-H	PERCENT
L1739534	LLOYD_KAHN	L1739534-03	BU-02-01-E-17_SED_03-05	T	Total Organic Carbon	4.565		4.565	J	HT, LD	PERCENT
L1739538	LLOYD_KAHN	L1739538-03	FF-08-02-G-17_SED_03-05	T	Total Organic Carbon	5.205		5.205	J	LD	PERCENT
L1739655	LLOYD_KAHN	L1739655-05	VE-10-01-E-17_SED_07-10	T	Total Organic Carbon	6.175		6.175	J	LD	PERCENT
L1739657	LLOYD_KAHN	L1739657-02	VN-01-01-B-17_SED_01-03	T	Total Organic Carbon	5.16		5.16	J	MS-H	PERCENT
1708709	7474_1631	1708709-02RE1	BH-05-01_08192017_SED_03	T	Mercury	134		134	J	TEMP	NG/G
1708709	% Solids	1708709-02	BH-05-01_08192017_SED_03	T	Percent Solids	73.5	O-04	73.5	J	HT,TEMP	% BY WT.
1708709	7474_1631	1708709-06RE2	BH-08-01_08192017_SED_03	T	Mercury	806		806	J	TEMP	NG/G
1708709	% Solids	1708709-06	BH-08-01_08192017_SED_03	T	Percent Solids	32.9	O-04	32.9	J	HT,TEMP	% BY WT.
1708709	7474_1631	1708709-03RE1	ON-13-01_08192017_SED_03	T	Mercury	476		476	J	TEMP	NG/G
1708709	% Solids	1708709-03	ON-13-01_08192017_SED_03	T	Percent Solids	40.8	O-04	40.8	J	HT,TEMP	% BY WT.
1708709	7474_1631	1708709-04RE1	ON-13-01_08192017_SED_03_DUP	T	Mercury	409		409	J	TEMP	NG/G
1708709	% Solids	1708709-04	ON-13-01_08192017_SED_03_DUP	T	Percent Solids	43.3	O-04	43.3	J	HT,TEMP	% BY WT.
1708709	7474_1631	1708709-05RE1	ON-21-01_08192017_SED_03	T	Mercury	659		659	J	TEMP	NG/G
1708709	% Solids	1708709-05	ON-21-01_08192017_SED_03	T	Percent Solids	49.9	O-04	49.9	J	HT,TEMP	% BY WT.
1708709	7474_1631	1708709-07RE1	ON-22-01_08192017_SED_03	T	Mercury	703		703	J	TEMP	NG/G
1708709	% Solids	1708709-07	ON-22-01_08192017_SED_03	T	Percent Solids	34.2	O-04	34.2	J	HT,TEMP	% BY WT.
1708709	7474_1631	1708709-01	VN-10-01_08192017_SED_03	T	Mercury	728		728	J	TEMP	NG/G
1708709	% Solids	1708709-01	VN-10-01_08192017_SED_03	T	Percent Solids	36.3	O-04	36.3	J	HT,TEMP	% BY WT.
1708709	7474_1631	1708709-08RE1	VN-10-02_08192017_SED_03	T	Mercury	710		710	J	TEMP	NG/G
1708709	% Solids	1708709-08	VN-10-02_08192017_SED_03	T	Percent Solids	39	O-04	39	J	HT,TEMP	% BY WT.

TABLE 2
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PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690, and L1739692

SDG	Analysis Method	Lab Sample ID	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
1709528	% Solids	1709528-01	BU-08-02_091217_SED_03	T	Percent Solids	39.7	O-04	39.7	J	HT	% BY WT.
1709561	% Solids	1709561-01	ON-19-01-A-17_SED_00-01	T	Percent Solids	41	[1]	41	J	HT	% BY WT.
1709561	% Solids	1709561-02	ON-19-01-A-17_SED_01-03	T	Percent Solids	52	[2]	52	J	HT	% BY WT.
1709561	% Solids	1709561-03	ON-19-01-A-17_SED_03-05	T	Percent Solids	21.8	[3]	21.8	J	HT	% BY WT.
1709561	% Solids	1709561-04	ON-19-01-A-17_SED_05-07	T	Percent Solids	40.6	[4]	40.6	J	HT	% BY WT.
1709561	% Solids	1709561-05	ON-19-01-A-17_SED_07-10	T	Percent Solids	65.2	[5]	65.2	J	HT	% BY WT.
1709561	% Solids	1709561-06	ON-19-01-A-17_SED_10-15	T	Percent Solids	79.4	[6]	79.4	J	HT	% BY WT.
1709575	% Solids	1709575-01	FF-06-01-A-17_SED_00-01	T	Percent Solids	36.8	O-04	36.8	J	HT	% BY WT.
1709575	% Solids	1709575-02	FF-06-01-A-17_SED_01-03	T	Percent Solids	56.7	O-04	56.7	J	HT	% BY WT.
1709575	% Solids	1709575-03	FF-06-01-A-17_SED_03-05	T	Percent Solids	72.3	O-04	72.3	J	HT	% BY WT.
1709575	% Solids	1709575-04	FF-06-01-A-17_SED_05-07	T	Percent Solids	69.6	O-04	69.6	J	HT	% BY WT.
1709575	% Solids	1709575-05	FF-06-01-A-17_SED_07-10	T	Percent Solids	63.8	O-04	63.8	J	HT	% BY WT.
1709575	% Solids	1709575-06	FF-06-01-A-17_SED_10-15	T	Percent Solids	56.9	O-04	56.9	J	HT	% BY WT.
1709575	% Solids	1709575-07	FF-06-01-A-17_SED_15-20	T	Percent Solids	66.1	O-04	66.1	J	HT	% BY WT.
1709576	% Solids	1709576-01	BU-09-01-C-17_SED_00-01	T	Percent Solids	16.3	O-04	16.3	J	HT	% BY WT.
1709576	% Solids	1709576-02	BU-09-01-C-17_SED_01-03	T	Percent Solids	19.1	O-04	19.1	J	HT	% BY WT.
1709576	% Solids	1709576-03	BU-09-01-C-17_SED_03-05	T	Percent Solids	32.7	O-04	32.7	J	HT	% BY WT.
1709576	% Solids	1709576-04	BU-09-01-C-17_SED_05-07	T	Percent Solids	36.4	O-04	36.4	J	HT	% BY WT.
1709576	% Solids	1709576-05	BU-09-01-C-17_SED_07-10	T	Percent Solids	63.1	O-04	63.1	J	HT	% BY WT.
1709576	% Solids	1709576-06	BU-09-01-C-17_SED_10-15	T	Percent Solids	59.4	O-04	59.4	J	HT	% BY WT.
1709576	% Solids	1709576-07	BU-09-01-C-17_SED_15-20	T	Percent Solids	53.3	O-04	53.3	J	HT	% BY WT.
1709576	% Solids	1709576-08	BU-09-01-C-17_SED_20-30	T	Percent Solids	61.2	O-04	61.2	J	HT	% BY WT.
1709576	% Solids	1709576-09	BU-09-01-C-17_SED_30-40	T	Percent Solids	47.9	O-04	47.9	J	HT	% BY WT.
1709576	% Solids	1709576-10	BU-09-01-C-17_SED_40-50	T	Percent Solids	69.2	O-04	69.2	J	HT	% BY WT.
1709577	% Solids	1709577-01	BU-05-01-A-17_SED_00-01	T	Percent Solids	44.9	O-04	44.9	J	HT	% BY WT.
1709577	% Solids	1709577-02	BU-05-01-A-17_SED_01-03	T	Percent Solids	46.3	O-04	46.3	J	HT	% BY WT.
1709577	% Solids	1709577-03	BU-05-01-A-17_SED_03-05	T	Percent Solids	38.5	O-04	38.5	J	HT	% BY WT.
1709577	% Solids	1709577-04	BU-05-01-A-17_SED_05-07	T	Percent Solids	46.2	O-04	46.2	J	HT	% BY WT.
1709577	% Solids	1709577-05	BU-05-01-A-17_SED_07-10	T	Percent Solids	77.1	O-04	77.1	J	HT	% BY WT.
1709577	% Solids	1709577-06	BU-05-01-A-17_SED_10-15	T	Percent Solids	82.4	O-04	82.4	J	HT	% BY WT.

TABLE 2
DATA VALIDATION SUMMARY
2017 INTERTIDAL AND SUBTIDAL SEDIMENT CHARACTERIZATION – REPORT 1
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690, and L1739692

SDG	Analysis Method	Lab Sample ID	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
1709577	% Solids	1709577-07	BU-05-01-A-17_SED_15-20	T	Percent Solids	75	O-04	75	J	HT	% BY WT.
1709579	% Solids	1709579-01	BU-01-01-C-17_SED_00-01	T	Percent Solids	32.8	O-04	32.8	J	HT	% BY WT.
1709579	% Solids	1709579-02	BU-01-01-C-17_SED_01-03	T	Percent Solids	40.6	O-04	40.6	J	HT	% BY WT.
1709579	% Solids	1709579-03	BU-01-01-C-17_SED_03-05	T	Percent Solids	37.8	O-04	37.8	J	HT	% BY WT.
1709579	% Solids	1709579-04	BU-01-01-C-17_SED_05-07	T	Percent Solids	37.5	O-04	37.5	J	HT	% BY WT.
1709579	% Solids	1709579-05	BU-01-01-C-17_SED_07-10	T	Percent Solids	39.1	O-04	39.1	J	HT	% BY WT.
1709579	% Solids	1709579-06	BU-01-01-C-17_SED_10-15	T	Percent Solids	38.5	O-04	38.5	J	HT	% BY WT.
1709579	% Solids	1709579-07	BU-01-01-C-17_SED_15-20	T	Percent Solids	42.1	O-04	42.1	J	HT	% BY WT.
1709581	% Solids	1709581-01	BU-10-01-A-17_SED_00-01	T	Percent Solids	27.9	O-04	27.9	J	HT	% BY WT.
1709581	% Solids	1709581-02	BU-10-01-A-17_SED_01-03	T	Percent Solids	35.3	O-04	35.3	J	HT	% BY WT.
1709581	% Solids	1709581-03	BU-10-01-A-17_SED_03-05	T	Percent Solids	37.3	O-04	37.3	J	HT	% BY WT.
1709581	% Solids	1709581-04	BU-10-01-A-17_SED_05-07	T	Percent Solids	31.8	O-04	31.8	J	HT	% BY WT.
1709581	% Solids	1709581-05	BU-10-01-A-17_SED_07-10	T	Percent Solids	35.2	O-04	35.2	J	HT	% BY WT.
1709581	% Solids	1709581-06	BU-10-01-A-17_SED_10-15	T	Percent Solids	34.2	O-04	34.2	J	HT	% BY WT.
1709581	% Solids	1709581-07	BU-10-01-A-17_SED_15-20	T	Percent Solids	36	O-04	36	J	HT	% BY WT.
1709581	% Solids	1709581-08	BU-10-01-A-17_SED_20-30	T	Percent Solids	29.5	O-04	29.5	J	HT	% BY WT.
1709581	% Solids	1709581-09	BU-10-01-A-17_SED_30-40	T	Percent Solids	30.4	O-04	30.4	J	HT	% BY WT.
1709581	% Solids	1709581-10	BU-10-01-A-17_SED_40-50	T	Percent Solids	24.2	O-04	24.2	J	HT	% BY WT.
1709581	% Solids	1709581-11	BU-10-01-A-17_SED_50-60	T	Percent Solids	27.9	O-04	27.9	J	HT	% BY WT.
1709581	% Solids	1709581-12	BU-10-01-A-17_SED_60-70	T	Percent Solids	46.7	O-04	46.7	J	HT	% BY WT.
1709581	% Solids	1709581-13	BU-10-01-A-17_SED_70-80	T	Percent Solids	48.4	O-04	48.4	J	HT	% BY WT.
1710899	% Solids	1710899-01	FF-07-02-B-17_SED_30-33	T	Percent Solids	65.6	[1]	65.6	J	HT	% BY WT.
1710899	% Solids	1710899-02	FF-07-02-B-17_SED_33-35	T	Percent Solids	65.7	[2]	65.7	J	HT	% BY WT.
1710899	% Solids	1710899-03	FF-07-02-B-17_SED_35-38	T	Percent Solids	63.6	[3]	63.6	J	HT	% BY WT.
1710899	% Solids	1710899-04	FF-07-02-B-17_SED_38-40	T	Percent Solids	65.2	[4]	65.2	J	HT	% BY WT.
1710899	% Solids	1710899-05	FF-07-02-B-17_SED_40-43	T	Percent Solids	66.9	[5]	66.9	J	HT	% BY WT.
1710899	% Solids	1710899-06	FF-07-02-B-17_SED_43-45	T	Percent Solids	64.2	[6]	64.2	J	HT	% BY WT.
1710899	% Solids	1710899-07	FF-07-02-B-17_SED_45-48	T	Percent Solids	60.3	[7]	60.3	J	HT	% BY WT.
1710899	% Solids	1710899-08	FF-07-02-B-17_SED_48-50	T	Percent Solids	58.9	[8]	58.9	J	HT	% BY WT.

TABLE 2
DATA VALIDATION SUMMARY
2017 INTERTIDAL AND SUBTIDAL SEDIMENT CHARACTERIZATION – REPORT 1
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690, and L1739692

SDG	Analysis Method	Lab Sample ID	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
1710899	% Solids	1710899-09	FF-07-02-B-17_SED_50-53	T	Percent Solids	59.6	[9]	59.6	J	HT	% BY WT.
1710899	% Solids	1710899-10	FF-07-02-B-17_SED_50-53_DUP	T	Percent Solids	59.7	[10]	59.7	J	HT	% BY WT.
1710899	% Solids	1710899-11	FF-07-02-B-17_SED_53-55	T	Percent Solids	59.9	[11]	59.9	J	HT	% BY WT.
1710899	% Solids	1710899-12	FF-07-02-B-17_SED_55-58	T	Percent Solids	61.3	[12]	61.3	J	HT	% BY WT.
1710899	% Solids	1710899-13	FF-07-02-B-17_SED_58-60	T	Percent Solids	52	[13]	52	J	HT	% BY WT.
1710899	% Solids	1710899-14	FF-07-02-B-17_SED_60-63	T	Percent Solids	62.4	[14]	62.4	J	HT	% BY WT.
1710899	% Solids	1710899-15	FF-07-02-B-17_SED_63-65	T	Percent Solids	57.5	[15]	57.5	J	HT	% BY WT.
1710899	% Solids	1710899-16	FF-07-02-B-17_SED_65-68	T	Percent Solids	54.9	[16]	54.9	J	HT	% BY WT.
1710899	% Solids	1710899-17	FF-07-02-B-17_SED_68-70	T	Percent Solids	59.9	[17]	59.9	J	HT	% BY WT.
1710899	% Solids	1710899-18	FF-07-02-B-17_SED_70-73	T	Percent Solids	53.9	[18]	53.9	J	HT	% BY WT.
1710899	% Solids	1710899-19	FF-07-02-B-17_SED_73-75	T	Percent Solids	59.3	[19]	59.3	J	HT	% BY WT.
1710899	% Solids	1710899-20	FF-07-02-B-17_SED_75-78	T	Percent Solids	57.7	[20]	57.7	J	HT	% BY WT.
1710899	% Solids	1710899-21	FF-07-02-B-17_SED_75-78_DUP	T	Percent Solids	57.5	[21]	57.5	J	HT	% BY WT.
1710899	% Solids	1710899-22	FF-07-02-B-17_SED_78-80	T	Percent Solids	60.4	O-04	60.4	J	HT	% BY WT.
1710899	% Solids	1710899-23	FF-07-02-B-17_SED_80-83	T	Percent Solids	62.6	[22]	62.6	J	HT	% BY WT.
1711005	7474_1631	1711005-01	WP-06-02-F-17_SED_03-05	T	Mercury	792		792	J	MS-RPD	NG/G
1711005	% Solids	1711005-01	WP-06-02-F-17_SED_03-05	T	Percent Solids	36.9	[1]	36.9	J	HT	% BY WT.
1711043	% Solids	1711043-01	VW-02-01-E-17_SED_03-05	T	Percent Solids	49.9	[1]	49.9	J	HT	% BY WT.
1711044	% Solids	1711044-01	VW-14-01-F-17_SED_03-05	T	Percent Solids	41.2	[1]	41.2	J	HT	% BY WT.
1711044	% Solids	1711044-02	VW-14-01-F-17_SED_05-07	T	Percent Solids	33.7	[2]	33.7	J	HT	% BY WT.
1711044	% Solids	1711044-03	VW-14-01-F-17_SED_07-10	T	Percent Solids	39.6	[3]	39.6	J	HT	% BY WT.
1711045	% Solids	1711045-04	WP-02-01-D-17_SED_01-03	T	Percent Solids	41.5	[4]	41.5	J	HT	% BY WT.
1711045	% Solids	1711045-01	WP-02-01-D-17_SED_03-05	T	Percent Solids	40.6	[1]	40.6	J	HT	% BY WT.
1711045	% Solids	1711045-02	WP-02-01-D-17_SED_05-07	T	Percent Solids	43.5	[2]	43.5	J	HT	% BY WT.
1711045	% Solids	1711045-03	WP-02-01-D-17_SED_07-10	T	Percent Solids	47.2	[3]	47.2	J	HT	% BY WT.
1711048	% Solids	1711048-04	VE-09-01-E-17_SED_01-03	T	Percent Solids	39.9	[4]	39.9	J	HT	% BY WT.
1711048	% Solids	1711048-01	VE-09-01-E-17_SED_03-05	T	Percent Solids	41	[1]	41	J	HT	% BY WT.
1711048	% Solids	1711048-02	VE-09-01-E-17_SED_05-07	T	Percent Solids	42	[2]	42	J	HT	% BY WT.
1711048	% Solids	1711048-03	VE-09-01-E-17_SED_07-10	T	Percent Solids	40.1	[3]	40.1	J	HT	% BY WT.

TABLE 2
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PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690, and L1739692

SDG	Analysis Method	Lab Sample ID	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
1711049	% Solids	1711049-01	VE-10-01-E-17_SED_03-05	T	Percent Solids	46.1	[1]	46.1	J	HT	% BY WT.
1711049	% Solids	1711049-02	VE-10-01-E-17_SED_05-07	T	Percent Solids	43.6	[2]	43.6	J	HT	% BY WT.
1711049	% Solids	1711049-03	VE-10-01-E-17_SED_07-10	T	Percent Solids	41	[3]	41	J	HT	% BY WT.
1711049	% Solids	1711049-04	VE-10-01-E-17_SED_07-10_DUP	T	Percent Solids	41.9	[4]	41.9	J	HT	% BY WT.
1711051	% Solids	1711051-01	VN-01-01-B-17_SED_03-05	T	Percent Solids	45.4	[1]	45.4	J	HT	% BY WT.
1711051	% Solids	1711051-02	VN-01-01-B-17_SED_05-07	T	Percent Solids	43.6	[2]	43.6	J	HT	% BY WT.
1711051	% Solids	1711051-03	VN-01-01-B-17_SED_07-10	T	Percent Solids	45.6	[3]	45.6	J	HT	% BY WT.
1711052	% Solids	1711052-01	VN-02-01-A-17_SED_03-05	T	Percent Solids	45.8	[1]	45.8	J	HT	% BY WT.
1711052	% Solids	1711052-02	VN-02-01-A-17_SED_05-07	T	Percent Solids	48.6	[2]	48.6	J	HT	% BY WT.
1711052	% Solids	1711052-03	VN-02-01-A-17_SED_07-10	T	Percent Solids	48.5	[3]	48.5	J	HT	% BY WT.
1711053	% Solids	1711053-01	VN-03-01-D-17_SED_03-05	T	Percent Solids	47.7	[1]	47.7	J	HT	% BY WT.
1711053	% Solids	1711053-02	VN-03-01-D-17_SED_05-07	T	Percent Solids	48	[2]	48	J	HT	% BY WT.
1711053	% Solids	1711053-03	VN-03-01-D-17_SED_07-10	T	Percent Solids	46.5	[3]	46.5	J	HT	% BY WT.
1711053	% Solids	1711053-04	VN-03-01-D-17_SED_07-10_DUP	T	Percent Solids	46.9	[4]	46.9	J	HT	% BY WT.
1711054	% Solids	1711054-01	VN-02-04-B-17_SED_03-05	T	Percent Solids	40.9	[1]	40.9	J	HT	% BY WT.
1711054	% Solids	1711054-02	VN-02-04-B-17_SED_05-07	T	Percent Solids	43.1	[2]	43.1	J	HT	% BY WT.
1711054	% Solids	1711054-03	VN-02-04-B-17_SED_07-10	T	Percent Solids	41.8	[3]	41.8	J	HT	% BY WT.
1711055	% Solids	1711055-01	VN-02-03-A-17_SED_03-05	T	Percent Solids	44.6	[1]	44.6	J	HT	% BY WT.
1711055	% Solids	1711055-02	VN-02-03-A-17_SED_05-07	T	Percent Solids	44.1	[2]	44.1	J	HT	% BY WT.
1711055	% Solids	1711055-03	VN-02-03-A-17_SED_05-07_DUP	T	Percent Solids	42.1	[3]	42.1	J	HT	% BY WT.
1711055	% Solids	1711055-04	VN-02-03-A-17_SED_07-10	T	Percent Solids	43.8	[4]	43.8	J	HT	% BY WT.
1711072	% Solids	1711072-01	FF-08-02-G-17_SED_03-05	T	Percent Solids	50.8	O-04	50.8	J	HT	% BY WT.
1711072	% Solids	1711072-02	FF-08-02-G-17_SED_03-05_DUP	T	Percent Solids	47.8	O-04	47.8	J	HT	% BY WT.
1711072	% Solids	1711072-03	FF-08-02-G-17_SED_05-07	T	Percent Solids	51.6	O-04	51.6	J	HT	% BY WT.
1711074	% Solids	1711074-01	BU-08-01-E-17_SED_03-05	T	Percent Solids	53.6	O-04	53.6	J	HT	% BY WT.
1711074	% Solids	1711074-02	BU-08-01-E-17_SED_05-07	T	Percent Solids	50.7	O-04	50.7	J	HT	% BY WT.
1711074	% Solids	1711074-03	BU-08-01-E-17_SED_07-10	T	Percent Solids	49	O-04	49	J	HT	% BY WT.
1711075	% Solids	1711075-03	MM-04-01-F-17_SED_01-03_DUP	T	Percent Solids	37.1	O-04	37.1	J	HT	% BY WT.
1711075	% Solids	1711075-01	MM-04-01-F-17_SED_03-05	T	Percent Solids	34.3	O-04	34.3	J	HT	% BY WT.
1711075	% Solids	1711075-02	MM-04-01-F-17_SED_05-07	T	Percent Solids	40.1	O-04	40.1	J	HT	% BY WT.

TABLE 2
DATA VALIDATION SUMMARY
2017 INTERTIDAL AND SUBTIDAL SEDIMENT CHARACTERIZATION – REPORT 1
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690, and L1739692

SDG	Analysis Method	Lab Sample ID	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
1711076	% Solids	1711076-01	BU-02-01-E-17_SED_03-05	T	Percent Solids	51.5	O-04	51.5	J	HT	% BY WT.
1711078	% Solids	1711078-04	BH-03-01-E-17_SED_01-03	T	Percent Solids	52.7	O-04	52.7	J	HT	% BY WT.
1711078	% Solids	1711078-01	BH-03-01-E-17_SED_03-05	T	Percent Solids	55.9	O-04	55.9	J	HT	% BY WT.
1711078	% Solids	1711078-02	BH-03-01-E-17_SED_03-05_DUP	T	Percent Solids	56.7	O-04	56.7	J	HT	% BY WT.
1711078	% Solids	1711078-03	BH-03-01-E-17_SED_05-07	T	Percent Solids	45.3	O-04	45.3	J	HT	% BY WT.
1711079	% Solids	1711079-01	ON-18-02-E-17_SED_03-05	T	Percent Solids	27.9	O-04	27.9	J	HT	% BY WT.
1711079	% Solids	1711079-02	ON-18-02-E-17_SED_05-07	T	Percent Solids	41.3	O-04	41.3	J	HT	% BY WT.
1711079	% Solids	1711079-03	ON-18-02-E-17_SED_07-10	T	Percent Solids	30.7	O-04	30.7	J	HT	% BY WT.
1711080	% Solids	1711080-01	VN-08-01-E-17_SED_03-05	T	Percent Solids	46.7	[1]	46.7	J	HT	% BY WT.
1711080	% Solids	1711080-02	VN-08-01-E-17_SED_05-07	T	Percent Solids	41.9	[2]	41.9	J	HT	% BY WT.
1711080	% Solids	1711080-03	VN-08-01-E-17_SED_05-07_DUP	T	Percent Solids	46	[3]	46	J	HT	% BY WT.
1711081	% Solids	1711081-01	ON-18-01-F-17_SED_03-05	T	Percent Solids	46.4	[1]	46.4	J	HT	% BY WT.
1711081	% Solids	1711081-02	ON-18-01-F-17_SED_05-07	T	Percent Solids	41.4	[2]	41.4	J	HT	% BY WT.
1711081	% Solids	1711081-03	ON-18-01-F-17_SED_07-10	T	Percent Solids	33.7	[3]	33.7	J	HT	% BY WT.
1711081	% Solids	1711081-04	ON-18-01-F-17_SED_07-10_DUP	T	Percent Solids	37.7	[4]	37.7	J	HT	% BY WT.
1711082	% Solids	1711082-01	ON-10-01-C-17_SED_03-05	T	Percent Solids	38	[1]	38	J	HT	% BY WT.

Units
% = PERCENT
NG/G = Nanogram per gram

Validation Qualifier:
J = Value is estimated

Validation Reason Codes:
HT = Holding time exceeded
LD = Lab Duplicate limit exceeded
MS-H = MS and/or MSD recovery high
MS-RPD = MS/MSD RPD limit exceeded
TEMP = Sample temperature upon receipt exceeded range

Created by: BCG 01/02/2018
Checked by: DMK 01/18/2018

TABLE 3

DATA VALIDATION SUMMARY

2017 INTERTIDAL AND SUBTIDAL SEDIMENT CHARACTERIZATION – REPORT 1

PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690, and L1739692

			Analysis Method			EPA 1631		LLOYD KAHN	
			Parameter	% Solids		Mercury		TOC	
			Unit	PERCENT		NG/G		PERCENT	
			Fraction	Total		Total		Total	
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
L1729881	BH-08-01	8/19/2017	BH-08-01_08192017_SED_03	FS	36.3				5.34	
L1729881	ON-13-01	8/19/2017	ON-13-01_08192017_SED_03	FS	36.3				5.945	
L1729881	ON-21-01	8/19/2017	ON-21-01_08192017_SED_03	FS	46.6				3.79	
L1729881	ON-22-01	8/19/2017	ON-22-01_08192017_SED_03	FS	37.7				6.695	
L1729881	VN-10-01	8/19/2017	VN-10-01_08192017_SED_03	FS	37.8				5.33	
L1729881	VN-10-02	8/19/2017	VN-10-02_08192017_SED_03	FS	35.1				4.92	
L1732496	BU-08-02	9/12/2017	BU-08-02_091217_SED_03	FS	38.5	J			4.225	J
L1733613	BU-01-01-C	9/19/2017	BU-01-01-C-17_SED_00-01	FS	32				9.23	
L1733613	BU-01-01-C	9/19/2017	BU-01-01-C-17_SED_01-03	FS	39.6				6.94	
L1733613	BU-01-01-C	9/19/2017	BU-01-01-C-17_SED_03-05	FS	39				8.275	
L1733613	BU-01-01-C	9/19/2017	BU-01-01-C-17_SED_05-07	FS	36.8				6.9	
L1733613	BU-01-01-C	9/19/2017	BU-01-01-C-17_SED_07-10	FS	37.7				7.485	
L1733613	BU-01-01-C	9/19/2017	BU-01-01-C-17_SED_10-15	FS	39				7.26	
L1733613	BU-01-01-C	9/19/2017	BU-01-01-C-17_SED_15-20	FS	38.7				10.75	
L1733614	BU-05-01-A	9/19/2017	BU-05-01-A-17_SED_00-01	FS	39.2				5.67	
L1733614	BU-05-01-A	9/19/2017	BU-05-01-A-17_SED_01-03	FS	44.6				7.12	
L1733614	BU-05-01-A	9/19/2017	BU-05-01-A-17_SED_03-05	FS	38.2				7.31	
L1733614	BU-05-01-A	9/19/2017	BU-05-01-A-17_SED_05-07	FS	45.1				8.36	J
L1733614	BU-05-01-A	9/19/2017	BU-05-01-A-17_SED_07-10	FS	82.4				0.545	
L1733614	BU-05-01-A	9/19/2017	BU-05-01-A-17_SED_10-15	FS	71				0.7455	
L1733614	BU-05-01-A	9/19/2017	BU-05-01-A-17_SED_15-20	FS	79.6				0.8265	
L1733615	BU-09-01-C	9/19/2017	BU-09-01-C-17_SED_00-01	FS	14.3				39.35	
L1733615	BU-09-01-C	9/19/2017	BU-09-01-C-17_SED_01-03	FS	20.2				35.9	
L1733615	BU-09-01-C	9/19/2017	BU-09-01-C-17_SED_03-05	FS	33.3				15.4	J

TABLE 3

DATA VALIDATION SUMMARY

2017 INTERTIDAL AND SUBTIDAL SEDIMENT CHARACTERIZATION – REPORT 1

PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690, and L1739692

			Analysis Method				EPA 1631		LLOYD KAHN	
			Parameter		% Solids		Mercury		TOC	
			Unit		PERCENT		NG/G		PERCENT	
			Fraction		Total		Total		Total	
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
L1733615	BU-09-01-C	9/19/2017	BU-09-01-C-17_SED_05-07	FS	53.5				7.175	J
L1733615	BU-09-01-C	9/19/2017	BU-09-01-C-17_SED_07-10	FS	60.6				2.555	J
L1733615	BU-09-01-C	9/19/2017	BU-09-01-C-17_SED_10-15	FS	58.3				5.035	
L1733615	BU-09-01-C	9/19/2017	BU-09-01-C-17_SED_15-20	FS	52.7				6.785	
L1733615	BU-09-01-C	9/19/2017	BU-09-01-C-17_SED_20-30	FS	57.7				3.705	J
L1733615	BU-09-01-C	9/19/2017	BU-09-01-C-17_SED_30-40	FS	46.6				7.84	
L1733615	BU-09-01-C	9/19/2017	BU-09-01-C-17_SED_40-50	FS	72.6				1.245	
L1733616	BU-10-01-A	9/20/2017	BU-10-01-A-17_SED_00-01	FS	27.7				15.8	
L1733616	BU-10-01-A	9/20/2017	BU-10-01-A-17_SED_01-03	FS	34				10.8	
L1733616	BU-10-01-A	9/20/2017	BU-10-01-A-17_SED_03-05	FS	37.2				8.495	
L1733616	BU-10-01-A	9/20/2017	BU-10-01-A-17_SED_05-07	FS	34.8				8.41	
L1733616	BU-10-01-A	9/20/2017	BU-10-01-A-17_SED_07-10	FS	36.2				8.045	
L1733616	BU-10-01-A	9/20/2017	BU-10-01-A-17_SED_10-15	FS	35.5				9.305	
L1733616	BU-10-01-A	9/20/2017	BU-10-01-A-17_SED_15-20	FS	35.8				8.98	
L1733616	BU-10-01-A	9/20/2017	BU-10-01-A-17_SED_20-30	FS	28				23.4	
L1733616	BU-10-01-A	9/20/2017	BU-10-01-A-17_SED_30-40	FS	30				15.35	
L1733616	BU-10-01-A	9/20/2017	BU-10-01-A-17_SED_40-50	FS	25.7				25.3	
L1733616	BU-10-01-A	9/20/2017	BU-10-01-A-17_SED_50-60	FS	27				21.9	
L1733616	BU-10-01-A	9/20/2017	BU-10-01-A-17_SED_60-70	FS	44.2				5.49	
L1733616	BU-10-01-A	9/20/2017	BU-10-01-A-17_SED_70-80	FS	48.2				3.3	
L1733617	FF-06-01-A	9/19/2017	FF-06-01-A-17_SED_00-01	FS	38.8				6.68	
L1733617	FF-06-01-A	9/19/2017	FF-06-01-A-17_SED_01-03	FS	56.9				2.455	
L1733617	FF-06-01-A	9/19/2017	FF-06-01-A-17_SED_03-05	FS	79				1.295	
L1733617	FF-06-01-A	9/19/2017	FF-06-01-A-17_SED_05-07	FS	70.3				1.635	

TABLE 3
DATA VALIDATION SUMMARY
2017 INTERTIDAL AND SUBTIDAL SEDIMENT CHARACTERIZATION – REPORT 1
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690, and L1739692

			Analysis Method				EPA 1631		LLOYD KAHN	
			Parameter		% Solids		Mercury		TOC	
			Unit		PERCENT		NG/G		PERCENT	
			Fraction		Total		Total		Total	
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
L1733617	FF-06-01-A	9/19/2017	FF-06-01-A-17_SED_07-10	FS	61.8				1.78	
L1733617	FF-06-01-A	9/19/2017	FF-06-01-A-17_SED_10-15	FS	58.6				2.235	
L1733617	FF-06-01-A	9/19/2017	FF-06-01-A-17_SED_15-20	FS	58				2.44	
L1733622	ON-19-01-A	9/19/2017	ON-19-01-A-17_SED_00-01	FS	45.4				8.79	
L1733622	ON-19-01-A	9/19/2017	ON-19-01-A-17_SED_01-03	FS	61.1				6.905	
L1733622	ON-19-01-A	9/19/2017	ON-19-01-A-17_SED_03-05	FS	14.3				22.9	
L1733622	ON-19-01-A	9/19/2017	ON-19-01-A-17_SED_05-07	FS	39.5				8.575	
L1733622	ON-19-01-A	9/19/2017	ON-19-01-A-17_SED_07-10	FS	65.5				1.22	
L1733622	ON-19-01-A	9/19/2017	ON-19-01-A-17_SED_10-15	FS	78.3				0.2845	J
L1739125	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_30-33	FS	64.2				2.185	
L1739125	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_33-35	FS	66.7				1.925	
L1739125	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_35-38	FS	65.2				2.2	
L1739125	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_38-40	FS	63.6				1.925	
L1739125	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_40-43	FS	67.9				1.835	
L1739125	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_43-45	FS	64				1.875	
L1739125	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_45-48	FS	62.4				2.685	
L1739125	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_48-50	FS	64				2.695	
L1739125	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_50-53	FS	60.5				2.69	
L1739125	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_53-55	FS	64.6				2.415	
L1739125	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_55-58	FS	62.3				2.095	
L1739125	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_58-60	FS	63				2.225	
L1739125	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_60-63	FS	64				2.085	
L1739125	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_63-65	FS	60.7				2.715	
L1739125	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_65-68	FS	57.9				3.03	

Created by: BCG 01/02/2018
Checked by: DMK 01/18/2018

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2017 INTERTIDAL AND SUBTIDAL SEDIMENT CHARACTERIZATION – REPORT 1

PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690, and L1739692

				Analysis Method			EPA 1631		LLOYD KAHN	
				Parameter	% Solids		Mercury		TOC	
				Unit	PERCENT		NG/G		PERCENT	
				Fraction	Total		Total		Total	
SDG	Location ID	Sample Date	Sample ID	QC Code	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
L1739125	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_68-70	FS	60.5				2.49	
L1739125	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_70-73	FS	62.4				2.625	
L1739125	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_73-75	FS	61.4				2.485	
L1739125	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_75-78	FS	63.2				2.855	J
L1739125	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_78-80	FS	62.1				2.485	
L1739125	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_80-83	FS	62.5				2.465	
L1739533	BH-03-01-E	10/25/2017	BH-03-01-E-17_SED_00-01	FS	32.4				5.325	
L1739533	BH-03-01-E	10/25/2017	BH-03-01-E-17_SED_01-03	FS	41.8				4.105	
L1739533	BH-03-01-E	10/25/2017	BH-03-01-E-17_SED_03-05	FS	51.8				2.675	
L1739533	BH-03-01-E	10/25/2017	BH-03-01-E-17_SED_05-07	FS	40.8				3.73	
L1739534	BU-02-01-E	10/25/2017	BU-02-01-E-17_SED_00-01	FS	51.7				8.17	
L1739534	BU-02-01-E	10/25/2017	BU-02-01-E-17_SED_01-03	FS	34.6				3.54	
L1739534	BU-02-01-E	10/25/2017	BU-02-01-E-17_SED_03-05	FS	47				4.565	J
L1739535	BU-08-01-E	10/25/2017	BU-08-01-E-17_SED_00-01	FS	30.8				4.415	
L1739535	BU-08-01-E	10/25/2017	BU-08-01-E-17_SED_01-03	FS	44.6				4.38	
L1739535	BU-08-01-E	10/25/2017	BU-08-01-E-17_SED_03-05	FS	51.8				4.53	
L1739535	BU-08-01-E	10/25/2017	BU-08-01-E-17_SED_05-07	FS	47.9				5.14	
L1739535	BU-08-01-E	10/25/2017	BU-08-01-E-17_SED_07-10	FS	44.9				4.6	
L1739538	FF-08-02-G	10/26/2017	FF-08-02-G-17_SED_00-01	FS	37.3				5.17	
L1739538	FF-08-02-G	10/26/2017	FF-08-02-G-17_SED_01-03	FS	39.6				4.93	
L1739538	FF-08-02-G	10/26/2017	FF-08-02-G-17_SED_03-05	FS	43.2				5.205	J
L1739538	FF-08-02-G	10/26/2017	FF-08-02-G-17_SED_05-07	FS	45.4				3.885	
L1739539	MM-04-01-F	10/26/2017	MM-04-01-F-17_SED_00-01	FS	17.7				6.295	
L1739539	MM-04-01-F	10/26/2017	MM-04-01-F-17_SED_01-03	FS	33.7				6.77	

TABLE 3

DATA VALIDATION SUMMARY

2017 INTERTIDAL AND SUBTIDAL SEDIMENT CHARACTERIZATION – REPORT 1

PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690, and L1739692

			Analysis Method				EPA 1631		LLOYD KAHN	
			Parameter		% Solids		Mercury		TOC	
			Unit		PERCENT		NG/G		PERCENT	
			Fraction		Total		Total		Total	
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
L1739539	MM-04-01-F	10/26/2017	MM-04-01-F-17_SED_03-05	FS	30.9				7.035	
L1739539	MM-04-01-F	10/26/2017	MM-04-01-F-17_SED_05-07	FS	36.7				6.405	
L1739574	ON-10-01-C	10/27/2017	ON-10-01-C-17_SED_00-01	FS	14.8				7.335	
L1739574	ON-10-01-C	10/27/2017	ON-10-01-C-17_SED_01-03	FS	36.5				5.935	
L1739574	ON-10-01-C	10/27/2017	ON-10-01-C-17_SED_03-05	FS	39.2				6.34	
L1739575	ON-18-01-F	10/26/2017	ON-18-01-F-17_SED_00-01	FS	37.3				3.96	
L1739575	ON-18-01-F	10/26/2017	ON-18-01-F-17_SED_01-03	FS	37.4				5.64	
L1739575	ON-18-01-F	10/26/2017	ON-18-01-F-17_SED_03-05	FS	30.6				3.825	
L1739575	ON-18-01-F	10/26/2017	ON-18-01-F-17_SED_05-07	FS	60.3				4.76	
L1739575	ON-18-01-F	10/26/2017	ON-18-01-F-17_SED_07-10	FS	36.4				5.71	
L1739576	ON-18-02-E	10/26/2017	ON-18-02-E-17_SED_00-01	FS	28				8.425	
L1739576	ON-18-02-E	10/26/2017	ON-18-02-E-17_SED_01-03	FS	38.5				8.235	
L1739576	ON-18-02-E	10/26/2017	ON-18-02-E-17_SED_03-05	FS	41.5				9.43	
L1739576	ON-18-02-E	10/26/2017	ON-18-02-E-17_SED_05-07	FS	35.6				7.285	
L1739576	ON-18-02-E	10/26/2017	ON-18-02-E-17_SED_07-10	FS	39.1				8.5	
L1739654	VE-09-01-E	10/26/2017	VE-09-01-E-17_SED_00-01	FS	19.7				5.275	
L1739654	VE-09-01-E	10/26/2017	VE-09-01-E-17_SED_01-03	FS	33.6				5.49	
L1739654	VE-09-01-E	10/26/2017	VE-09-01-E-17_SED_03-05	FS	37.1				5.795	
L1739654	VE-09-01-E	10/26/2017	VE-09-01-E-17_SED_05-07	FS	40.2				6.185	
L1739654	VE-09-01-E	10/26/2017	VE-09-01-E-17_SED_07-10	FS	37				8.195	
L1739655	VE-10-01-E	10/26/2017	VE-10-01-E-17_SED_00-01	FS	28.7				5.48	
L1739655	VE-10-01-E	10/26/2017	VE-10-01-E-17_SED_01-03	FS	41.1				7.515	
L1739655	VE-10-01-E	10/26/2017	VE-10-01-E-17_SED_03-05	FS	48.5				4.055	
L1739655	VE-10-01-E	10/26/2017	VE-10-01-E-17_SED_05-07	FS	40				6.835	

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				Analysis Method			EPA 1631		LLOYD KAHN	
				Parameter	% Solids		Mercury		TOC	
				Unit	PERCENT		NG/G		PERCENT	
				Fraction	Total		Total		Total	
SDG	Location ID	Sample Date	Sample ID	QC Code	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
L1739655	VE-10-01-E	10/26/2017	VE-10-01-E-17_SED_07-10	FS	40				6.175	J
L1739657	VN-01-01-B	10/26/2017	VN-01-01-B-17_SED_00-01	FS	29.2				6.16	
L1739657	VN-01-01-B	10/26/2017	VN-01-01-B-17_SED_01-03	FS	45.4				5.16	J
L1739657	VN-01-01-B	10/26/2017	VN-01-01-B-17_SED_03-05	FS	42.7				5.65	
L1739657	VN-01-01-B	10/26/2017	VN-01-01-B-17_SED_05-07	FS	43				6.85	
L1739657	VN-01-01-B	10/26/2017	VN-01-01-B-17_SED_07-10	FS	43.6				7.54	
L1739658	VN-02-01-A	10/25/2017	VN-02-01-A-17_SED_00-01	FS	19.2				6.47	
L1739658	VN-02-01-A	10/25/2017	VN-02-01-A-17_SED_01-03	FS	42.9				5.015	
L1739658	VN-02-01-A	10/25/2017	VN-02-01-A-17_SED_03-05	FS	45.6				5.22	
L1739658	VN-02-01-A	10/25/2017	VN-02-01-A-17_SED_05-07	FS	49.3				5.52	
L1739658	VN-02-01-A	10/25/2017	VN-02-01-A-17_SED_07-10	FS	47.9				5.15	
L1739659	VN-02-03-A	10/25/2017	VN-02-03-A-17_SED_00-01	FS	19				5.58	
L1739659	VN-02-03-A	10/25/2017	VN-02-03-A-17_SED_01-03	FS	33.3				6.54	
L1739659	VN-02-03-A	10/25/2017	VN-02-03-A-17_SED_03-05	FS	39.5				6.325	
L1739659	VN-02-03-A	10/25/2017	VN-02-03-A-17_SED_05-07	FS	42.3				5.745	
L1739659	VN-02-03-A	10/25/2017	VN-02-03-A-17_SED_07-10	FS	39				6.75	
L1739660	VN-02-04-B	10/25/2017	VN-02-04-B-17_SED_00-01	FS	25.4				6.26	
L1739660	VN-02-04-B	10/25/2017	VN-02-04-B-17_SED_01-03	FS	41.9				5.965	
L1739660	VN-02-04-B	10/25/2017	VN-02-04-B-17_SED_03-05	FS	39.4				5.92	
L1739660	VN-02-04-B	10/25/2017	VN-02-04-B-17_SED_05-07	FS	38.2				6.635	
L1739660	VN-02-04-B	10/25/2017	VN-02-04-B-17_SED_07-10	FS	40.3				8.6	
L1739661	VN-03-01-D	10/26/2017	VN-03-01-D-17_SED_00-01	FS	39.7				5.06	
L1739661	VN-03-01-D	10/26/2017	VN-03-01-D-17_SED_01-03	FS	43.3				4.58	
L1739661	VN-03-01-D	10/26/2017	VN-03-01-D-17_SED_03-05	FS	44.7				5.005	

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DATA VALIDATION SUMMARY

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SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690, and L1739692

			Analysis Method			EPA 1631		LLOYD KAHN	
			Parameter	% Solids		Mercury		TOC	
			Unit	PERCENT		NG/G		PERCENT	
			Fraction	Total		Total		Total	
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
L1739661	VN-03-01-D	10/26/2017	VN-03-01-D-17_SED_05-07	FS	48.9				4.255	
L1739661	VN-03-01-D	10/26/2017	VN-03-01-D-17_SED_07-10	FS	43.1				5.87	
L1739662	VN-04-01-E	10/26/2017	VN-04-01-E-17_SED_00-01	FS	45				3.835	
L1739662	VN-04-01-E	10/26/2017	VN-04-01-E-17_SED_01-03	FS	49.3				4.92	
L1739662	VN-04-01-E	10/26/2017	VN-04-01-E-17_SED_03-05	FS	46.3				6.095	
L1739662	VN-04-01-E	10/26/2017	VN-04-01-E-17_SED_05-07	FS	47.1				5.72	
L1739662	VN-04-01-E	10/26/2017	VN-04-01-E-17_SED_07-10	FS	41.8				5.305	
L1739686	VN-04-02-C	10/20/2017	VN-04-02-C-17_SED_03-05	FS	60.7				2.04	
L1739686	VN-04-02-C	10/20/2017	VN-04-02-C-17_SED_05-07	FS	58.7				2.22	
L1739686	VN-04-02-C	10/20/2017	VN-04-02-C-17_SED_07-10	FS	59.1				1.87	
L1739686	VN-04-02-C	10/27/2017	VN-04-02-C-17_SED_00-01	FS	46				1.565	
L1739686	VN-04-02-C	10/27/2017	VN-04-02-C-17_SED_01-03	FS	63.8				1.67	
L1739687	VN-08-01-E	10/26/2017	VN-08-01-E-17_SED_00-01	FS	35				5.595	
L1739687	VN-08-01-E	10/26/2017	VN-08-01-E-17_SED_01-03	FS	43.8				5.05	
L1739687	VN-08-01-E	10/26/2017	VN-08-01-E-17_SED_03-05	FS	45.4				6.06	
L1739687	VN-08-01-E	10/26/2017	VN-08-01-E-17_SED_05-07	FS	46.1				6.44	
L1739688	VW-14-01-F	10/27/2017	VW-14-01-F-17_SED_00-01	FS	22.1				4.67	
L1739688	VW-14-01-F	10/27/2017	VW-14-01-F-17_SED_01-03	FS	41.1				5.395	
L1739688	VW-14-01-F	10/27/2017	VW-14-01-F-17_SED_03-05	FS	40.5				5.27	
L1739688	VW-14-01-F	10/27/2017	VW-14-01-F-17_SED_05-07	FS	31.3				6.965	
L1739688	VW-14-01-F	10/27/2017	VW-14-01-F-17_SED_07-10	FS	39.5				5.45	
L1739689	WP-02-01-D	10/26/2017	WP-02-01-D-17_SED_00-01	FS	27.8				5.835	
L1739689	WP-02-01-D	10/26/2017	WP-02-01-D-17_SED_01-03	FS	40.4				6.89	
L1739689	WP-02-01-D	10/26/2017	WP-02-01-D-17_SED_03-05	FS	42.3				8.025	

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SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690, and L1739692

			Analysis Method			EPA 1631		LLOYD KAHN			
			Parameter		% Solids	Mercury		TOC			
			Unit		PERCENT	NG/G		PERCENT			
			Fraction		Total	Total		Total			
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
L1739689	WP-02-01-D	10/26/2017	WP-02-01-D-17_SED_05-07	FS	44.1				8.33	
L1739689	WP-02-01-D	10/26/2017	WP-02-01-D-17_SED_07-10	FS	46.4				7.365	
L1739690	WP-06-02-F	10/27/2017	WP-06-02-F-17_SED_00-01	FS	37.5				6.355	
L1739690	WP-06-02-F	10/27/2017	WP-06-02-F-17_SED_01-03	FS	37.9				6.385	
L1739690	WP-06-02-F	10/27/2017	WP-06-02-F-17_SED_03-05	FS	38.3				6.33	
L1739692	VW-02-01-E	10/27/2017	VW-02-01-E-17_SED_00-01	FS	40.6				1.805	
L1739692	VW-02-01-E	10/27/2017	VW-02-01-E-17_SED_01-03	FS	51.6				2.225	
L1739692	VW-02-01-E	10/27/2017	VW-02-01-E-17_SED_03-05	FS	53.6				2.15	
1708709	BH-05-01	8/19/2017	BH-05-01_08192017_SED_03	FS	73.5	J	134	J		
1708709	BH-08-01	8/19/2017	BH-08-01_08192017_SED_03	FS	32.9	J	806	J		
1708709	ON-13-01	8/19/2017	ON-13-01_08192017_SED_03	FS	40.8	J	476	J		
1708709	ON-13-01	8/19/2017	ON-13-01_08192017_SED_03_DUP	FD	43.3	J	409	J		
1708709	ON-21-01	8/19/2017	ON-21-01_08192017_SED_03	FS	49.9	J	659	J		
1708709	ON-22-01	8/19/2017	ON-22-01_08192017_SED_03	FS	34.2	J	703	J		
1708709	VN-10-01	8/19/2017	VN-10-01_08192017_SED_03	FS	36.3	J	728	J		
1708709	VN-10-02	8/19/2017	VN-10-02_08192017_SED_03	FS	39	J	710	J		
1709528	BU-08-02	9/12/2017	BU-08-02_091217_SED_03	FS	39.7	J	598			
1709561	ON-19-01-A	9/19/2017	ON-19-01-A-17_SED_00-01	FS	41	J	264			
1709561	ON-19-01-A	9/19/2017	ON-19-01-A-17_SED_01-03	FS	52	J	74.3			
1709561	ON-19-01-A	9/19/2017	ON-19-01-A-17_SED_03-05	FS	21.8	J	53.3			
1709561	ON-19-01-A	9/19/2017	ON-19-01-A-17_SED_05-07	FS	40.6	J	18.1			
1709561	ON-19-01-A	9/19/2017	ON-19-01-A-17_SED_07-10	FS	65.2	J	14.3			
1709561	ON-19-01-A	9/19/2017	ON-19-01-A-17_SED_10-15	FS	79.4	J	11.5			
1709575	FF-06-01-A	9/19/2017	FF-06-01-A-17_SED_00-01	FS	36.8	J	1,010			

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				Analysis Method			EPA 1631		LLOYD KAHN	
				Parameter	% Solids		Mercury		TOC	
				Unit	PERCENT		NG/G		PERCENT	
				Fraction	Total		Total		Total	
SDG	Location ID	Sample Date	Sample ID	QC Code	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
1709575	FF-06-01-A	9/19/2017	FF-06-01-A-17_SED_01-03	FS	56.7	J	251			
1709575	FF-06-01-A	9/19/2017	FF-06-01-A-17_SED_03-05	FS	72.3	J	78.5			
1709575	FF-06-01-A	9/19/2017	FF-06-01-A-17_SED_05-07	FS	69.6	J	37			
1709575	FF-06-01-A	9/19/2017	FF-06-01-A-17_SED_07-10	FS	63.8	J	34.8			
1709575	FF-06-01-A	9/19/2017	FF-06-01-A-17_SED_10-15	FS	56.9	J	27.7			
1709575	FF-06-01-A	9/19/2017	FF-06-01-A-17_SED_15-20	FS	66.1	J	24.8			
1709576	BU-09-01-C	9/19/2017	BU-09-01-C-17_SED_00-01	FS	16.3	J	1,400			
1709576	BU-09-01-C	9/19/2017	BU-09-01-C-17_SED_01-03	FS	19.1	J	1,630			
1709576	BU-09-01-C	9/19/2017	BU-09-01-C-17_SED_03-05	FS	32.7	J	1,030			
1709576	BU-09-01-C	9/19/2017	BU-09-01-C-17_SED_05-07	FS	36.4	J	784			
1709576	BU-09-01-C	9/19/2017	BU-09-01-C-17_SED_07-10	FS	63.1	J	293			
1709576	BU-09-01-C	9/19/2017	BU-09-01-C-17_SED_10-15	FS	59.4	J	550			
1709576	BU-09-01-C	9/19/2017	BU-09-01-C-17_SED_15-20	FS	53.3	J	519			
1709576	BU-09-01-C	9/19/2017	BU-09-01-C-17_SED_20-30	FS	61.2	J	279			
1709576	BU-09-01-C	9/19/2017	BU-09-01-C-17_SED_30-40	FS	47.9	J	173			
1709576	BU-09-01-C	9/19/2017	BU-09-01-C-17_SED_40-50	FS	69.2	J	34.4			
1709577	BU-05-01-A	9/19/2017	BU-05-01-A-17_SED_00-01	FS	44.9	J	516			
1709577	BU-05-01-A	9/19/2017	BU-05-01-A-17_SED_01-03	FS	46.3	J	534			
1709577	BU-05-01-A	9/19/2017	BU-05-01-A-17_SED_03-05	FS	38.5	J	875			
1709577	BU-05-01-A	9/19/2017	BU-05-01-A-17_SED_05-07	FS	46.2	J	810			
1709577	BU-05-01-A	9/19/2017	BU-05-01-A-17_SED_07-10	FS	77.1	J	59.1			
1709577	BU-05-01-A	9/19/2017	BU-05-01-A-17_SED_10-15	FS	82.4	J	22.9			
1709577	BU-05-01-A	9/19/2017	BU-05-01-A-17_SED_15-20	FS	75	J	15.7			
1709579	BU-01-01-C	9/19/2017	BU-01-01-C-17_SED_00-01	FS	32.8	J	946			

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			Analysis Method			EPA 1631		LLOYD KAHN		
			Parameter		% Solids	Mercury		TOC		
			Unit		PERCENT	NG/G		PERCENT		
			Fraction		Total	Total		Total		
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
1709579	BU-01-01-C	9/19/2017	BU-01-01-C-17_SED_01-03	FS	40.6	J	834			
1709579	BU-01-01-C	9/19/2017	BU-01-01-C-17_SED_03-05	FS	37.8	J	876			
1709579	BU-01-01-C	9/19/2017	BU-01-01-C-17_SED_05-07	FS	37.5	J	1,030			
1709579	BU-01-01-C	9/19/2017	BU-01-01-C-17_SED_07-10	FS	39.1	J	1,040			
1709579	BU-01-01-C	9/19/2017	BU-01-01-C-17_SED_10-15	FS	38.5	J	1,260			
1709579	BU-01-01-C	9/19/2017	BU-01-01-C-17_SED_15-20	FS	42.1	J	926			
1709581	BU-10-01-A	9/20/2017	BU-10-01-A-17_SED_00-01	FS	27.9	J	1,080			
1709581	BU-10-01-A	9/20/2017	BU-10-01-A-17_SED_01-03	FS	35.3	J	890			
1709581	BU-10-01-A	9/20/2017	BU-10-01-A-17_SED_03-05	FS	37.3	J	792			
1709581	BU-10-01-A	9/20/2017	BU-10-01-A-17_SED_05-07	FS	31.8	J	1,020			
1709581	BU-10-01-A	9/20/2017	BU-10-01-A-17_SED_07-10	FS	35.2	J	811			
1709581	BU-10-01-A	9/20/2017	BU-10-01-A-17_SED_10-15	FS	34.2	J	1,090			
1709581	BU-10-01-A	9/20/2017	BU-10-01-A-17_SED_15-20	FS	36	J	1,130			
1709581	BU-10-01-A	9/20/2017	BU-10-01-A-17_SED_20-30	FS	29.5	J	1,860			
1709581	BU-10-01-A	9/20/2017	BU-10-01-A-17_SED_30-40	FS	30.4	J	1,310			
1709581	BU-10-01-A	9/20/2017	BU-10-01-A-17_SED_40-50	FS	24.2	J	1,790			
1709581	BU-10-01-A	9/20/2017	BU-10-01-A-17_SED_50-60	FS	27.9	J	1,510			
1709581	BU-10-01-A	9/20/2017	BU-10-01-A-17_SED_60-70	FS	46.7	J	289			
1709581	BU-10-01-A	9/20/2017	BU-10-01-A-17_SED_70-80	FS	48.4	J	45.9			
1710899	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_30-33	FS	65.6	J	23.3			
1710899	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_33-35	FS	65.7	J	20.6			
1710899	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_35-38	FS	63.6	J	22.8			
1710899	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_38-40	FS	65.2	J	23			
1710899	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_40-43	FS	66.9	J	18			

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				Analysis Method			EPA 1631		LLOYD KAHN	
				Parameter	% Solids		Mercury		TOC	
				Unit	PERCENT		NG/G		PERCENT	
				Fraction	Total		Total		Total	
SDG	Location ID	Sample Date	Sample ID	QC Code	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
1710899	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_43-45	FS	64.2	J	20.9			
1710899	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_45-48	FS	60.3	J	23.5			
1710899	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_48-50	FS	58.9	J	25.1			
1710899	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_50-53	FS	59.6	J	22.6			
1710899	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_50-53_DUP	FD	59.7	J	23.2			
1710899	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_53-55	FS	59.9	J	22.5			
1710899	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_55-58	FS	61.3	J	20.8			
1710899	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_58-60	FS	52	J	13.6			
1710899	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_60-63	FS	62.4	J	19.7			
1710899	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_63-65	FS	57.5	J	21.7			
1710899	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_65-68	FS	54.9	J	21.9			
1710899	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_68-70	FS	59.9	J	21.1			
1710899	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_70-73	FS	53.9	J	21.5			
1710899	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_73-75	FS	59.3	J	22.3			
1710899	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_75-78	FS	57.7	J	24.2			
1710899	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_75-78_DUP	FD	57.5	J	22			
1710899	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_78-80	FS	60.4	J	20.5			
1710899	FF-07-02-B	10/18/2017	FF-07-02-B-17_SED_80-83	FS	62.6	J	19.2			
1711005	WP-06-02-F	10/27/2017	WP-06-02-F-17_SED_03-05	FS	36.9	J	792	J		
1711043	VW-02-01-E	10/27/2017	VW-02-01-E-17_SED_03-05	FS	49.9	J	111			
1711044	VW-14-01-F	10/27/2017	VW-14-01-F-17_SED_03-05	FS	41.2	J	644			
1711044	VW-14-01-F	10/27/2017	VW-14-01-F-17_SED_05-07	FS	33.7	J	813			
1711044	VW-14-01-F	10/27/2017	VW-14-01-F-17_SED_07-10	FS	39.6	J	707			
1711045	WP-02-01-D	10/26/2017	WP-02-01-D-17_SED_01-03	FS	41.5	J	696			

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TABLE 3
DATA VALIDATION SUMMARY
2017 INTERTIDAL AND SUBTIDAL SEDIMENT CHARACTERIZATION – REPORT 1
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690, and L1739692

				Analysis Method			EPA 1631		LLOYD KAHN	
				Parameter	% Solids		Mercury		TOC	
				Unit	PERCENT		NG/G		PERCENT	
				Fraction	Total		Total		Total	
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
1711045	WP-02-01-D	10/26/2017	WP-02-01-D-17_SED_03-05	FS	40.6	J	500			
1711045	WP-02-01-D	10/26/2017	WP-02-01-D-17_SED_05-07	FS	43.5	J	446			
1711045	WP-02-01-D	10/26/2017	WP-02-01-D-17_SED_07-10	FS	47.2	J	272			
1711048	VE-09-01-E	10/26/2017	VE-09-01-E-17_SED_01-03	FS	39.9	J	584			
1711048	VE-09-01-E	10/26/2017	VE-09-01-E-17_SED_03-05	FS	41	J	850			
1711048	VE-09-01-E	10/26/2017	VE-09-01-E-17_SED_05-07	FS	42	J	1,060			
1711048	VE-09-01-E	10/26/2017	VE-09-01-E-17_SED_07-10	FS	40.1	J	1,310			
1711049	VE-10-01-E	10/26/2017	VE-10-01-E-17_SED_03-05	FS	46.1	J	645			
1711049	VE-10-01-E	10/26/2017	VE-10-01-E-17_SED_05-07	FS	43.6	J	1,320			
1711049	VE-10-01-E	10/26/2017	VE-10-01-E-17_SED_07-10	FS	41	J	1,650			
1711049	VE-10-01-E	10/26/2017	VE-10-01-E-17_SED_07-10_DUP	FD	41.9	J	1,540			
1711051	VN-01-01-B	10/26/2017	VN-01-01-B-17_SED_03-05	FS	45.4	J	1,220			
1711051	VN-01-01-B	10/26/2017	VN-01-01-B-17_SED_05-07	FS	43.6	J	1,280			
1711051	VN-01-01-B	10/26/2017	VN-01-01-B-17_SED_07-10	FS	45.6	J	833			
1711052	VN-02-01-A	10/25/2017	VN-02-01-A-17_SED_03-05	FS	45.8	J	831			
1711052	VN-02-01-A	10/25/2017	VN-02-01-A-17_SED_05-07	FS	48.6	J	1,120			
1711052	VN-02-01-A	10/25/2017	VN-02-01-A-17_SED_07-10	FS	48.5	J	1,510			
1711053	VN-03-01-D	10/26/2017	VN-03-01-D-17_SED_03-05	FS	47.7	J	693			
1711053	VN-03-01-D	10/26/2017	VN-03-01-D-17_SED_05-07	FS	48	J	836			
1711053	VN-03-01-D	10/26/2017	VN-03-01-D-17_SED_07-10	FS	46.5	J	1,170			
1711053	VN-03-01-D	10/26/2017	VN-03-01-D-17_SED_07-10_DUP	FD	46.9	J	1,250			
1711054	VN-02-04-B	10/25/2017	VN-02-04-B-17_SED_03-05	FS	40.9	J	892			
1711054	VN-02-04-B	10/25/2017	VN-02-04-B-17_SED_05-07	FS	43.1	J	1,330			
1711054	VN-02-04-B	10/25/2017	VN-02-04-B-17_SED_07-10	FS	41.8	J	754			

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TABLE 3

DATA VALIDATION SUMMARY

2017 INTERTIDAL AND SUBTIDAL SEDIMENT CHARACTERIZATION – REPORT 1

PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690, and L1739692

			Analysis Method				EPA 1631		LLOYD KAHN	
			Parameter		% Solids		Mercury		TOC	
			Unit		PERCENT		NG/G		PERCENT	
			Fraction		Total		Total		Total	
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
1711055	VN-02-03-A	10/25/2017	VN-02-03-A-17_SED_03-05	FS	44.6	J	831			
1711055	VN-02-03-A	10/25/2017	VN-02-03-A-17_SED_05-07	FS	44.1	J	912			
1711055	VN-02-03-A	10/25/2017	VN-02-03-A-17_SED_05-07_DUP	FD	42.1	J	872			
1711055	VN-02-03-A	10/25/2017	VN-02-03-A-17_SED_07-10	FS	43.8	J	1,290			
1711072	FF-08-02-G	10/26/2017	FF-08-02-G-17_SED_03-05	FS	50.8	J	614			
1711072	FF-08-02-G	10/26/2017	FF-08-02-G-17_SED_03-05_DUP	FD	47.8	J	560			
1711072	FF-08-02-G	10/26/2017	FF-08-02-G-17_SED_05-07	FS	51.6	J	577			
1711074	BU-08-01-E	10/25/2017	BU-08-01-E-17_SED_03-05	FS	53.6	J	593			
1711074	BU-08-01-E	10/25/2017	BU-08-01-E-17_SED_05-07	FS	50.7	J	379			
1711074	BU-08-01-E	10/25/2017	BU-08-01-E-17_SED_07-10	FS	49	J	858			
1711075	MM-04-01-F	10/26/2017	MM-04-01-F-17_SED_01-03_DUP	FD	37.1	J	922			
1711075	MM-04-01-F	10/26/2017	MM-04-01-F-17_SED_03-05	FS	34.3	J	838			
1711075	MM-04-01-F	10/26/2017	MM-04-01-F-17_SED_05-07	FS	40.1	J	830			
1711076	BU-02-01-E	10/25/2017	BU-02-01-E-17_SED_03-05	FS	51.5	J	705			
1711078	BH-03-01-E	10/25/2017	BH-03-01-E-17_SED_01-03	FS	52.7	J	520			
1711078	BH-03-01-E	10/25/2017	BH-03-01-E-17_SED_03-05	FS	55.9	J	503			
1711078	BH-03-01-E	10/25/2017	BH-03-01-E-17_SED_03-05_DUP	FD	56.7	J	499			
1711078	BH-03-01-E	10/25/2017	BH-03-01-E-17_SED_05-07	FS	45.3	J	696			
1711079	ON-18-02-E	10/26/2017	ON-18-02-E-17_SED_03-05	FS	27.9	J	1,010			
1711079	ON-18-02-E	10/26/2017	ON-18-02-E-17_SED_05-07	FS	41.3	J	871			
1711079	ON-18-02-E	10/26/2017	ON-18-02-E-17_SED_07-10	FS	30.7	J	877			
1711080	VN-08-01-E	10/26/2017	VN-08-01-E-17_SED_03-05	FS	46.7	J	1,030			
1711080	VN-08-01-E	10/26/2017	VN-08-01-E-17_SED_05-07	FS	41.9	J	1,500			
1711080	VN-08-01-E	10/26/2017	VN-08-01-E-17_SED_05-07_DUP	FD	46	J	1,410			

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TABLE 3

DATA VALIDATION SUMMARY

2017 INTERTIDAL AND SUBTIDAL SEDIMENT CHARACTERIZATION – REPORT 1

PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690, and L1739692

			Analysis Method			EPA 1631		LLOYD KAHN	
			Parameter	% Solids		Mercury		TOC	
			Unit	PERCENT		NG/G		PERCENT	
			Fraction	Total		Total		Total	
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
1711081	ON-18-01-F	10/26/2017	ON-18-01-F-17_SED_03-05	FS	46.4	J	606			
1711081	ON-18-01-F	10/26/2017	ON-18-01-F-17_SED_05-07	FS	41.4	J	823			
1711081	ON-18-01-F	10/26/2017	ON-18-01-F-17_SED_07-10	FS	33.7	J	773			
1711081	ON-18-01-F	10/26/2017	ON-18-01-F-17_SED_07-10_DUP	FD	37.7	J	794			
1711082	ON-10-01-C	10/27/2017	ON-10-01-C-17_SED_03-05	FS	38	J	767			

Notes:

% = Percent

NG/G = Nanogram per gram

FD = Field Duplicate

FS = Field Sample

SDG = Sample Delivery Group

TOC = Total Organic Carbon

Qualifiers:

J = Value is estimated

Data Validation Summary
2017 Intertidal and Subtidal Sediment Characterization – Report 2
Penobscot River Estuary Phase III – Engineering Evaluation
Penobscot River, Maine

1.0 INTRODUCTION

Sediment samples were collected in October through November 2017 from the Penobscot River located in Maine. Samples were analyzed by Eurofins Frontier Global Sciences, Inc. (Eurofins) located in Bothell, Washington and included in sample delivery groups (SDGs) 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, and 1711604. Samples were also analyzed by Alpha Analytical located in Mansfield, Massachusetts and are reported in SDGs L1742398, L1742399, L1742400, and L1742401. Samples were analyzed by one or more of the following: Clean Water Act (CWA, 2012) or Standard Methods for the Examination of Water and Wastewater (SM, 2014):

Laboratory	Parameter	Analytical Method	Validation Level
Eurofins	Mercury, total	CWA 1631B (Hot aqua regia digestion)	10% Stage III/ 90% Stage IIB
Eurofins	Methyl mercury, total	EPA 1630 (KOH digestion)	10% Stage III/ 90% Stage IIB
Alpha Analytical	TOC	Lloyd Kahn	10% Stage III/ 90% Stage IIB
Eurofins/Alpha	% Solids	SM2540	10% Stage III/ 90% Stage IIB

Stage IIB data validation was performed on all samples**.** Stage III data validation was performed on ten percent of samples. Data validation was completed in accordance with National Functional Guidelines for Inorganic Superfund Data Review (USEPA, 2017), EPA New England Environmental Data Review Supplement for Regional Data Review Elements, and Superfund Specific Guidance/Procedures (USEPA, 2013) as applicable. Data quality evaluations were completed using quality control (QC) limits specified in the draft Penobscot River Estuary Phase III Engineering Evaluation Quality Assurance Project Plan (QAPP) [Amec Foster Wheeler, 2016]. The project laboratory reported results using a combination of two detection limits: the reporting limit (RL) and the method detection limit (MDL). Results for compounds that were not detected in samples were reported as U qualified results at the RL. Positive detections between the MDL and RL were qualified as estimated (J) by the laboratory.

Data validation review and qualification actions are discussed in the following subsections. It should be noted that only instances resulting in an impact to data quality are presented in this report. There may be QC elements outside of QAPP and/or method control limits not presented in this report if there is no impact on data quality. Samples included in this data evaluation are presented in Table 1.

Data qualifications were completed, where necessary, in accordance with the guidelines or the professional judgment of the project chemist. The following qualifiers as applied during data validation or reported by the laboratory are included in the final data set:

J = The reported concentration is considered an estimated value

Validation reason codes were applied to results associated with QC measurements outside project QC limits. The validation qualification actions and associated validation reason codes applied to sample

results are summarized in Table 2. The following data validation reason codes were applied to one or more sample results:

HT = Holding time for preparation and/or analysis was exceeded.
LD = Laboratory duplicate or sample duplicate relative percent difference (RPD) limit was exceeded.
MS-H = Matrix Spike recovery was above the acceptance limits.
MS-L = Matrix Spike recovery was below the acceptance limits.

A complete summary of final sample results is provided in Table 3.

Data were evaluated based on the following parameters:

* Data Completeness and Chain of Custody
  Holding Times and Preservation
* Blanks
* Initial Calibration
* Continuing Calibration
* Laboratory Control Sample (LCS)
  Matrix Spike/Matrix Spike Duplicates (MS/MSD)
  Laboratory Duplicates/ Replicates
* Field Duplicates
* Detection Limits
* Sample Result Verification/Electronic Evaluation Verification (EDD)
* Ongoing Precision Recovery

* indicates that criteria were met and/or that there was no impact to data quality for this parameter

With the exception of the following items, results were determined to be usable as reported by the laboratory.

2.0 Methyl Mercury – 1630

Results were determined to be usable as reported by the laboratory.

3.0 Total Mercury – 1631

Results were determined to be usable as reported by the laboratory.

4.0 Total Organic Carbon – Lloyd Kahn

<u>Laboratory Duplicate</u>

SDG L1742401 – The RPD for total organic carbon (TOC) was high at 43% (rep 2) between the laboratory duplicate analyses performed on sample VN-04-01-D-17_SED_23-25. The average TOC result and TOC Rep 2 from this sample has been J qualified due to potential analytical imprecision between duplicate analyses. (J-LD)

SDG L1742401 – The RPD for TOC was high at 35% (rep 2) between the laboratory duplicate analyses performed on sample VN-04-01-D-17_SED_00-01. The average TOC result and TOC Rep 2 from this sample has been J qualified due to potential analytical imprecision between duplicate analyses. (J-LD)

SDG L1742401 – The RPDs between readings 1 and 2 were above the 30% limit for samples VN-04-01-D-17_SED_01-03 (35%) and VN-04-01-D-17_SED_10-15 (48%). All TOC results from samples VN-04-01-D-17_SED_01-03 and VN-04-01-D-17_SED_10-15 have been J qualified due to potential analytical imprecision between replicate readings. (J-LD)

Field Duplicate

Samples submitted to the laboratory as field duplicates were logged incorrectly by the lab and processed as laboratory duplicates. These sample results are not available in the project database since laboratory duplicates are not included in the electronic data deliverable. The samples were evaluated as laboratory duplicates and assessed based on the more stringent laboratory duplicate criteria and qualified as necessary.

Matrix Spike Recovery

SDG L1742401 – The recoveries (Rep 1 – 71%, Rep 2 – 144%) from the MS performed on sample VN-04-01-D-17_SED_00-01 exceeded the acceptable limits of 75-125%. The sample has been J qualified due to inconsistent MS performance. (J-MS-L and MS-H)

Holding Times and Preservation

The TOC results from samples in the following SDGs have been J qualified due to holding time exceedance:

- L1742398, L1742399, L1742400, and L1742401. (J-HT)

4.0 Percent Solids – 2540B

Holding Times and Preservation

The percent solids results from samples in the following SDGs have been J qualified due to technical holding time exceedance:

- 1711006, 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, and 1711604. (J-HT)

References:

Amec Foster Wheeler, 2016. "Draft Penobscot River Estuary Phase III – Engineering Study Quality Assurance Project Plan", Penobscot River, Maine, July 2016.

U.S. Environmental Protection Agency (USEPA), 2004. "Final Update IIIB and Method 9071B of Final Update IIIA"; Test Methods for Evaluating Solid Waste Physical/Chemical Methods SW-846; Office of Solid Waste and Emergency Response, EPA-SW-846-03-03B; November 2004.

U.S. Environmental Protection Agency (USEPA), 2009. "Guidance for Labeling Externally Validated Laboratory Analytical data for Superfund Use"; Office of Solid Waste and Emergency Response; EPA 540-R-08-005; January 13, 2009.

U.S. Environmental Protection Agency (USEPA), 2017. "National Functional Guidelines for Inorganic Superfund Data Review"; Office of Superfund Remediation and Technology Innovation; EPA-540-R-2017-001; January 2017.

U.S. Environmental Protection Agency (USEPA), 2013. "EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures"; Quality Assurance Unit Staff; Office of Environmental Measurement and Evaluation; April 22, 2013.

Data Validator: Bjorn Ottosson January 5, 2017

Senior Reviewer: Denise King January 8, 2017

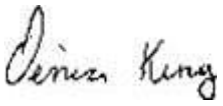

TABLE 1

DATA VALIDATION SUMMARY

2017 INTERTIDAL AND SUBTIDAL SEDIMENT - REPORT 2

PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399,

						Method Class	SM2540	Mercury	Methyl Mercury	TOC
						Analysis Method	% Solids	EPA 1631	EPA 1630	Lloyd_Kahn
SDG	Media	Location	Field Sample ID	Sample Date	QC Code		Count	Count	Count	Count
1711006	SED	VN-04-01-E	VN-04-01-E-17_SED_03-05	10/26/2017	FS		1	1		
1711006	SED	VN-04-01-E	VN-04-01-E-17_SED_05-07	10/26/2017	FS		1	1		
1711006	SED	VN-04-01-E	VN-04-01-E-17_SED_07-10	10/26/2017	FS		1	1		
1711007	SED	VN-04-02-C	VN-04-02-C-17_SED_01-03	10/27/2017	FS		1	1		
1711007	SED	VN-04-02-C	VN-04-02-C-17_SED_03-05	10/20/2017	FS		1	1		
1711007	SED	VN-04-02-C	VN-04-02-C-17_SED_03-05_DUP	10/20/2017	FS		1	1		
1711007	SED	VN-04-02-C	VN-04-02-C-17_SED_05-07	10/20/2017	FS		1	1		
1711007	SED	VN-04-02-C	VN-04-02-C-17_SED_07-10	10/20/2017	FS		1	1		
1711121	SED	VN-03-01-D	VN-03-01-D-17_SED_00-01	10/26/2017	FS		1	1	1	
1711121	SED	VN-03-01-D	VN-03-01-D-17_SED_01-03	10/26/2017	FS		1	1	1	
1711122	SED	VN-02-04-B	VN-02-04-B-17_SED_00-01	10/25/2017	FS		1	1	1	
1711122	SED	VN-02-04-B	VN-02-04-B-17_SED_01-03	10/25/2017	FS		1	1	1	
1711123	SED	VN-02-03-A	VN-02-03-A-17_SED_00-01	10/25/2017	FS		1	1	1	
1711123	SED	VN-02-03-A	VN-02-03-A-17_SED_01-03	10/25/2017	FS		1	1	1	
1711124	SED	VN-02-01-A	VN-02-01-A-17_SED_00-01	10/25/2017	FS		1	1	1	
1711124	SED	VN-02-01-A	VN-02-01-A-17_SED_01-03	10/25/2017	FS		1	1	1	
1711125	SED	VE-10-01-E	VE-10-01-E-17_SED_00-01	10/26/2017	FS		1	1	1	
1711125	SED	VE-10-01-E	VE-10-01-E-17_SED_01-03	10/26/2017	FS		1	1	1	
1711126	SED	ON-18-02-E	ON-18-02-E-17_SED_00-01	10/26/2017	FS		1	1	1	
1711126	SED	ON-18-02-E	ON-18-02-E-17_SED_01-03	10/26/2017	FS		1	1	1	
1711127	SED	BU-08-01-E	BU-08-01-E-17_SED_00-01	10/25/2017	FS		1	1	1	
1711127	SED	BU-08-01-E	BU-08-01-E-17_SED_01-03	10/25/2017	FS		1	1	1	
1711309	SED	FF-08-01-B	FF-08-01-B-17_SED_00-01	10/4/2017	FS		1	1		
1711309	SED	FF-08-01-B	FF-08-01-B-17_SED_01-03	10/4/2017	FS		1	1		
1711309	SED	FF-08-01-B	FF-08-01-B-17_SED_03-05	10/4/2017	FS		1	1		
1711309	SED	FF-08-01-B	FF-08-01-B-17_SED_05-07	10/4/2017	FS		1	1		

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DATA VALIDATION SUMMARY

2017 INTERTIDAL AND SUBTIDAL SEDIMENT - REPORT 2

PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399,

					Method Class	SM2540	Mercury	Methyl Mercury	TOC
					Analysis Method	% Solids	EPA 1631	EPA 1630	Lloyd_Kahn
SDG	Media	Location	Field Sample ID	Sample Date	QC Code	Count	Count	Count	Count
1711309	SED	FF-08-01-B	FF-08-01-B-17_SED_07-10	10/4/2017	FS	1	1		
1711309	SED	FF-08-01-B	FF-08-01-B-17_SED_10-15	10/4/2017	FS	1	1		
1711309	SED	FF-08-01-B	FF-08-01-B-17_SED_15-20	10/4/2017	FS	1	1		
1711309	SED	FF-08-01-B	FF-08-01-B-17_SED_20-30	10/4/2017	FS	1	1		
1711309	SED	FF-08-01-B	FF-08-01-B-17_SED_30-40	10/4/2017	FS	1	1		
1711309	SED	FF-08-01-B	FF-08-01-B-17_SED_40-50	10/4/2017	FS	1	1		
1711309	SED	FF-08-01-B	FF-08-01-B-17_SED_50-60	10/4/2017	FS	1	1		
1711309	SED	FF-08-01-B	FF-08-01-B-17_SED_60-70	10/4/2017	FS	1	1		
1711313	SED	FF-04-01-D	FF-04-01-D-17_SED_00-01	10/4/2017	FS	1	1		
1711313	SED	FF-04-01-D	FF-04-01-D-17_SED_01-03	10/4/2017	FS	1	1		
1711313	SED	FF-04-01-D	FF-04-01-D-17_SED_03-05	10/4/2017	FS	1	1		
1711313	SED	FF-04-01-D	FF-04-01-D-17_SED_05-07	10/4/2017	FS	1	1		
1711313	SED	FF-04-01-D	FF-04-01-D-17_SED_07-10	10/4/2017	FS	1	1		
1711313	SED	FF-04-01-D	FF-04-01-D-17_SED_10-15	10/4/2017	FS	1	1		
1711313	SED	FF-04-01-D	FF-04-01-D-17_SED_15-20	10/4/2017	FS	1	1		
1711313	SED	FF-04-01-D	FF-04-01-D-17_SED_20-30	10/4/2017	FS	1	1		
1711313	SED	FF-04-01-D	FF-04-01-D-17_SED_30-40	10/4/2017	FS	1	1		
1711313	SED	FF-04-01-D	FF-04-01-D-17_SED_40-50	10/4/2017	FS	1	1		
1711315	SED	WP-06-02-C	WP-06-02-C-17_SED_00-01	10/5/2017	FS	1	1		
1711315	SED	WP-06-02-C	WP-06-02-C-17_SED_01-03	10/5/2017	FS	1	1		
1711315	SED	WP-06-02-C	WP-06-02-C-17_SED_03-05	10/5/2017	FS	1	1		
1711315	SED	WP-06-02-C	WP-06-02-C-17_SED_05-07	10/5/2017	FS	1	1		
1711315	SED	WP-06-02-C	WP-06-02-C-17_SED_07-10	10/5/2017	FS	1	1		
1711315	SED	WP-06-02-C	WP-06-02-C-17_SED_10-15	10/5/2017	FS	1	1		
1711315	SED	WP-06-02-C	WP-06-02-C-17_SED_15-20	10/5/2017	FS	1	1		
1711315	SED	WP-06-02-C	WP-06-02-C-17_SED_20-30	10/5/2017	FS	1	1		

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PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399,

						Method Class	SM2540	Mercury	Methyl Mercury	TOC
						Analysis Method	% Solids	EPA 1631	EPA 1630	Lloyd_Kahn
SDG	Media	Location	Field Sample ID	Sample Date	QC Code		Count	Count	Count	Count
1711315	SED	WP-06-02-C	WP-06-02-C-17_SED_30-40	10/5/2017	FS		1	1		
1711315	SED	WP-06-02-C	WP-06-02-C-17_SED_40-50	10/5/2017	FS		1	1		
1711315	SED	WP-06-02-C	WP-06-02-C-17_SED_50-60	10/5/2017	FS		1	1		
1711317	SED	VN-01-01-E	VN-01-01-E-17_SED_00-01	10/6/2017	FS		1	1		
1711317	SED	VN-01-01-E	VN-01-01-E-17_SED_01-03	10/6/2017	FS		1	1		
1711317	SED	VN-01-01-E	VN-01-01-E-17_SED_03-05	10/6/2017	FS		1	1		
1711317	SED	VN-01-01-E	VN-01-01-E-17_SED_05-07	10/6/2017	FS		1	1		
1711317	SED	VN-01-01-E	VN-01-01-E-17_SED_07-10	10/6/2017	FS		1	1		
1711317	SED	VN-01-01-E	VN-01-01-E-17_SED_10-15	10/6/2017	FS		1	1		
1711317	SED	VN-01-01-E	VN-01-01-E-17_SED_15-17	10/6/2017	FS		1	1		
1711317	SED	VN-01-01-E	VN-01-01-E-17_SED_17-18	10/6/2017	FS		1	1		
1711317	SED	VN-01-01-E	VN-01-01-E-17_SED_18-20	10/6/2017	FS		1	1		
1711317	SED	VN-01-01-E	VN-01-01-E-17_SED_20-23	10/6/2017	FS		1	1		
1711321	SED	BU-02-01-D	BU-02-01-D-17_SED_00-01	10/5/2017	FS		1	1		
1711321	SED	BU-02-01-D	BU-02-01-D-17_SED_01-03	10/5/2017	FS		1	1		
1711321	SED	BU-02-01-D	BU-02-01-D-17_SED_03-05	10/5/2017	FS		1	1		
1711321	SED	BU-02-01-D	BU-02-01-D-17_SED_05-07	10/5/2017	FS		1	1		
1711321	SED	BU-02-01-D	BU-02-01-D-17_SED_07-10	10/5/2017	FS		1	1		
1711321	SED	BU-02-01-D	BU-02-01-D-17_SED_10-15	10/5/2017	FS		1	1		
1711321	SED	BU-02-01-D	BU-02-01-D-17_SED_15-20	10/5/2017	FS		1	1		
1711321	SED	BU-02-01-D	BU-02-01-D-17_SED_20-30	10/5/2017	FS		1	1		
1711324	SED	MM-04-01-C	MM-04-01-C-17_SED_00-01	10/5/2017	FS		1	1		
1711324	SED	MM-04-01-C	MM-04-01-C-17_SED_01-03	10/5/2017	FS		1	1		
1711324	SED	MM-04-01-C	MM-04-01-C-17_SED_03-05	10/5/2017	FS		1	1		
1711324	SED	MM-04-01-C	MM-04-01-C-17_SED_05-07	10/5/2017	FS		1	1		
1711324	SED	MM-04-01-C	MM-04-01-C-17_SED_07-10	10/5/2017	FS		1	1		

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SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399,

						Method Class	SM2540	Mercury	Methyl Mercury	TOC
						Analysis Method	% Solids	EPA 1631	EPA 1630	Lloyd_Kahn
SDG	Media	Location	Field Sample ID	Sample Date	QC Code		Count	Count	Count	Count
1711324	SED	MM-04-01-C	MM-04-01-C-17_SED_10-15	10/5/2017	FS		1	1		
1711324	SED	MM-04-01-C	MM-04-01-C-17_SED_15-20	10/5/2017	FS		1	1		
1711324	SED	MM-04-01-C	MM-04-01-C-17_SED_20-30	10/5/2017	FS		1	1		
1711326	SED	WP-02-01-B	WP-02-01-B-17_SED_00-01	10/5/2017	FS		1	1		
1711326	SED	WP-02-01-B	WP-02-01-B-17_SED_01-03	10/5/2017	FS		1	1		
1711326	SED	WP-02-01-B	WP-02-01-B-17_SED_03-05	10/5/2017	FS		1	1		
1711326	SED	WP-02-01-B	WP-02-01-B-17_SED_05-07	10/5/2017	FS		1	1		
1711326	SED	WP-02-01-B	WP-02-01-B-17_SED_07-10	10/5/2017	FS		1	1		
1711326	SED	WP-02-01-B	WP-02-01-B-17_SED_10-15	10/5/2017	FS		1	1		
1711326	SED	WP-02-01-B	WP-02-01-B-17_SED_15-20	10/5/2017	FS		1	1		
1711326	SED	WP-02-01-B	WP-02-01-B-17_SED_20-30	10/5/2017	FS		1	1		
1711327	SED	BU-08-01-A	BU-08-01-A-17_SED_00-01	10/5/2017	FS		1	1		
1711327	SED	BU-08-01-A	BU-08-01-A-17_SED_01-03	10/5/2017	FS		1	1		
1711327	SED	BU-08-01-A	BU-08-01-A-17_SED_03-05	10/5/2017	FS		1	1		
1711327	SED	BU-08-01-A	BU-08-01-A-17_SED_05-07	10/5/2017	FS		1	1		
1711327	SED	BU-08-01-A	BU-08-01-A-17_SED_07-10	10/5/2017	FS		1	1		
1711327	SED	BU-08-01-A	BU-08-01-A-17_SED_10-15	10/5/2017	FS		1	1		
1711327	SED	BU-08-01-A	BU-08-01-A-17_SED_15-20	10/5/2017	FS		1	1		
1711587	SED	FF-07-01-E	FF-07-01-E-17_SED_00-01	11/15/2017	FS		1	1		
1711587	SED	FF-07-01-E	FF-07-01-E-17_SED_01-03	11/15/2017	FS		1	1		
1711587	SED	FF-07-01-E	FF-07-01-E-17_SED_03-05	11/15/2017	FS		1	1		
1711587	SED	FF-07-01-E	FF-07-01-E-17_SED_03-05-Dup	11/15/2017	FD		1	1		
1711587	SED	FF-07-01-E	FF-07-01-E-17_SED_05-07	11/15/2017	FS		1	1		
1711587	SED	FF-07-01-E	FF-07-01-E-17_SED_07-10	11/15/2017	FS		1	1		
1711587	SED	FF-07-01-E	FF-07-01-E-17_SED_10-15	11/15/2017	FS		1	1		
1711587	SED	FF-07-01-E	FF-07-01-E-17_SED_10-15-Dup	11/15/2017	FD		1	1		

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SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399,

					Method Class	SM2540	Mercury	Methyl Mercury	TOC
					Analysis Method	% Solids	EPA 1631	EPA 1630	Lloyd_Kahn
SDG	Media	Location	Field Sample ID	Sample Date	QC Code	Count	Count	Count	Count
1711587	SED	FF-07-01-E	FF-07-01-E-17_SED_15-20	11/15/2017	FS	1	1		
1711587	SED	FF-07-01-E	FF-07-01-E-17_SED_20-25	11/15/2017	FS	1	1		
1711587	SED	FF-07-01-E	FF-07-01-E-17_SED_25-27	11/15/2017	FS	1	1		
1711587	SED	FF-07-01-E	FF-07-01-E-17_SED_27-30	11/15/2017	FS	1	1		
1711587	SED	FF-07-01-E	FF-07-01-E-17_SED_27-30-Dup	11/15/2017	FD	1	1		
1711587	SED	FF-07-01-E	FF-07-01-E-17_SED_30-40	11/15/2017	FS	1	1		
1711587	SED	FF-07-01-E	FF-07-01-E-17_SED_40-45	11/15/2017	FS	1	1		
1711587	SED	FF-07-01-E	FF-07-01-E-17_SED_45-49	11/15/2017	FS	1	1		
1711588	SED	VN-04-01-D	VN-04-01-D-17_SED_00-01	11/13/2017	FS	1	1		
1711588	SED	VN-04-01-D	VN-04-01-D-17_SED_00-01-Dup	11/13/2017	FD	1	1		
1711588	SED	VN-04-01-D	VN-04-01-D-17_SED_01-03	11/13/2017	FS	1	1		
1711588	SED	VN-04-01-D	VN-04-01-D-17_SED_03-05	11/13/2017	FS	1	1		
1711588	SED	VN-04-01-D	VN-04-01-D-17_SED_05-07	11/13/2017	FS	1	1		
1711588	SED	VN-04-01-D	VN-04-01-D-17_SED_07-10	11/13/2017	FS	1	1		
1711588	SED	VN-04-01-D	VN-04-01-D-17_SED_10-15	11/13/2017	FS	1	1		
1711588	SED	VN-04-01-D	VN-04-01-D-17_SED_15-17	11/13/2017	FS	1	1		
1711588	SED	VN-04-01-D	VN-04-01-D-17_SED_17-20	11/13/2017	FS	1	1		
1711588	SED	VN-04-01-D	VN-04-01-D-17_SED_20-22	11/13/2017	FS	1	1		
1711588	SED	VN-04-01-D	VN-04-01-D-17_SED_22-23	11/13/2017	FS	1	1		
1711588	SED	VN-04-01-D	VN-04-01-D-17_SED_23-25	11/13/2017	FS	1	1		
1711588	SED	VN-04-01-D	VN-04-01-D-17_SED_23-25-Dup	11/13/2017	FD	1	1		
1711588	SED	VN-04-01-D	VN-04-01-D-17_SED_25-27	11/13/2017	FS	1	1		
1711588	SED	VN-04-01-D	VN-04-01-D-17_SED_27-30	11/13/2017	FS	1	1		
1711588	SED	VN-04-01-D	VN-04-01-D-17_SED_30-36	11/13/2017	FS	1	1		
1711589	SED	VN-04-02-A	VN-04-02-A-17_SED_00-01	11/10/2017	FS	1	1		
1711589	SED	VN-04-02-A	VN-04-02-A-17_SED_00-01-Dup	11/10/2017	FD	1	1		

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SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399,

						Method Class	SM2540	Mercury	Methyl Mercury	TOC
						Analysis Method	% Solids	EPA 1631	EPA 1630	Lloyd_Kahn
SDG	Media	Location	Field Sample ID	Sample Date	QC Code		Count	Count	Count	Count
1711589	SED	VN-04-02-A	VN-04-02-A-17_SED_01-03	11/10/2017	FS		1	1		
1711589	SED	VN-04-02-A	VN-04-02-A-17_SED_01-03-Dup	11/10/2017	FD		1	1		
1711589	SED	VN-04-02-A	VN-04-02-A-17_SED_03-05	11/10/2017	FS		1	1		
1711589	SED	VN-04-02-A	VN-04-02-A-17_SED_03-05-Dup	11/10/2017	FS		1	1		
1711589	SED	VN-04-02-A	VN-04-02-A-17_SED_05-07	11/10/2017	FS		1	1		
1711589	SED	VN-04-02-A	VN-04-02-A-17_SED_05-07-Dup	11/10/2017	FS		1	1		
1711589	SED	VN-04-02-A	VN-04-02-A-17_SED_07-10	11/10/2017	FS		1	1		
1711589	SED	VN-04-02-A	VN-04-02-A-17_SED_07-10-Dup	11/10/2017	FS		1	1		
1711589	SED	VN-04-02-A	VN-04-02-A-17_SED_10-15	11/10/2017	FS		1	1		
1711589	SED	VN-04-02-A	VN-04-02-A-17_SED_10-15-Dup	11/10/2017	FS		1	1		
1711589	SED	VN-04-02-A	VN-04-02-A-17_SED_15-20	11/10/2017	FS		1	1		
1711589	SED	VN-04-02-A	VN-04-02-A-17_SED_20-25	11/10/2017	FS		1	1		
1711589	SED	VN-04-02-A	VN-04-02-A-17_SED_25-31	11/10/2017	FS		1	1		
1711590	SED	BH-03-01-A	BH-03-01-A-17_SED_00-01	11/13/2017	FS		1	1		
1711590	SED	BH-03-01-A	BH-03-01-A-17_SED_01-03	11/13/2017	FS		1	1		
1711590	SED	BH-03-01-A	BH-03-01-A-17_SED_03-05	11/13/2017	FS		1	1		
1711590	SED	BH-03-01-A	BH-03-01-A-17_SED_05-07	11/13/2017	FS		1	1		
1711590	SED	BH-03-01-A	BH-03-01-A-17_SED_07-10	11/13/2017	FS		1	1		
1711590	SED	BH-03-01-A	BH-03-01-A-17_SED_10-13	11/13/2017	FS		1	1		
1711590	SED	BH-03-01-A	BH-03-01-A-17_SED_13-17	11/13/2017	FS		1	1		
1711590	SED	BH-03-01-A	BH-03-01-A-17_SED_13-17-Dup	11/13/2017	FD		1	1		
1711590	SED	BH-03-01-A	BH-03-01-A-17_SED_17-20	11/13/2017	FS		1	1		
1711590	SED	BH-03-01-A	BH-03-01-A-17_SED_20-25	11/13/2017	FS		1	1		
1711590	SED	BH-03-01-A	BH-03-01-A-17_SED_25-30	11/13/2017	FS		1	1		
1711590	SED	BH-03-01-A	BH-03-01-A-17_SED_30-35	11/13/2017	FS		1	1		
1711590	SED	BH-03-01-A	BH-03-01-A-17_SED_35-39	11/13/2017	FS		1	1		

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2017 INTERTIDAL AND SUBTIDAL SEDIMENT - REPORT 2
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION
SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399,

						Method Class	SM2540	Mercury	Methyl Mercury	TOC
						Analysis Method	% Solids	EPA 1631	EPA 1630	Lloyd_Kahn
SDG	Media	Location	Field Sample ID	Sample Date	QC Code		Count	Count	Count	Count
1711590	SED	BH-03-01-A	BH-03-01-A-17_SED_39-43	11/13/2017	FS		1	1		
1711591	SED	VW-14-01-E	VW-14-01-E-17_SED_00-01	11/15/2017	FS		1	1		
1711591	SED	VW-14-01-E	VW-14-01-E-17_SED_01-03	11/15/2017	FS		1	1		
1711591	SED	VW-14-01-E	VW-14-01-E-17_SED_03-05	11/15/2017	FS		1	1		
1711591	SED	VW-14-01-E	VW-14-01-E-17_SED_03-05-Dup	11/15/2017	FD		1	1		
1711591	SED	VW-14-01-E	VW-14-01-E-17_SED_05-07	11/15/2017	FS		1	1		
1711591	SED	VW-14-01-E	VW-14-01-E-17_SED_07-10	11/15/2017	FS		1	1		
1711591	SED	VW-14-01-E	VW-14-01-E-17_SED_10-12	11/15/2017	FS		1	1		
1711591	SED	VW-14-01-E	VW-14-01-E-17_SED_12-14	11/15/2017	FS		1	1		
1711591	SED	VW-14-01-E	VW-14-01-E-17_SED_14-16	11/15/2017	FS		1	1		
1711591	SED	VW-14-01-E	VW-14-01-E-17_SED_16-18	11/15/2017	FS		1	1		
1711591	SED	VW-14-01-E	VW-14-01-E-17_SED_18-20	11/15/2017	FS		1	1		
1711591	SED	VW-14-01-E	VW-14-01-E-17_SED_18-20-Dup	11/15/2017	FD		1	1		
1711592	SED	ON-10-01-B	ON-10-01-B-17_SED_00-01	11/14/2017	FS		1	1		
1711592	SED	ON-10-01-B	ON-10-01-B-17_SED_01-03	11/14/2017	FS		1	1		
1711592	SED	ON-10-01-B	ON-10-01-B-17_SED_03-05	11/14/2017	FS		1	1		
1711592	SED	ON-10-01-B	ON-10-01-B-17_SED_05-07	11/14/2017	FS		1	1		
1711592	SED	ON-10-01-B	ON-10-01-B-17_SED_07-09	11/14/2017	FS		1	1		
1711592	SED	ON-10-01-B	ON-10-01-B-17_SED_09-11	11/14/2017	FS		1	1		
1711592	SED	ON-10-01-B	ON-10-01-B-17_SED_11-15	11/14/2017	FS		1	1		
1711592	SED	ON-10-01-B	ON-10-01-B-17_SED_15-20	11/14/2017	FS		1	1		
1711592	SED	ON-10-01-B	ON-10-01-B-17_SED_20-25	11/14/2017	FS		1	1		
1711592	SED	ON-10-01-B	ON-10-01-B-17_SED_25-28	11/14/2017	FS		1	1		
1711592	SED	ON-10-01-B	ON-10-01-B-17_SED_28-30	11/14/2017	FS		1	1		
1711592	SED	ON-10-01-B	ON-10-01-B-17_SED_30-37	11/14/2017	FS		1	1		
1711593	SED	VW-02-01-B	VW-02-01-B-17_SED_00-01	11/14/2017	FS		1	1		

TABLE 1

DATA VALIDATION SUMMARY

2017 INTERTIDAL AND SUBTIDAL SEDIMENT - REPORT 2

PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399,

						Method Class	SM2540	Mercury	Methyl Mercury	TOC
						Analysis Method	% Solids	EPA 1631	EPA 1630	Lloyd_Kahn
SDG	Media	Location	Field Sample ID	Sample Date	QC Code		Count	Count	Count	Count
1711593	SED	VW-02-01-B	VW-02-01-B-17_SED_01-03	11/14/2017	FS		1	1		
1711593	SED	VW-02-01-B	VW-02-01-B-17_SED_03-05	11/14/2017	FS		1	1		
1711593	SED	VW-02-01-B	VW-02-01-B-17_SED_05-07	11/14/2017	FS		1	1		
1711593	SED	VW-02-01-B	VW-02-01-B-17_SED_07-09	11/14/2017	FS		1	1		
1711593	SED	VW-02-01-B	VW-02-01-B-17_SED_09-11	11/14/2017	FS		1	1		
1711593	SED	VW-02-01-B	VW-02-01-B-17_SED_11-13	11/14/2017	FS		1	1		
1711593	SED	VW-02-01-B	VW-02-01-B-17_SED_13-15	11/14/2017	FS		1	1		
1711593	SED	VW-02-01-B	VW-02-01-B-17_SED_15-20	11/14/2017	FS		1	1		
1711593	SED	VW-02-01-B	VW-02-01-B-17_SED_20-25	11/14/2017	FS		1	1		
1711593	SED	VW-02-01-B	VW-02-01-B-17_SED_25-30	11/14/2017	FS		1	1		
1711603	SED	VE-10-01-C	VE-10-01-C-17_SED_00-01	11/8/2017	FS		1	1		
1711603	SED	VE-10-01-C	VE-10-01-C-17_SED_01-02	11/8/2017	FS		1	1		
1711603	SED	VE-10-01-C	VE-10-01-C-17_SED_02-03	11/8/2017	FS		1	1		
1711603	SED	VE-10-01-C	VE-10-01-C-17_SED_03-05	11/8/2017	FS		1	1		
1711603	SED	VE-10-01-C	VE-10-01-C-17_SED_05-07	11/8/2017	FS		1	1		
1711603	SED	VE-10-01-C	VE-10-01-C-17_SED_07-10	11/8/2017	FS		1	1		
1711603	SED	VE-10-01-C	VE-10-01-C-17_SED_10-13	11/8/2017	FS		1	1		
1711603	SED	VE-10-01-C	VE-10-01-C-17_SED_13-16	11/8/2017	FS		1	1		
1711603	SED	VE-10-01-C	VE-10-01-C-17_SED_16-20	11/8/2017	FS		1	1		
1711604	SED	VE-09-01-B	VE-09-01-B-17_SED_00-01	11/10/2017	FS		1	1		
1711604	SED	VE-09-01-B	VE-09-01-B-17_SED_01-03	11/10/2017	FS		1	1		
1711604	SED	VE-09-01-B	VE-09-01-B-17_SED_03-05	11/10/2017	FS		1	1		
1711604	SED	VE-09-01-B	VE-09-01-B-17_SED_05-07	11/10/2017	FS		1	1		
1711604	SED	VE-09-01-B	VE-09-01-B-17_SED_07-10	11/10/2017	FS		1	1		
1711604	SED	VE-09-01-B	VE-09-01-B-17_SED_10-13	11/10/2017	FS		1	1		
1711604	SED	VE-09-01-B	VE-09-01-B-17_SED_13-16	11/10/2017	FS		1	1		

TABLE 1

DATA VALIDATION SUMMARY

2017 INTERTIDAL AND SUBTIDAL SEDIMENT - REPORT 2

PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399,

						Method Class	SM2540	Mercury	Methyl Mercury	TOC
						Analysis Method	% Solids	EPA 1631	EPA 1630	Lloyd_Kahn
SDG	Media	Location	Field Sample ID	Sample Date	QC Code		Count	Count	Count	Count
1711604	SED	VE-09-01-B	VE-09-01-B-17_SED_13-16-Dup	11/10/2017	FD		1	1		
1711604	SED	VE-09-01-B	VE-09-01-B-17_SED_16-20	11/10/2017	FS		1	1		
1711604	SED	VE-09-01-B	VE-09-01-B-17_SED_20-23	11/10/2017	FS		1	1		
L1742398	SED	VN-02-03-E	VN-02-03-E-17_SED_00-01	11/9/2017	FS		1			1
L1742398	SED	VN-02-03-E	VN-02-03-E-17_SED_01-03	11/9/2017	FS		1			1
L1742398	SED	VN-02-03-E	VN-02-03-E-17_SED_03-05	11/9/2017	FS		1			1
L1742398	SED	VN-02-03-E	VN-02-03-E-17_SED_05-07	11/9/2017	FS		1			1
L1742398	SED	VN-02-03-E	VN-02-03-E-17_SED_07-10	11/9/2017	FS		1			1
L1742398	SED	VN-02-03-E	VN-02-03-E-17_SED_10-15	11/9/2017	FS		1			1
L1742398	SED	VN-02-03-E	VN-02-03-E-17_SED_15-19	11/9/2017	FS		1			1
L1742398	SED	VN-02-03-E	VN-02-03-E-17_SED_19-22	11/9/2017	FS		1			1
L1742398	SED	VN-02-03-E	VN-02-03-E-17_SED_22-25	11/9/2017	FS		1			1
L1742398	SED	VN-02-03-E	VN-02-03-E-17_SED_25-27	11/9/2017	FS		1			1
L1742399	SED	VN-02-04-C	VN-02-04-C-17_SED_00-01	11/10/2017	FS		1			1
L1742399	SED	VN-02-04-C	VN-02-04-C-17_SED_01-03	11/10/2017	FS		1			1
L1742399	SED	VN-02-04-C	VN-02-04-C-17_SED_03-05	11/10/2017	FS		1			1
L1742399	SED	VN-02-04-C	VN-02-04-C-17_SED_05-07	11/10/2017	FS		1			1
L1742399	SED	VN-02-04-C	VN-02-04-C-17_SED_07-10	11/10/2017	FS		1			1
L1742399	SED	VN-02-04-C	VN-02-04-C-17_SED_10-15	11/10/2017	FS		1			1
L1742399	SED	VN-02-04-C	VN-02-04-C-17_SED_15-20	11/10/2017	FS		1			1
L1742399	SED	VN-02-04-C	VN-02-04-C-17_SED_20-24	11/10/2017	FS		1			1
L1742399	SED	VN-02-04-C	VN-02-04-C-17_SED_24-29	11/10/2017	FS		1			1
L1742400	SED	VN-03-01-B	VN-03-01-B-17_SED_00-01	11/10/2017	FS		1			1
L1742400	SED	VN-03-01-B	VN-03-01-B-17_SED_01-03	11/10/2017	FS		1			1
L1742400	SED	VN-03-01-B	VN-03-01-B-17_SED_03-05	11/10/2017	FS		1			1
L1742400	SED	VN-03-01-B	VN-03-01-B-17_SED_05-07	11/10/2017	FS		1			1

TABLE 1

DATA VALIDATION SUMMARY

2017 INTERTIDAL AND SUBTIDAL SEDIMENT - REPORT 2

PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399,

						Method Class	SM2540	Mercury	Methyl Mercury	TOC
						Analysis Method	% Solids	EPA 1631	EPA 1630	Lloyd_Kahn
SDG	Media	Location	Field Sample ID	Sample Date	QC Code		Count	Count	Count	Count
L1742400	SED	VN-03-01-B	VN-03-01-B-17_SED_07-10	11/10/2017	FS		1			1
L1742400	SED	VN-03-01-B	VN-03-01-B-17_SED_10-15	11/10/2017	FS		1			1
L1742400	SED	VN-03-01-B	VN-03-01-B-17_SED_15-21	11/10/2017	FS		1			1
L1742400	SED	VN-03-01-B	VN-03-01-B-17_SED_21-27	11/10/2017	FS		1			1
L1742401	SED	VN-04-01-D	VN-04-01-D-17_SED_00-01	11/13/2017	FS		1			1
L1742401	SED	VN-04-01-D	VN-04-01-D-17_SED_01-03	11/13/2017	FS		1			1
L1742401	SED	VN-04-01-D	VN-04-01-D-17_SED_03-05	11/13/2017	FS		1			1
L1742401	SED	VN-04-01-D	VN-04-01-D-17_SED_05-07	11/13/2017	FS		1			1
L1742401	SED	VN-04-01-D	VN-04-01-D-17_SED_07-10	11/13/2017	FS		1			1
L1742401	SED	VN-04-01-D	VN-04-01-D-17_SED_10-15	11/13/2017	FS		1			1
L1742401	SED	VN-04-01-D	VN-04-01-D-17_SED_15-17	11/13/2017	FS		1			1
L1742401	SED	VN-04-01-D	VN-04-01-D-17_SED_17-20	11/13/2017	FS		1			1
L1742401	SED	VN-04-01-D	VN-04-01-D-17_SED_20-22	11/13/2017	FS		1			1
L1742401	SED	VN-04-01-D	VN-04-01-D-17_SED_22-23	11/13/2017	FS		1			1
L1742401	SED	VN-04-01-D	VN-04-01-D-17_SED_23-25	11/13/2017	FS		1			1
L1742401	SED	VN-04-01-D	VN-04-01-D-17_SED_25-27	11/13/2017	FS		1			1
L1742401	SED	VN-04-01-D	VN-04-01-D-17_SED_27-30	11/13/2017	FS		1			1
L1742401	SED	VN-04-01-D	VN-04-01-D-17_SED_30-36	11/13/2017	FS		1			1

Notes: FS = Field Sample FD = Field Duplicate
Count = # of analytes SDG = Sample Delivery Group

TABLE 2
DATA VALIDATION SUMMARY REPORT
2017 INTERTIDAL AND SUBTIDAL SEDIMENT - REPORT 2
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION
PENOBSCOT RIVER, MAINE

SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399, L1742400, and L1742401

SDG	Analysis Method	Lab Sample Id	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
L1742398	LLOYD_KAHN	L1742398-01	VN-02-03-E-17_SED_00-01	T	Total Organic Carbon	6.73		6.73	J	HT	PERCENT
L1742398	LLOYD_KAHN	L1742398-02	VN-02-03-E-17_SED_01-03	T	Total Organic Carbon	6.845		6.845	J	HT	PERCENT
L1742398	LLOYD_KAHN	L1742398-03	VN-02-03-E-17_SED_03-05	T	Total Organic Carbon	6.58		6.58	J	HT	PERCENT
L1742398	LLOYD_KAHN	L1742398-04	VN-02-03-E-17_SED_05-07	T	Total Organic Carbon	5.51		5.51	J	HT	PERCENT
L1742398	LLOYD_KAHN	L1742398-05	VN-02-03-E-17_SED_07-10	T	Total Organic Carbon	6.37		6.37	J	HT	PERCENT
L1742398	LLOYD_KAHN	L1742398-06	VN-02-03-E-17_SED_10-15	T	Total Organic Carbon	6.11		6.11	J	HT	PERCENT
L1742398	LLOYD_KAHN	L1742398-07	VN-02-03-E-17_SED_15-19	T	Total Organic Carbon	5.18		5.18	J	HT	PERCENT
L1742398	LLOYD_KAHN	L1742398-08	VN-02-03-E-17_SED_19-22	T	Total Organic Carbon	4.23		4.23	J	HT	PERCENT
L1742398	LLOYD_KAHN	L1742398-09	VN-02-03-E-17_SED_22-25	T	Total Organic Carbon	2.42		2.42	J	HT	PERCENT
L1742398	LLOYD_KAHN	L1742398-10	VN-02-03-E-17_SED_25-27	T	Total Organic Carbon	2.275		2.275	J	HT	PERCENT
L1742399	LLOYD_KAHN	L1742399-01	VN-02-04-C-17_SED_00-01	T	Total Organic Carbon	5.3		5.3	J	HT	PERCENT
L1742399	LLOYD_KAHN	L1742399-02	VN-02-04-C-17_SED_01-03	T	Total Organic Carbon	5.875		5.875	J	HT	PERCENT
L1742399	LLOYD_KAHN	L1742399-03	VN-02-04-C-17_SED_03-05	T	Total Organic Carbon	7.075		7.075	J	HT	PERCENT

TABLE 2
DATA VALIDATION SUMMARY REPORT
2017 INTERTIDAL AND SUBTIDAL SEDIMENT - REPORT 2
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION
PENOBSCOT RIVER, MAINE

SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399, L1742400, and L1742401

SDG	Analysis Method	Lab Sample Id	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
L1742399	LLOYD_KAHN	L1742399-04	VN-02-04-C-17_SED_05-07	T	Total Organic Carbon	7.965		7.965	J	HT	PERCENT
L1742399	LLOYD_KAHN	L1742399-05	VN-02-04-C-17_SED_07-10	T	Total Organic Carbon	9.81		9.81	J	HT	PERCENT
L1742399	LLOYD_KAHN	L1742399-06	VN-02-04-C-17_SED_10-15	T	Total Organic Carbon	7.74		7.74	J	HT	PERCENT
L1742399	LLOYD_KAHN	L1742399-07	VN-02-04-C-17_SED_15-20	T	Total Organic Carbon	7.03		7.03	J	HT	PERCENT
L1742399	LLOYD_KAHN	L1742399-08	VN-02-04-C-17_SED_20-24	T	Total Organic Carbon	2.285		2.285	J	HT	PERCENT
L1742399	LLOYD_KAHN	L1742399-09	VN-02-04-C-17_SED_24-29	T	Total Organic Carbon	2.07		2.07	J	HT	PERCENT
L1742400	LLOYD_KAHN	L1742400-01	VN-03-01-B-17_SED_00-01	T	Total Organic Carbon	5.275		5.275	J	HT, LD	PERCENT
L1742400	LLOYD_KAHN	L1742400-02	VN-03-01-B-17_SED_01-03	T	Total Organic Carbon	5.175		5.175	J	HT	PERCENT
L1742400	LLOYD_KAHN	L1742400-03	VN-03-01-B-17_SED_03-05	T	Total Organic Carbon	5.315		5.315	J	HT	PERCENT
L1742400	LLOYD_KAHN	L1742400-04	VN-03-01-B-17_SED_05-07	T	Total Organic Carbon	4.095		4.095	J	HT	PERCENT
L1742400	LLOYD_KAHN	L1742400-05	VN-03-01-B-17_SED_07-10	T	Total Organic Carbon	6.075		6.075	J	HT	PERCENT
L1742400	LLOYD_KAHN	L1742400-06	VN-03-01-B-17_SED_10-15	T	Total Organic Carbon	7		7	J	HT	PERCENT
L1742400	LLOYD_KAHN	L1742400-07	VN-03-01-B-17_SED_15-21	T	Total Organic Carbon	7.135		7.135	J	HT	PERCENT

TABLE 2
DATA VALIDATION SUMMARY REPORT
2017 INTERTIDAL AND SUBTIDAL SEDIMENT - REPORT 2
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION
PENOBSCOT RIVER, MAINE

SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399, L1742400, and L1742401

SDG	Analysis Method	Lab Sample Id	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
L1742400	LLOYD_KAHN	L1742400-08	VN-03-01-B-17_SED_21-27	T	Total Organic Carbon	1.775		1.775	J	HT	PERCENT
L1742401	LLOYD_KAHN	L1742401-01	VN-04-01-D-17_SED_00-01	T	Total Organic Carbon	3.36		3.36	J	HT, MS-L, MS-H	PERCENT
L1742401	LLOYD_KAHN	L1742401-02	VN-04-01-D-17_SED_01-03	T	Total Organic Carbon	4.3		4.3	J	HT, LD	PERCENT
L1742401	LLOYD_KAHN	L1742401-03	VN-04-01-D-17_SED_03-05	T	Total Organic Carbon	5.735		5.735	J	HT	PERCENT
L1742401	LLOYD_KAHN	L1742401-04	VN-04-01-D-17_SED_05-07	T	Total Organic Carbon	5.73		5.73	J	HT	PERCENT
L1742401	LLOYD_KAHN	L1742401-05	VN-04-01-D-17_SED_07-10	T	Total Organic Carbon	6.72		6.72	J	HT	PERCENT
L1742401	LLOYD_KAHN	L1742401-06	VN-04-01-D-17_SED_10-15	T	Total Organic Carbon	5.485		5.485	J	HT, LD	PERCENT
L1742401	LLOYD_KAHN	L1742401-07	VN-04-01-D-17_SED_15-17	T	Total Organic Carbon	10.51		10.51	J	HT	PERCENT
L1742401	LLOYD_KAHN	L1742401-08	VN-04-01-D-17_SED_17-20	T	Total Organic Carbon	7.405		7.405	J	HT	PERCENT
L1742401	LLOYD_KAHN	L1742401-09	VN-04-01-D-17_SED_20-22	T	Total Organic Carbon	6.8		6.8	J	HT	PERCENT
L1742401	LLOYD_KAHN	L1742401-10	VN-04-01-D-17_SED_22-23	T	Total Organic Carbon	2.505		2.505	J	HT	PERCENT
L1742401	LLOYD_KAHN	L1742401-11	VN-04-01-D-17_SED_23-25	T	Total Organic Carbon	2.735		2.735	J	HT, LD	PERCENT
L1742401	LLOYD_KAHN	L1742401-12	VN-04-01-D-17_SED_25-27	T	Total Organic Carbon	1.51		1.51	J	HT	PERCENT

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SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399, L1742400, and L1742401

SDG	Analysis Method	Lab Sample Id	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
L1742401	LLOYD_KAHN	L1742401-13	VN-04-01-D-17_SED_27-30	T	Total Organic Carbon	2.145		2.145	J	HT	PERCENT
L1742401	LLOYD_KAHN	L1742401-14	VN-04-01-D-17_SED_30-36	T	Total Organic Carbon	2.405		2.405	J	HT	PERCENT
1711006	% Solids	1711006-01	VN-04-01-E-17_SED_03-05	T	Percent Solids	45.2	[1]	45.2	J	HT	% BY WT.
1711006	% Solids	1711006-02	VN-04-01-E-17_SED_05-07	T	Percent Solids	48.1	O-04	48.1	J	HT	% BY WT.
1711006	% Solids	1711006-03	VN-04-01-E-17_SED_07-10	T	Percent Solids	52.6	O-04	52.6	J	HT	% BY WT.
1711007	% Solids	1711007-05	VN-04-02-C-17_SED_01-03	T	Percent Solids	65.9	O-04	65.9	J	HT	% BY WT.
1711007	% Solids	1711007-01	VN-04-02-C-17_SED_03-05	T	Percent Solids	60.8	O-04	60.8	J	HT	% BY WT.
1711007	% Solids	1711007-02	VN-04-02-C-17_SED_03-05_DUP	T	Percent Solids	60	O-04	60	J	HT	% BY WT.
1711007	% Solids	1711007-03	VN-04-02-C-17_SED_05-07	T	Percent Solids	59.3	O-04	59.3	J	HT	% BY WT.
1711007	% Solids	1711007-04	VN-04-02-C-17_SED_07-10	T	Percent Solids	60.7	O-04	60.7	J	HT	% BY WT.
1711121	% Solids	1711121-01	VN-03-01-D-17_SED_00-01	T	Percent Solids	35.6	O-04	35.6	J	HT	% BY WT.
1711121	% Solids	1711121-02	VN-03-01-D-17_SED_01-03	T	Percent Solids	45.6	O-04	45.6	J	HT	% BY WT.
1711122	% Solids	1711122-01	VN-02-04-B-17_SED_00-01	T	Percent Solids	24.1	O-04	24.1	J	HT	% BY WT.
1711122	% Solids	1711122-02	VN-02-04-B-17_SED_01-03	T	Percent Solids	40.7	O-04	40.7	J	HT	% BY WT.
1711123	% Solids	1711123-01	VN-02-03-A-17_SED_00-01	T	Percent Solids	24.5	O-04	24.5	J	HT	% BY WT.
1711123	% Solids	1711123-02	VN-02-03-A-17_SED_01-03	T	Percent Solids	36.9	O-04	36.9	J	HT	% BY WT.
1711124	% Solids	1711124-01	VN-02-01-A-17_SED_00-01	T	Percent Solids	18.3	O-04	18.3	J	HT	% BY WT.
1711124	% Solids	1711124-02	VN-02-01-A-17_SED_01-03	T	Percent Solids	39.8	O-04	39.8	J	HT	% BY WT.
1711125	% Solids	1711125-01	VE-10-01-E-17_SED_00-01	T	Percent Solids	30.1	O-04	30.1	J	HT	% BY WT.
1711125	% Solids	1711125-02	VE-10-01-E-17_SED_01-03	T	Percent Solids	39.6	O-04	39.6	J	HT	% BY WT.
1711126	% Solids	1711126-01	ON-18-02-E-17_SED_00-01	T	Percent Solids	21.7	O-04	21.7	J	HT	% BY WT.
1711126	% Solids	1711126-02	ON-18-02-E-17_SED_01-03	T	Percent Solids	23	O-04	23	J	HT	% BY WT.
1711127	% Solids	1711127-01	BU-08-01-E-17_SED_00-01	T	Percent Solids	31	O-04	31	J	HT	% BY WT.
1711127	% Solids	1711127-02	BU-08-01-E-17_SED_01-03	T	Percent Solids	45.7	O-04	45.7	J	HT	% BY WT.
1711309	% Solids	1711309-01	FF-08-01-B-17_SED_00-01	T	Percent Solids	13.1	O-04	13.1	J	HT	% BY WT.

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SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399, L1742400, and L1742401

SDG	Analysis Method	Lab Sample Id	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
1711309	% Solids	1711309-02	FF-08-01-B-17_SED_01-03	T	Percent Solids	13.8	O-04	13.8	J	HT	% BY WT.
1711309	% Solids	1711309-03	FF-08-01-B-17_SED_03-05	T	Percent Solids	21.7	O-04	21.7	J	HT	% BY WT.
1711309	% Solids	1711309-04	FF-08-01-B-17_SED_05-07	T	Percent Solids	21.9	O-04	21.9	J	HT	% BY WT.
1711309	% Solids	1711309-05	FF-08-01-B-17_SED_07-10	T	Percent Solids	18.1	O-04	18.1	J	HT	% BY WT.
1711309	% Solids	1711309-06	FF-08-01-B-17_SED_10-15	T	Percent Solids	28	O-04	28	J	HT	% BY WT.
1711309	% Solids	1711309-07	FF-08-01-B-17_SED_15-20	T	Percent Solids	20.6	O-04	20.6	J	HT	% BY WT.
1711309	% Solids	1711309-08	FF-08-01-B-17_SED_20-30	T	Percent Solids	28.8	O-04	28.8	J	HT	% BY WT.
1711309	% Solids	1711309-09	FF-08-01-B-17_SED_30-40	T	Percent Solids	28.5	O-04	28.5	J	HT	% BY WT.
1711309	% Solids	1711309-10	FF-08-01-B-17_SED_40-50	T	Percent Solids	40.1	O-04	40.1	J	HT	% BY WT.
1711309	% Solids	1711309-11	FF-08-01-B-17_SED_50-60	T	Percent Solids	73	O-04	73	J	HT	% BY WT.
1711309	% Solids	1711309-12	FF-08-01-B-17_SED_60-70	T	Percent Solids	81.4	O-04	81.4	J	HT	% BY WT.
1711313	% Solids	1711313-01	FF-04-01-D-17_SED_00-01	T	Percent Solids	13	O-04	13	J	HT	% BY WT.
1711313	% Solids	1711313-02	FF-04-01-D-17_SED_01-03	T	Percent Solids	15.7	O-04	15.7	J	HT	% BY WT.
1711313	% Solids	1711313-03	FF-04-01-D-17_SED_03-05	T	Percent Solids	15.9	O-04	15.9	J	HT	% BY WT.
1711313	% Solids	1711313-04	FF-04-01-D-17_SED_05-07	T	Percent Solids	16.5	O-04	16.5	J	HT	% BY WT.
1711313	% Solids	1711313-05	FF-04-01-D-17_SED_07-10	T	Percent Solids	25.1	O-04	25.1	J	HT	% BY WT.
1711313	% Solids	1711313-06	FF-04-01-D-17_SED_10-15	T	Percent Solids	28.8	O-04	28.8	J	HT	% BY WT.
1711313	% Solids	1711313-07	FF-04-01-D-17_SED_15-20	T	Percent Solids	30.5	O-04	30.5	J	HT	% BY WT.
1711313	% Solids	1711313-08	FF-04-01-D-17_SED_20-30	T	Percent Solids	24.5	O-04	24.5	J	HT	% BY WT.
1711313	% Solids	1711313-09	FF-04-01-D-17_SED_30-40	T	Percent Solids	47.9	O-04	47.9	J	HT	% BY WT.
1711313	% Solids	1711313-10	FF-04-01-D-17_SED_40-50	T	Percent Solids	68.3	O-04	68.3	J	HT	% BY WT.
1711315	% Solids	1711315-01	WP-06-02-C-17_SED_00-01	T	Percent Solids	33.6	O-04	33.6	J	HT	% BY WT.
1711315	% Solids	1711315-02	WP-06-02-C-17_SED_01-03	T	Percent Solids	36.4	O-04	36.4	J	HT	% BY WT.
1711315	% Solids	1711315-03	WP-06-02-C-17_SED_03-05	T	Percent Solids	32.6	O-04	32.6	J	HT	% BY WT.
1711315	% Solids	1711315-04	WP-06-02-C-17_SED_05-07	T	Percent Solids	32.5	O-04	32.5	J	HT	% BY WT.
1711315	% Solids	1711315-05	WP-06-02-C-17_SED_07-10	T	Percent Solids	30.5	O-04	30.5	J	HT	% BY WT.
1711315	% Solids	1711315-06	WP-06-02-C-17_SED_10-15	T	Percent Solids	32.4	O-04	32.4	J	HT	% BY WT.

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SDG	Analysis Method	Lab Sample Id	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
1711315	% Solids	1711315-07	WP-06-02-C-17_SED_15-20	T	Percent Solids	30.9	O-04	30.9	J	HT	% BY WT.
1711315	% Solids	1711315-08	WP-06-02-C-17_SED_20-30	T	Percent Solids	56.4	O-04	56.4	J	HT	% BY WT.
1711315	% Solids	1711315-09	WP-06-02-C-17_SED_30-40	T	Percent Solids	50.1	O-04	50.1	J	HT	% BY WT.
1711315	% Solids	1711315-10	WP-06-02-C-17_SED_40-50	T	Percent Solids	45.2	O-04	45.2	J	HT	% BY WT.
1711315	% Solids	1711315-11	WP-06-02-C-17_SED_50-60	T	Percent Solids	64.6	O-04	64.6	J	HT	% BY WT.
1711317	% Solids	1711317-01	VN-01-01-E-17_SED_00-01	T	Percent Solids	44	O-04	44	J	HT	% BY WT.
1711317	% Solids	1711317-02	VN-01-01-E-17_SED_01-03	T	Percent Solids	42.4	O-04	42.4	J	HT	% BY WT.
1711317	% Solids	1711317-03	VN-01-01-E-17_SED_03-05	T	Percent Solids	44.6	O-04	44.6	J	HT	% BY WT.
1711317	% Solids	1711317-04	VN-01-01-E-17_SED_05-07	T	Percent Solids	44	O-04	44	J	HT	% BY WT.
1711317	% Solids	1711317-05	VN-01-01-E-17_SED_07-10	T	Percent Solids	46.3	O-04	46.3	J	HT	% BY WT.
1711317	% Solids	1711317-06	VN-01-01-E-17_SED_10-15	T	Percent Solids	43.5	O-04	43.5	J	HT	% BY WT.
1711317	% Solids	1711317-07	VN-01-01-E-17_SED_15-17	T	Percent Solids	42	O-04	42	J	HT	% BY WT.
1711317	% Solids	1711317-08	VN-01-01-E-17_SED_17-18	T	Percent Solids	49.2	O-04	49.2	J	HT	% BY WT.
1711317	% Solids	1711317-09	VN-01-01-E-17_SED_18-20	T	Percent Solids	53.3	O-04	53.3	J	HT	% BY WT.
1711317	% Solids	1711317-10	VN-01-01-E-17_SED_20-23	T	Percent Solids	45.2	O-04	45.2	J	HT	% BY WT.
1711321	% Solids	1711321-01	BU-02-01-D-17_SED_00-01	T	Percent Solids	32.3	O-04	32.3	J	HT	% BY WT.
1711321	% Solids	1711321-02	BU-02-01-D-17_SED_01-03	T	Percent Solids	43.2	O-04	43.2	J	HT	% BY WT.
1711321	% Solids	1711321-03	BU-02-01-D-17_SED_03-05	T	Percent Solids	34.5	O-04	34.5	J	HT	% BY WT.
1711321	% Solids	1711321-04	BU-02-01-D-17_SED_05-07	T	Percent Solids	35.5	O-04	35.5	J	HT	% BY WT.
1711321	% Solids	1711321-05	BU-02-01-D-17_SED_07-10	T	Percent Solids	47.4	O-04	47.4	J	HT	% BY WT.
1711321	% Solids	1711321-06	BU-02-01-D-17_SED_10-15	T	Percent Solids	43.4	O-04	43.4	J	HT	% BY WT.
1711321	% Solids	1711321-07	BU-02-01-D-17_SED_15-20	T	Percent Solids	37.4	O-04	37.4	J	HT	% BY WT.
1711321	% Solids	1711321-08	BU-02-01-D-17_SED_20-30	T	Percent Solids	52.6	O-04	52.6	J	HT	% BY WT.
1711324	% Solids	1711324-01	MM-04-01-C-17_SED_00-01	T	Percent Solids	33	O-04	33	J	HT	% BY WT.
1711324	% Solids	1711324-02	MM-04-01-C-17_SED_01-03	T	Percent Solids	35.7	O-04	35.7	J	HT	% BY WT.
1711324	% Solids	1711324-03	MM-04-01-C-17_SED_03-05	T	Percent Solids	37.2	O-04	37.2	J	HT	% BY WT.
1711324	% Solids	1711324-04	MM-04-01-C-17_SED_05-07	T	Percent Solids	40.7	O-04	40.7	J	HT	% BY WT.

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SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399, L1742400, and L1742401

SDG	Analysis Method	Lab Sample Id	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
1711324	% Solids	1711324-05	MM-04-01-C-17_SED_07-10	T	Percent Solids	43.4	O-04	43.4	J	HT	% BY WT.
1711324	% Solids	1711324-06	MM-04-01-C-17_SED_10-15	T	Percent Solids	36.8	O-04	36.8	J	HT	% BY WT.
1711324	% Solids	1711324-07	MM-04-01-C-17_SED_15-20	T	Percent Solids	38.7	O-04	38.7	J	HT	% BY WT.
1711324	% Solids	1711324-08	MM-04-01-C-17_SED_20-30	T	Percent Solids	55.5	O-04	55.5	J	HT	% BY WT.
1711326	% Solids	1711326-01	WP-02-01-B-17_SED_00-01	T	Percent Solids	36.4	[1]	36.4	J	HT	% BY WT.
1711326	% Solids	1711326-02	WP-02-01-B-17_SED_01-03	T	Percent Solids	38.5	[2]	38.5	J	HT	% BY WT.
1711326	% Solids	1711326-03	WP-02-01-B-17_SED_03-05	T	Percent Solids	41.4	[3]	41.4	J	HT	% BY WT.
1711326	% Solids	1711326-04	WP-02-01-B-17_SED_05-07	T	Percent Solids	39.1	[4]	39.1	J	HT	% BY WT.
1711326	% Solids	1711326-05	WP-02-01-B-17_SED_07-10	T	Percent Solids	41.2	[5]	41.2	J	HT	% BY WT.
1711326	% Solids	1711326-06	WP-02-01-B-17_SED_10-15	T	Percent Solids	53.5	[6]	53.5	J	HT	% BY WT.
1711326	% Solids	1711326-07	WP-02-01-B-17_SED_15-20	T	Percent Solids	60.5	[7]	60.5	J	HT	% BY WT.
1711326	% Solids	1711326-08	WP-02-01-B-17_SED_20-30	T	Percent Solids	62.6	[8]	62.6	J	HT	% BY WT.
1711327	% Solids	1711327-01	BU-08-01-A-17_SED_00-01	T	Percent Solids	43.5	[1]	43.5	J	HT	% BY WT.
1711327	% Solids	1711327-02	BU-08-01-A-17_SED_01-03	T	Percent Solids	45.5	[2]	45.5	J	HT	% BY WT.
1711327	% Solids	1711327-03	BU-08-01-A-17_SED_03-05	T	Percent Solids	53.2	[3]	53.2	J	HT	% BY WT.
1711327	% Solids	1711327-04	BU-08-01-A-17_SED_05-07	T	Percent Solids	49.9	[4]	49.9	J	HT	% BY WT.
1711327	% Solids	1711327-05	BU-08-01-A-17_SED_07-10	T	Percent Solids	49.7	[5]	49.7	J	HT	% BY WT.
1711327	% Solids	1711327-06	BU-08-01-A-17_SED_10-15	T	Percent Solids	52.1	[6]	52.1	J	HT	% BY WT.
1711327	% Solids	1711327-07	BU-08-01-A-17_SED_15-20	T	Percent Solids	64.6	[7]	64.6	J	HT	% BY WT.
1711587	% Solids	1711587-01	FF-07-01-E-17_SED_00-01	T	Percent Solids	57.1	O-04	57.1	J	HT	% BY WT.
1711587	% Solids	1711587-02	FF-07-01-E-17_SED_01-03	T	Percent Solids	62.4	O-04	62.4	J	HT	% BY WT.
1711587	% Solids	1711587-03	FF-07-01-E-17_SED_03-05	T	Percent Solids	63	O-04	63	J	HT	% BY WT.
1711587	% Solids	1711587-04	FF-07-01-E-17_SED_03-05-Dup	T	Percent Solids	63.3	O-04	63.3	J	HT	% BY WT.
1711587	% Solids	1711587-05	FF-07-01-E-17_SED_05-07	T	Percent Solids	64.3	O-04	64.3	J	HT	% BY WT.
1711587	% Solids	1711587-06	FF-07-01-E-17_SED_07-10	T	Percent Solids	63.2	O-04	63.2	J	HT	% BY WT.
1711587	% Solids	1711587-07	FF-07-01-E-17_SED_10-15	T	Percent Solids	62.7	O-04	62.7	J	HT	% BY WT.
1711587	% Solids	1711587-08	FF-07-01-E-17_SED_10-15-Dup	T	Percent Solids	63.5	O-04	63.5	J	HT	% BY WT.

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SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399, L1742400, and L1742401

SDG	Analysis Method	Lab Sample Id	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
1711587	% Solids	1711587-09	FF-07-01-E-17_SED_15-20	T	Percent Solids	57.7	O-04	57.7	J	HT	% BY WT.
1711587	% Solids	1711587-10	FF-07-01-E-17_SED_20-25	T	Percent Solids	60	O-04	60	J	HT	% BY WT.
1711587	% Solids	1711587-11	FF-07-01-E-17_SED_25-27	T	Percent Solids	57.7	O-04	57.7	J	HT	% BY WT.
1711587	% Solids	1711587-12	FF-07-01-E-17_SED_27-30	T	Percent Solids	59.6	O-04	59.6	J	HT	% BY WT.
1711587	% Solids	1711587-13	FF-07-01-E-17_SED_27-30-Dup	T	Percent Solids	59.7	O-04	59.7	J	HT	% BY WT.
1711587	% Solids	1711587-14	FF-07-01-E-17_SED_30-40	T	Percent Solids	57.5	O-04	57.5	J	HT	% BY WT.
1711587	% Solids	1711587-15	FF-07-01-E-17_SED_40-45	T	Percent Solids	58.9	O-04	58.9	J	HT	% BY WT.
1711587	% Solids	1711587-16	FF-07-01-E-17_SED_45-49	T	Percent Solids	59.3	O-04	59.3	J	HT	% BY WT.
1711588	% Solids	1711588-01	VN-04-01-D-17_SED_00-01	T	Percent Solids	46.3	O-04	46.3	J	HT	% BY WT.
1711588	% Solids	1711588-02	VN-04-01-D-17_SED_00-01-Dup	T	Percent Solids	46	O-04	46	J	HT	% BY WT.
1711588	% Solids	1711588-03	VN-04-01-D-17_SED_01-03	T	Percent Solids	47.3	O-04	47.3	J	HT	% BY WT.
1711588	% Solids	1711588-04	VN-04-01-D-17_SED_03-05	T	Percent Solids	36	O-04	36	J	HT	% BY WT.
1711588	% Solids	1711588-05	VN-04-01-D-17_SED_05-07	T	Percent Solids	44.5	O-04	44.5	J	HT	% BY WT.
1711588	% Solids	1711588-06	VN-04-01-D-17_SED_07-10	T	Percent Solids	37.2	O-04	37.2	J	HT	% BY WT.
1711588	% Solids	1711588-07	VN-04-01-D-17_SED_10-15	T	Percent Solids	47.5	O-04	47.5	J	HT	% BY WT.
1711588	% Solids	1711588-08	VN-04-01-D-17_SED_15-17	T	Percent Solids	35	O-04	35	J	HT	% BY WT.
1711588	% Solids	1711588-09	VN-04-01-D-17_SED_17-20	T	Percent Solids	38.7	O-04	38.7	J	HT	% BY WT.
1711588	% Solids	1711588-10	VN-04-01-D-17_SED_20-22	T	Percent Solids	41.5	O-04	41.5	J	HT	% BY WT.
1711588	% Solids	1711588-11	VN-04-01-D-17_SED_22-23	T	Percent Solids	45.5	O-04	45.5	J	HT	% BY WT.
1711588	% Solids	1711588-12	VN-04-01-D-17_SED_23-25	T	Percent Solids	55.9	O-04	55.9	J	HT	% BY WT.
1711588	% Solids	1711588-13	VN-04-01-D-17_SED_23-25-Dup	T	Percent Solids	63.4	O-04	63.4	J	HT	% BY WT.
1711588	% Solids	1711588-14	VN-04-01-D-17_SED_25-27	T	Percent Solids	65.9	O-04	65.9	J	HT	% BY WT.
1711588	% Solids	1711588-15	VN-04-01-D-17_SED_27-30	T	Percent Solids	55.7	O-04	55.7	J	HT	% BY WT.
1711588	% Solids	1711588-16	VN-04-01-D-17_SED_30-36	T	Percent Solids	56.8	O-04	56.8	J	HT	% BY WT.
1711589	% Solids	1711589-01	VN-04-02-A-17_SED_00-01	T	Percent Solids	72	O-04	72	J	HT	% BY WT.
1711589	% Solids	1711589-02	VN-04-02-A-17_SED_00-01-Dup	T	Percent Solids	67.6	O-04	67.6	J	HT	% BY WT.
1711589	% Solids	1711589-03	VN-04-02-A-17_SED_01-03	T	Percent Solids	66.5	O-04	66.5	J	HT	% BY WT.

TABLE 2
DATA VALIDATION SUMMARY REPORT
2017 INTERTIDAL AND SUBTIDAL SEDIMENT - REPORT 2
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION
PENOBSCOT RIVER, MAINE

SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399, L1742400, and L1742401

SDG	Analysis Method	Lab Sample Id	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
1711589	% Solids	1711589-04	VN-04-02-A-17_SED_01-03-Dup	T	Percent Solids	68.1	O-04	68.1	J	HT	% BY WT.
1711589	% Solids	1711589-05	VN-04-02-A-17_SED_03-05	T	Percent Solids	59.2	O-04	59.2	J	HT	% BY WT.
1711589	% Solids	1711589-06	VN-04-02-A-17_SED_03-05-Dup	T	Percent Solids	59	O-04	59	J	HT	% BY WT.
1711589	% Solids	1711589-07	VN-04-02-A-17_SED_05-07	T	Percent Solids	61	O-04	61	J	HT	% BY WT.
1711589	% Solids	1711589-08	VN-04-02-A-17_SED_05-07-Dup	T	Percent Solids	60.9	O-04	60.9	J	HT	% BY WT.
1711589	% Solids	1711589-09	VN-04-02-A-17_SED_07-10	T	Percent Solids	61.6	O-04	61.6	J	HT	% BY WT.
1711589	% Solids	1711589-10	VN-04-02-A-17_SED_07-10-Dup	T	Percent Solids	60.7	O-04	60.7	J	HT	% BY WT.
1711589	% Solids	1711589-11	VN-04-02-A-17_SED_10-15	T	Percent Solids	62.7	O-04	62.7	J	HT	% BY WT.
1711589	% Solids	1711589-12	VN-04-02-A-17_SED_10-15-Dup	T	Percent Solids	59.3	O-04	59.3	J	HT	% BY WT.
1711589	% Solids	1711589-13	VN-04-02-A-17_SED_15-20	T	Percent Solids	64.9	O-04	64.9	J	HT	% BY WT.
1711589	% Solids	1711589-14	VN-04-02-A-17_SED_20-25	T	Percent Solids	63.6	O-04	63.6	J	HT	% BY WT.
1711589	% Solids	1711589-15	VN-04-02-A-17_SED_25-31	T	Percent Solids	54.6	O-04	54.6	J	HT	% BY WT.
1711590	% Solids	1711590-01	BH-03-01-A-17_SED_00-01	T	Percent Solids	57.8	O-04	57.8	J	HT	% BY WT.
1711590	% Solids	1711590-02	BH-03-01-A-17_SED_01-03	T	Percent Solids	57.6	O-04	57.6	J	HT	% BY WT.
1711590	% Solids	1711590-03	BH-03-01-A-17_SED_03-05	T	Percent Solids	54	O-04	54	J	HT	% BY WT.
1711590	% Solids	1711590-04	BH-03-01-A-17_SED_05-07	T	Percent Solids	54.4	O-04	54.4	J	HT	% BY WT.
1711590	% Solids	1711590-05	BH-03-01-A-17_SED_07-10	T	Percent Solids	55	O-04	55	J	HT	% BY WT.
1711590	% Solids	1711590-06	BH-03-01-A-17_SED_10-13	T	Percent Solids	57	O-04	57	J	HT	% BY WT.
1711590	% Solids	1711590-07	BH-03-01-A-17_SED_13-17	T	Percent Solids	55.9	O-04	55.9	J	HT	% BY WT.
1711590	% Solids	1711590-08	BH-03-01-A-17_SED_13-17-Dup	T	Percent Solids	59.8	O-04	59.8	J	HT	% BY WT.
1711590	% Solids	1711590-09	BH-03-01-A-17_SED_17-20	T	Percent Solids	54.6	O-04	54.6	J	HT	% BY WT.
1711590	% Solids	1711590-10	BH-03-01-A-17_SED_20-25	T	Percent Solids	52.6	O-04	52.6	J	HT	% BY WT.
1711590	% Solids	1711590-11	BH-03-01-A-17_SED_25-30	T	Percent Solids	55.8	O-04	55.8	J	HT	% BY WT.
1711590	% Solids	1711590-12	BH-03-01-A-17_SED_30-35	T	Percent Solids	58.2	O-04	58.2	J	HT	% BY WT.
1711590	% Solids	1711590-13	BH-03-01-A-17_SED_35-39	T	Percent Solids	53.8	O-04	53.8	J	HT	% BY WT.
1711590	% Solids	1711590-14	BH-03-01-A-17_SED_39-43	T	Percent Solids	67.3	O-04	67.3	J	HT	% BY WT.
1711591	% Solids	1711591-01	VW-14-01-E-17_SED_00-01	T	Percent Solids	50.7	O-04	50.7	J	HT	% BY WT.

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SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399, L1742400, and L1742401

SDG	Analysis Method	Lab Sample Id	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
1711591	% Solids	1711591-02	VW-14-01-E-17_SED_01-03	T	Percent Solids	48.7	O-04	48.7	J	HT	% BY WT.
1711591	% Solids	1711591-03	VW-14-01-E-17_SED_03-05	T	Percent Solids	48.6	O-04	48.6	J	HT	% BY WT.
1711591	% Solids	1711591-04	VW-14-01-E-17_SED_03-05-Dup	T	Percent Solids	53.7	O-04	53.7	J	HT	% BY WT.
1711591	% Solids	1711591-05	VW-14-01-E-17_SED_05-07	T	Percent Solids	55.8	O-04	55.8	J	HT	% BY WT.
1711591	% Solids	1711591-06	VW-14-01-E-17_SED_07-10	T	Percent Solids	61.2	O-04	61.2	J	HT	% BY WT.
1711591	% Solids	1711591-07	VW-14-01-E-17_SED_10-12	T	Percent Solids	57.8	O-04	57.8	J	HT	% BY WT.
1711591	% Solids	1711591-08	VW-14-01-E-17_SED_12-14	T	Percent Solids	54.3	O-04	54.3	J	HT	% BY WT.
1711591	% Solids	1711591-09	VW-14-01-E-17_SED_14-16	T	Percent Solids	52.4	O-04	52.4	J	HT	% BY WT.
1711591	% Solids	1711591-10	VW-14-01-E-17_SED_16-18	T	Percent Solids	60.7	O-04	60.7	J	HT	% BY WT.
1711591	% Solids	1711591-11	VW-14-01-E-17_SED_18-20	T	Percent Solids	57.1	O-04	57.1	J	HT	% BY WT.
1711591	% Solids	1711591-12	VW-14-01-E-17_SED_18-20-Dup	T	Percent Solids	57.3	O-04	57.3	J	HT	% BY WT.
1711592	% Solids	1711592-01	ON-10-01-B-17_SED_00-01	T	Percent Solids	39.9	O-04	39.9	J	HT	% BY WT.
1711592	% Solids	1711592-02	ON-10-01-B-17_SED_01-03	T	Percent Solids	39.9	O-04	39.9	J	HT	% BY WT.
1711592	% Solids	1711592-03	ON-10-01-B-17_SED_03-05	T	Percent Solids	42.4	O-04	42.4	J	HT	% BY WT.
1711592	% Solids	1711592-04	ON-10-01-B-17_SED_05-07	T	Percent Solids	45.5	O-04	45.5	J	HT	% BY WT.
1711592	% Solids	1711592-05	ON-10-01-B-17_SED_07-09	T	Percent Solids	53.7	O-04	53.7	J	HT	% BY WT.
1711592	% Solids	1711592-06	ON-10-01-B-17_SED_09-11	T	Percent Solids	59.2	O-04	59.2	J	HT	% BY WT.
1711592	% Solids	1711592-07	ON-10-01-B-17_SED_11-15	T	Percent Solids	60.3	O-04	60.3	J	HT	% BY WT.
1711592	% Solids	1711592-08	ON-10-01-B-17_SED_15-20	T	Percent Solids	61.6	O-04	61.6	J	HT	% BY WT.
1711592	% Solids	1711592-09	ON-10-01-B-17_SED_20-25	T	Percent Solids	63.4	O-04	63.4	J	HT	% BY WT.
1711592	% Solids	1711592-10	ON-10-01-B-17_SED_25-28	T	Percent Solids	64.6	O-04	64.6	J	HT	% BY WT.
1711592	% Solids	1711592-11	ON-10-01-B-17_SED_28-30	T	Percent Solids	67.2	O-04	67.2	J	HT	% BY WT.
1711592	% Solids	1711592-12	ON-10-01-B-17_SED_30-37	T	Percent Solids	62.2	O-04	62.2	J	HT	% BY WT.
1711593	% Solids	1711593-01	VW-02-01-B-17_SED_00-01	T	Percent Solids	54.7	O-04	54.7	J	HT	% BY WT.
1711593	% Solids	1711593-02	VW-02-01-B-17_SED_01-03	T	Percent Solids	51.9	O-04	51.9	J	HT	% BY WT.
1711593	% Solids	1711593-03	VW-02-01-B-17_SED_03-05	T	Percent Solids	53.9	O-04	53.9	J	HT	% BY WT.
1711593	% Solids	1711593-04	VW-02-01-B-17_SED_05-07	T	Percent Solids	51.9	O-04	51.9	J	HT	% BY WT.

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SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399, L1742400, and L1742401

SDG	Analysis Method	Lab Sample Id	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
1711593	% Solids	1711593-05	VW-02-01-B-17_SED_07-09	T	Percent Solids	53.1	O-04	53.1	J	HT	% BY WT.
1711593	% Solids	1711593-06	VW-02-01-B-17_SED_09-11	T	Percent Solids	52.9	O-04	52.9	J	HT	% BY WT.
1711593	% Solids	1711593-07	VW-02-01-B-17_SED_11-13	T	Percent Solids	54.1	O-04	54.1	J	HT	% BY WT.
1711593	% Solids	1711593-08	VW-02-01-B-17_SED_13-15	T	Percent Solids	51.5	O-04	51.5	J	HT	% BY WT.
1711593	% Solids	1711593-09	VW-02-01-B-17_SED_15-20	T	Percent Solids	51.8	O-04	51.8	J	HT	% BY WT.
1711593	% Solids	1711593-10	VW-02-01-B-17_SED_20-25	T	Percent Solids	52.5	O-04	52.5	J	HT	% BY WT.
1711593	% Solids	1711593-11	VW-02-01-B-17_SED_25-30	T	Percent Solids	52.4	O-04	52.4	J	HT	% BY WT.
1711603	% Solids	1711603-01	VE-10-01-C-17_SED_00-01	T	Percent Solids	45.4	O-04	45.4	J	HT	% BY WT.
1711603	% Solids	1711603-02	VE-10-01-C-17_SED_01-02	T	Percent Solids	44.7	O-04	44.7	J	HT	% BY WT.
1711603	% Solids	1711603-03	VE-10-01-C-17_SED_02-03	T	Percent Solids	48.7	O-04	48.7	J	HT	% BY WT.
1711603	% Solids	1711603-04	VE-10-01-C-17_SED_03-05	T	Percent Solids	50.3	O-04	50.3	J	HT	% BY WT.
1711603	% Solids	1711603-05	VE-10-01-C-17_SED_05-07	T	Percent Solids	46.5	O-04	46.5	J	HT	% BY WT.
1711603	% Solids	1711603-06	VE-10-01-C-17_SED_07-10	T	Percent Solids	43.2	O-04	43.2	J	HT	% BY WT.
1711603	% Solids	1711603-07	VE-10-01-C-17_SED_10-13	T	Percent Solids	44.4	O-04	44.4	J	HT	% BY WT.
1711603	% Solids	1711603-08	VE-10-01-C-17_SED_13-16	T	Percent Solids	44.5	O-04	44.5	J	HT	% BY WT.
1711603	% Solids	1711603-09	VE-10-01-C-17_SED_16-20	T	Percent Solids	55.3	O-04	55.3	J	HT	% BY WT.
1711604	% Solids	1711604-01	VE-09-01-B-17_SED_00-01	T	Percent Solids	35.4	O-04	35.4	J	HT	% BY WT.
1711604	% Solids	1711604-02	VE-09-01-B-17_SED_01-03	T	Percent Solids	37.3	O-04	37.3	J	HT	% BY WT.
1711604	% Solids	1711604-03	VE-09-01-B-17_SED_03-05	T	Percent Solids	41.1	O-04	41.1	J	HT	% BY WT.
1711604	% Solids	1711604-04	VE-09-01-B-17_SED_05-07	T	Percent Solids	39.4	O-04	39.4	J	HT	% BY WT.
1711604	% Solids	1711604-05	VE-09-01-B-17_SED_07-10	T	Percent Solids	42.1	O-04	42.1	J	HT	% BY WT.
1711604	% Solids	1711604-06	VE-09-01-B-17_SED_10-13	T	Percent Solids	42.2	O-04	42.2	J	HT	% BY WT.
1711604	% Solids	1711604-07	VE-09-01-B-17_SED_13-16	T	Percent Solids	42.4	O-04	42.4	J	HT	% BY WT.
1711604	% Solids	1711604-08	VE-09-01-B-17_SED_13-16-Dup	T	Percent Solids	41	O-04	41	J	HT	% BY WT.
1711604	% Solids	1711604-09	VE-09-01-B-17_SED_16-20	T	Percent Solids	55.1	O-04	55.1	J	HT	% BY WT.
1711604	% Solids	1711604-10	VE-09-01-B-17_SED_20-23	T	Percent Solids	56	O-04	56	J	HT	% BY WT.

TABLE 2
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SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399, L1742400, and L1742401

SDG	Analysis Method	Lab Sample Id	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units

Units
% = Percent

Validation Qualifier:
J = Value is estimated

Validation Reason Codes:
HT = Hold time exceeded
LD = Lab duplicate limit exceeded
MS-H = Matrix Spike recovery was above the acceptance limits.
MS-L = Matrix Spike recovery was below the acceptance limits.

TABLE 3
DATA VALIDATION SUMMARY REPORT
2017 INTERTIDAL AND SUBTIDAL SEDIMENT - REPORT 2
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION
PENOBSCOT RIVER, MAINE
SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399, L1742400, and L1742401

			Analysis Method	SM2540G		EPA 1631		EPA 1630		Lloyd-Kahn	
			Parameter	% Solids		Mercury		Methyl Mercury		TOC	
			Unit	PERCENT		NG/G		NG/G		PERCENT	
			Fraction	Total		Total		Total		Total	
SDG	**Location ID**	**Sample Date**	**Field Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
L1742398	VN-02-03-E	11/9/2017	VN-02-03-E-17_SED_00-01	FS	34.5						6.73	J
L1742398	VN-02-03-E	11/9/2017	VN-02-03-E-17_SED_01-03	FS	32.9						6.845	J
L1742398	VN-02-03-E	11/9/2017	VN-02-03-E-17_SED_03-05	FS	35.1						6.58	J
L1742398	VN-02-03-E	11/9/2017	VN-02-03-E-17_SED_05-07	FS	39.9						5.51	J
L1742398	VN-02-03-E	11/9/2017	VN-02-03-E-17_SED_07-10	FS	41.3						6.37	J
L1742398	VN-02-03-E	11/9/2017	VN-02-03-E-17_SED_10-15	FS	40.9						6.11	J
L1742398	VN-02-03-E	11/9/2017	VN-02-03-E-17_SED_15-19	FS	45.6						5.18	J
L1742398	VN-02-03-E	11/9/2017	VN-02-03-E-17_SED_19-22	FS	47.1						4.23	J
L1742398	VN-02-03-E	11/9/2017	VN-02-03-E-17_SED_22-25	FS	58.8						2.42	J
L1742398	VN-02-03-E	11/9/2017	VN-02-03-E-17_SED_25-27	FS	59.8						2.275	J
L1742399	VN-02-04-C	11/10/2017	VN-02-04-C-17_SED_00-01	FS	39.5						5.3	J
L1742399	VN-02-04-C	11/10/2017	VN-02-04-C-17_SED_01-03	FS	42.4						5.875	J
L1742399	VN-02-04-C	11/10/2017	VN-02-04-C-17_SED_03-05	FS	40.8						7.075	J
L1742399	VN-02-04-C	11/10/2017	VN-02-04-C-17_SED_05-07	FS	40.8						7.965	J
L1742399	VN-02-04-C	11/10/2017	VN-02-04-C-17_SED_07-10	FS	37						9.81	J
L1742399	VN-02-04-C	11/10/2017	VN-02-04-C-17_SED_10-15	FS	41.7						7.74	J
L1742399	VN-02-04-C	11/10/2017	VN-02-04-C-17_SED_15-20	FS	44.7						7.03	J
L1742399	VN-02-04-C	11/10/2017	VN-02-04-C-17_SED_20-24	FS	65.1						2.285	J
L1742399	VN-02-04-C	11/10/2017	VN-02-04-C-17_SED_24-29	FS	67.2						2.07	J
L1742400	VN-03-01-B	11/10/2017	VN-03-01-B-17_SED_00-01	FS	45.4						5.275	J
L1742400	VN-03-01-B	11/10/2017	VN-03-01-B-17_SED_01-03	FS	45.9						5.175	J
L1742400	VN-03-01-B	11/10/2017	VN-03-01-B-17_SED_03-05	FS	43.8						5.315	J

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PENOBSCOT RIVER, MAINE
SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399, L1742400, and L1742401

			Analysis Method		SM2540G		EPA 1631		EPA 1630		Lloyd-Kahn	
			Parameter		% Solids		Mercury		Methyl Mercury		TOC	
			Unit		PERCENT		NG/G		NG/G		PERCENT	
			Fraction		Total		Total		Total		Total	
SDG	**Location ID**	**Sample Date**	**Field Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
L1742400	VN-03-01-B	11/10/2017	VN-03-01-B-17_SED_05-07	FS	46.9						4.095	J
L1742400	VN-03-01-B	11/10/2017	VN-03-01-B-17_SED_07-10	FS	47.5						6.075	J
L1742400	VN-03-01-B	11/10/2017	VN-03-01-B-17_SED_10-15	FS	45.8						7	J
L1742400	VN-03-01-B	11/10/2017	VN-03-01-B-17_SED_15-21	FS	47.6						7.135	J
L1742400	VN-03-01-B	11/10/2017	VN-03-01-B-17_SED_21-27	FS	69.8						1.775	J
L1742401	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_00-01	FS	45.2						3.36	J
L1742401	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_01-03	FS	42.9						4.3	J
L1742401	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_03-05	FS	31						5.735	J
L1742401	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_05-07	FS	41.9						5.73	J
L1742401	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_07-10	FS	33.9						6.72	J
L1742401	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_10-15	FS	47.5						5.485	J
L1742401	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_15-17	FS	22.7						10.51	J
L1742401	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_17-20	FS	36.8						7.405	J
L1742401	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_20-22	FS	35.5						6.8	J
L1742401	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_22-23	FS	44.7						2.505	J
L1742401	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_23-25	FS	56.6						2.735	J
L1742401	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_25-27	FS	70.9						1.51	J
L1742401	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_27-30	FS	52						2.145	J
L1742401	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_30-36	FS	51.8						2.405	J
1711006	VN-04-01-E	10/26/2017	VN-04-01-E-17_SED_03-05	FS	45.2	J	889					
1711006	VN-04-01-E	10/26/2017	VN-04-01-E-17_SED_05-07	FS	48.1	J	907					
1711006	VN-04-01-E	10/26/2017	VN-04-01-E-17_SED_07-10	FS	52.6	J	1,370					

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PENOBSCOT RIVER, MAINE
SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399, L1742400, and L1742401

			Analysis Method	SM2540G		EPA 1631		EPA 1630		Lloyd-Kahn	
			Parameter	% Solids		Mercury		Methyl Mercury		TOC	
			Unit	PERCENT		NG/G		NG/G		PERCENT	
			Fraction	Total		Total		Total		Total	
SDG	**Location ID**	**Sample Date**	**Field Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
1711007	VN-04-02-C	10/20/2017	VN-04-02-C-17_SED_03-05	FS	60.8	J	27.1					
1711007	VN-04-02-C	10/20/2017	VN-04-02-C-17_SED_03-05_DUP	FD	60	J	29.9					
1711007	VN-04-02-C	10/20/2017	VN-04-02-C-17_SED_05-07	FS	59.3	J	22.3					
1711007	VN-04-02-C	10/20/2017	VN-04-02-C-17_SED_07-10	FS	60.7	J	16.2					
1711007	VN-04-02-C	10/27/2017	VN-04-02-C-17_SED_01-03	FS	65.9	J	112					
1711121	VN-03-01-D	10/26/2017	VN-03-01-D-17_SED_00-01	FS	35.6	J	715		20.3			
1711121	VN-03-01-D	10/26/2017	VN-03-01-D-17_SED_01-03	FS	45.6	J	756		11.8			
1711122	VN-02-04-B	10/25/2017	VN-02-04-B-17_SED_00-01	FS	24.1	J	1,050		55.8			
1711122	VN-02-04-B	10/25/2017	VN-02-04-B-17_SED_01-03	FS	40.7	J	759		10.9			
1711123	VN-02-03-A	10/25/2017	VN-02-03-A-17_SED_00-01	FS	24.5	J	1,100		19.2			
1711123	VN-02-03-A	10/25/2017	VN-02-03-A-17_SED_01-03	FS	36.9	J	916		14.5			
1711124	VN-02-01-A	10/25/2017	VN-02-01-A-17_SED_00-01	FS	18.3	J	1,500		25.2			
1711124	VN-02-01-A	10/25/2017	VN-02-01-A-17_SED_01-03	FS	39.8	J	772		12.2			
1711125	VE-10-01-E	10/26/2017	VE-10-01-E-17_SED_00-01	FS	30.1	J	943		28.7			
1711125	VE-10-01-E	10/26/2017	VE-10-01-E-17_SED_01-03	FS	39.6	J	796		22.5			
1711126	ON-18-02-E	10/26/2017	ON-18-02-E-17_SED_00-01	FS	21.7	J	1,430		4.9	J		
1711126	ON-18-02-E	10/26/2017	ON-18-02-E-17_SED_01-03	FS	23	J	1,350		13.1			
1711127	BU-08-01-E	10/25/2017	BU-08-01-E-17_SED_00-01	FS	31	J	792		16			
1711127	BU-08-01-E	10/25/2017	BU-08-01-E-17_SED_01-03	FS	45.7	J	509		13.4			
1711309	FF-08-01-B	10/4/2017	FF-08-01-B-17_SED_00-01	FS	13.1	J	512					
1711309	FF-08-01-B	10/4/2017	FF-08-01-B-17_SED_01-03	FS	13.8	J	524					
1711309	FF-08-01-B	10/4/2017	FF-08-01-B-17_SED_03-05	FS	21.7	J	1,150					

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PENOBSCOT RIVER, MAINE
SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399, L1742400, and L1742401

			Analysis Method	SM2540G		EPA 1631		EPA 1630		Lloyd-Kahn	
			Parameter	% Solids		Mercury		Methyl Mercury		TOC	
			Unit	PERCENT		NG/G		NG/G		PERCENT	
			Fraction	Total		Total		Total		Total	
SDG	**Location ID**	**Sample Date**	**Field Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
1711309	FF-08-01-B	10/4/2017	FF-08-01-B-17_SED_05-07	FS	21.9	J	588					
1711309	FF-08-01-B	10/4/2017	FF-08-01-B-17_SED_07-10	FS	18.1	J	381					
1711309	FF-08-01-B	10/4/2017	FF-08-01-B-17_SED_10-15	FS	28	J	319					
1711309	FF-08-01-B	10/4/2017	FF-08-01-B-17_SED_15-20	FS	20.6	J	274					
1711309	FF-08-01-B	10/4/2017	FF-08-01-B-17_SED_20-30	FS	28.8	J	376					
1711309	FF-08-01-B	10/4/2017	FF-08-01-B-17_SED_30-40	FS	28.5	J	170					
1711309	FF-08-01-B	10/4/2017	FF-08-01-B-17_SED_40-50	FS	40.1	J	93.8					
1711309	FF-08-01-B	10/4/2017	FF-08-01-B-17_SED_50-60	FS	73	J	17.2					
1711309	FF-08-01-B	10/4/2017	FF-08-01-B-17_SED_60-70	FS	81.4	J	8.1					
1711313	FF-04-01-D	10/4/2017	FF-04-01-D-17_SED_00-01	FS	13	J	993					
1711313	FF-04-01-D	10/4/2017	FF-04-01-D-17_SED_01-03	FS	15.7	J	1,160					
1711313	FF-04-01-D	10/4/2017	FF-04-01-D-17_SED_03-05	FS	15.9	J	1,030					
1711313	FF-04-01-D	10/4/2017	FF-04-01-D-17_SED_05-07	FS	16.5	J	1,150					
1711313	FF-04-01-D	10/4/2017	FF-04-01-D-17_SED_07-10	FS	25.1	J	1,010					
1711313	FF-04-01-D	10/4/2017	FF-04-01-D-17_SED_10-15	FS	28.8	J	1,090					
1711313	FF-04-01-D	10/4/2017	FF-04-01-D-17_SED_15-20	FS	30.5	J	806					
1711313	FF-04-01-D	10/4/2017	FF-04-01-D-17_SED_20-30	FS	24.5	J	1,030					
1711313	FF-04-01-D	10/4/2017	FF-04-01-D-17_SED_30-40	FS	47.9	J	411					
1711313	FF-04-01-D	10/4/2017	FF-04-01-D-17_SED_40-50	FS	68.3	J	311					
1711315	WP-06-02-C	10/5/2017	WP-06-02-C-17_SED_00-01	FS	33.6	J	983					
1711315	WP-06-02-C	10/5/2017	WP-06-02-C-17_SED_01-03	FS	36.4	J	838					
1711315	WP-06-02-C	10/5/2017	WP-06-02-C-17_SED_03-05	FS	32.6	J	884					

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PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION
PENOBSCOT RIVER, MAINE
SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399, L1742400, and L1742401

				Analysis Method	SM2540G		EPA 1631		EPA 1630		Lloyd-Kahn	
				Parameter	% Solids		Mercury		Methyl Mercury		TOC	
				Unit	PERCENT		NG/G		NG/G		PERCENT	
				Fraction	Total		Total		Total		Total	
SDG	**Location ID**	**Sample Date**	**Field Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
1711315	WP-06-02-C	10/5/2017	WP-06-02-C-17_SED_05-07	FS	32.5	J	904					
1711315	WP-06-02-C	10/5/2017	WP-06-02-C-17_SED_07-10	FS	30.5	J	907					
1711315	WP-06-02-C	10/5/2017	WP-06-02-C-17_SED_10-15	FS	32.4	J	1,160					
1711315	WP-06-02-C	10/5/2017	WP-06-02-C-17_SED_15-20	FS	30.9	J	3,770					
1711315	WP-06-02-C	10/5/2017	WP-06-02-C-17_SED_20-30	FS	56.4	J	242					
1711315	WP-06-02-C	10/5/2017	WP-06-02-C-17_SED_30-40	FS	50.1	J	39.8					
1711315	WP-06-02-C	10/5/2017	WP-06-02-C-17_SED_40-50	FS	45.2	J	26.2					
1711315	WP-06-02-C	10/5/2017	WP-06-02-C-17_SED_50-60	FS	64.6	J	13.5					
1711317	VN-01-01-E	11/6/2017	VN-01-01-E-17_SED_00-01	FS	44	J	687					
1711317	VN-01-01-E	11/6/2017	VN-01-01-E-17_SED_01-03	FS	42.4	J	979					
1711317	VN-01-01-E	11/6/2017	VN-01-01-E-17_SED_03-05	FS	44.6	J	863					
1711317	VN-01-01-E	11/6/2017	VN-01-01-E-17_SED_05-07	FS	44	J	2,570					
1711317	VN-01-01-E	11/6/2017	VN-01-01-E-17_SED_07-10	FS	46.3	J	1,620					
1711317	VN-01-01-E	11/6/2017	VN-01-01-E-17_SED_10-15	FS	43.5	J	407					
1711317	VN-01-01-E	11/6/2017	VN-01-01-E-17_SED_15-17	FS	42	J	336					
1711317	VN-01-01-E	11/6/2017	VN-01-01-E-17_SED_17-18	FS	49.2	J	222					
1711317	VN-01-01-E	11/6/2017	VN-01-01-E-17_SED_18-20	FS	53.3	J	164					
1711317	VN-01-01-E	11/6/2017	VN-01-01-E-17_SED_20-23	FS	45.2	J	91					
1711321	BU-02-01-D	10/5/2017	BU-02-01-D-17_SED_00-01	FS	32.3	J	1,090					
1711321	BU-02-01-D	10/5/2017	BU-02-01-D-17_SED_01-03	FS	43.2	J	418					
1711321	BU-02-01-D	10/5/2017	BU-02-01-D-17_SED_03-05	FS	34.5	J	440					
1711321	BU-02-01-D	10/5/2017	BU-02-01-D-17_SED_05-07	FS	35.5	J	399					

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PENOBSCOT RIVER, MAINE
SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399, L1742400, and L1742401

			Analysis Method	SM2540G		EPA 1631		EPA 1630		Lloyd-Kahn	
			Parameter	% Solids		Mercury		Methyl Mercury		TOC	
			Unit	PERCENT		NG/G		NG/G		PERCENT	
			Fraction	Total		Total		Total		Total	
SDG	**Location ID**	**Sample Date**	**Field Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
1711321	BU-02-01-D	10/5/2017	BU-02-01-D-17_SED_07-10	FS	47.4	J	328					
1711321	BU-02-01-D	10/5/2017	BU-02-01-D-17_SED_10-15	FS	43.4	J	239					
1711321	BU-02-01-D	10/5/2017	BU-02-01-D-17_SED_15-20	FS	37.4	J	135					
1711321	BU-02-01-D	10/5/2017	BU-02-01-D-17_SED_20-30	FS	52.6	J	69.4					
1711324	MM-04-01-C	10/5/2017	MM-04-01-C-17_SED_00-01	FS	33	J	721					
1711324	MM-04-01-C	10/5/2017	MM-04-01-C-17_SED_01-03	FS	35.7	J	780					
1711324	MM-04-01-C	10/5/2017	MM-04-01-C-17_SED_03-05	FS	37.2	J	717					
1711324	MM-04-01-C	10/5/2017	MM-04-01-C-17_SED_05-07	FS	40.7	J	792					
1711324	MM-04-01-C	10/5/2017	MM-04-01-C-17_SED_07-10	FS	43.4	J	1,090					
1711324	MM-04-01-C	10/5/2017	MM-04-01-C-17_SED_10-15	FS	36.8	J	1,350					
1711324	MM-04-01-C	10/5/2017	MM-04-01-C-17_SED_15-20	FS	38.7	J	2,130					
1711324	MM-04-01-C	10/5/2017	MM-04-01-C-17_SED_20-30	FS	55.5	J	43.3					
1711326	WP-02-01-B	10/5/2017	WP-02-01-B-17_SED_00-01	FS	36.4	J	652					
1711326	WP-02-01-B	10/5/2017	WP-02-01-B-17_SED_01-03	FS	38.5	J	663					
1711326	WP-02-01-B	10/5/2017	WP-02-01-B-17_SED_03-05	FS	41.4	J	476					
1711326	WP-02-01-B	10/5/2017	WP-02-01-B-17_SED_05-07	FS	39.1	J	401					
1711326	WP-02-01-B	10/5/2017	WP-02-01-B-17_SED_07-10	FS	41.2	J	351					
1711326	WP-02-01-B	10/5/2017	WP-02-01-B-17_SED_10-15	FS	53.5	J	139					
1711326	WP-02-01-B	10/5/2017	WP-02-01-B-17_SED_15-20	FS	60.5	J	40.1					
1711326	WP-02-01-B	10/5/2017	WP-02-01-B-17_SED_20-30	FS	62.6	J	32.3					
1711327	BU-08-01-A	10/5/2017	BU-08-01-A-17_SED_00-01	FS	43.5	J	673					
1711327	BU-08-01-A	10/5/2017	BU-08-01-A-17_SED_01-03	FS	45.5	J	603					

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DATA VALIDATION SUMMARY REPORT
2017 INTERTIDAL AND SUBTIDAL SEDIMENT - REPORT 2
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION
PENOBSCOT RIVER, MAINE
SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399, L1742400, and L1742401

				Analysis Method	SM2540G		EPA 1631		EPA 1630		Lloyd-Kahn	
				Parameter	% Solids		Mercury		Methyl Mercury		TOC	
				Unit	PERCENT		NG/G		NG/G		PERCENT	
				Fraction	Total		Total		Total		Total	
SDG	**Location ID**	**Sample Date**	**Field Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
1711327	BU-08-01-A	10/5/2017	BU-08-01-A-17_SED_03-05	FS	53.2	J	663					
1711327	BU-08-01-A	10/5/2017	BU-08-01-A-17_SED_05-07	FS	49.9	J	1,070					
1711327	BU-08-01-A	10/5/2017	BU-08-01-A-17_SED_07-10	FS	49.7	J	363					
1711327	BU-08-01-A	10/5/2017	BU-08-01-A-17_SED_10-15	FS	52.1	J	111					
1711327	BU-08-01-A	10/5/2017	BU-08-01-A-17_SED_15-20	FS	64.6	J	30.1					
1711587	FF-07-01-E	11/15/2017	FF-07-01-E-17_SED_00-01	FS	57.1	J	142					
1711587	FF-07-01-E	11/15/2017	FF-07-01-E-17_SED_01-03	FS	62.4	J	80.1					
1711587	FF-07-01-E	11/15/2017	FF-07-01-E-17_SED_03-05	FS	63	J	33.1					
1711587	FF-07-01-E	11/15/2017	FF-07-01-E-17_SED_03-05-Dup	FD	63.3	J	23.8					
1711587	FF-07-01-E	11/15/2017	FF-07-01-E-17_SED_05-07	FS	64.3	J	21.1					
1711587	FF-07-01-E	11/15/2017	FF-07-01-E-17_SED_07-10	FS	63.2	J	19.8					
1711587	FF-07-01-E	11/15/2017	FF-07-01-E-17_SED_10-15	FS	62.7	J	17.9					
1711587	FF-07-01-E	11/15/2017	FF-07-01-E-17_SED_10-15-Dup	FD	63.5	J	22.1					
1711587	FF-07-01-E	11/15/2017	FF-07-01-E-17_SED_15-20	FS	57.7	J	21.6					
1711587	FF-07-01-E	11/15/2017	FF-07-01-E-17_SED_20-25	FS	60	J	19.8					
1711587	FF-07-01-E	11/15/2017	FF-07-01-E-17_SED_25-27	FS	57.7	J	19					
1711587	FF-07-01-E	11/15/2017	FF-07-01-E-17_SED_27-30	FS	59.6	J	19.2					
1711587	FF-07-01-E	11/15/2017	FF-07-01-E-17_SED_27-30-Dup	FD	59.7	J	18.1					
1711587	FF-07-01-E	11/15/2017	FF-07-01-E-17_SED_30-40	FS	57.5	J	20.7					
1711587	FF-07-01-E	11/15/2017	FF-07-01-E-17_SED_40-45	FS	58.9	J	20.1					
1711587	FF-07-01-E	11/15/2017	FF-07-01-E-17_SED_45-49	FS	59.3	J	18.4					
1711588	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_00-01	FS	46.3	J	610					

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SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399, L1742400, and L1742401

				Analysis Method	SM2540G		EPA 1631		EPA 1630		Lloyd-Kahn	
				Parameter	% Solids		Mercury		Methyl Mercury		TOC	
				Unit	PERCENT		NG/G		NG/G		PERCENT	
				Fraction	Total		Total		Total		Total	
SDG	**Location ID**	**Sample Date**	**Field Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
1711588	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_00-01-Dup	FD	46	J	599					
1711588	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_01-03	FS	47.3	J	681					
1711588	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_03-05	FS	36	J	782					
1711588	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_05-07	FS	44.5	J	775					
1711588	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_07-10	FS	37.2	J	1,410					
1711588	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_10-15	FS	47.5	J	1,430					
1711588	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_15-17	FS	35	J	751					
1711588	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_17-20	FS	38.7	J	203					
1711588	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_20-22	FS	41.5	J	157					
1711588	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_22-23	FS	45.5	J	75.7					
1711588	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_23-25	FS	55.9	J	45.5					
1711588	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_23-25-Dup	FD	63.4	J	35.4					
1711588	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_25-27	FS	65.9	J	15.7					
1711588	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_27-30	FS	55.7	J	16					
1711588	VN-04-01-D	11/13/2017	VN-04-01-D-17_SED_30-36	FS	56.8	J	18.1					
1711589	VN-04-02-A	11/10/2017	VN-04-02-A-17_SED_00-01	FS	72	J	229					
1711589	VN-04-02-A	11/10/2017	VN-04-02-A-17_SED_00-01-Dup	FD	67.6	J	258					
1711589	VN-04-02-A	11/10/2017	VN-04-02-A-17_SED_01-03	FS	66.5	J	113					
1711589	VN-04-02-A	11/10/2017	VN-04-02-A-17_SED_01-03-Dup	FD	68.1	J	133					
1711589	VN-04-02-A	11/10/2017	VN-04-02-A-17_SED_03-05	FS	59.2	J	33.8					
1711589	VN-04-02-A	11/10/2017	VN-04-02-A-17_SED_03-05-Dup	FD	59	J	38.5					
1711589	VN-04-02-A	11/10/2017	VN-04-02-A-17_SED_05-07	FS	61	J	25					

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PENOBSCOT RIVER, MAINE
SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399, L1742400, and L1742401

				Analysis Method	SM2540G		EPA 1631		EPA 1630		Lloyd-Kahn	
				Parameter	% Solids		Mercury		Methyl Mercury		TOC	
				Unit	PERCENT		NG/G		NG/G		PERCENT	
				Fraction	Total		Total		Total		Total	
SDG	**Location ID**	**Sample Date**	**Field Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
1711589	VN-04-02-A	11/10/2017	VN-04-02-A-17_SED_05-07-Dup	FD	60.9	J	24.7					
1711589	VN-04-02-A	11/10/2017	VN-04-02-A-17_SED_07-10	FS	61.6	J	21					
1711589	VN-04-02-A	11/10/2017	VN-04-02-A-17_SED_07-10-Dup	FD	60.7	J	25.1					
1711589	VN-04-02-A	11/10/2017	VN-04-02-A-17_SED_10-15	FS	62.7	J	19.2					
1711589	VN-04-02-A	11/10/2017	VN-04-02-A-17_SED_10-15-Dup	FD	59.3	J	20.6					
1711589	VN-04-02-A	11/10/2017	VN-04-02-A-17_SED_15-20	FS	64.9	J	15.1					
1711589	VN-04-02-A	11/10/2017	VN-04-02-A-17_SED_20-25	FS	63.6	J	17.1					
1711589	VN-04-02-A	11/10/2017	VN-04-02-A-17_SED_25-31	FS	54.6	J	19.8					
1711590	BH-03-01-A	11/13/2017	BH-03-01-A-17_SED_00-01	FS	57.8	J	387					
1711590	BH-03-01-A	11/13/2017	BH-03-01-A-17_SED_01-03	FS	57.6	J	371					
1711590	BH-03-01-A	11/13/2017	BH-03-01-A-17_SED_03-05	FS	54	J	413					
1711590	BH-03-01-A	11/13/2017	BH-03-01-A-17_SED_05-07	FS	54.4	J	499					
1711590	BH-03-01-A	11/13/2017	BH-03-01-A-17_SED_07-10	FS	55	J	501					
1711590	BH-03-01-A	11/13/2017	BH-03-01-A-17_SED_10-13	FS	57	J	1,820					
1711590	BH-03-01-A	11/13/2017	BH-03-01-A-17_SED_13-17	FS	55.9	J	418					
1711590	BH-03-01-A	11/13/2017	BH-03-01-A-17_SED_13-17-Dup	FD	59.8	J	546					
1711590	BH-03-01-A	11/13/2017	BH-03-01-A-17_SED_17-20	FS	54.6	J	614					
1711590	BH-03-01-A	11/13/2017	BH-03-01-A-17_SED_20-25	FS	52.6	J	803					
1711590	BH-03-01-A	11/13/2017	BH-03-01-A-17_SED_25-30	FS	55.8	J	1,030					
1711590	BH-03-01-A	11/13/2017	BH-03-01-A-17_SED_30-35	FS	58.2	J	1,010					
1711590	BH-03-01-A	11/13/2017	BH-03-01-A-17_SED_35-39	FS	53.8	J	857					
1711590	BH-03-01-A	11/13/2017	BH-03-01-A-17_SED_39-43	FS	67.3	J	338					

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PENOBSCOT RIVER, MAINE
SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399, L1742400, and L1742401

				Analysis Method	SM2540G		EPA 1631		EPA 1630		Lloyd-Kahn	
				Parameter	% Solids		Mercury		Methyl Mercury		TOC	
				Unit	PERCENT		NG/G		NG/G		PERCENT	
				Fraction	Total		Total		Total		Total	
SDG	**Location ID**	**Sample Date**	**Field Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
1711591	VW-14-01-E	11/15/2017	VW-14-01-E-17_SED_00-01	FS	50.7	J	515					
1711591	VW-14-01-E	11/15/2017	VW-14-01-E-17_SED_01-03	FS	48.7	J	514					
1711591	VW-14-01-E	11/15/2017	VW-14-01-E-17_SED_03-05	FS	48.6	J	468					
1711591	VW-14-01-E	11/15/2017	VW-14-01-E-17_SED_03-05-Dup	FD	53.7	J	424					
1711591	VW-14-01-E	11/15/2017	VW-14-01-E-17_SED_05-07	FS	55.8	J	360					
1711591	VW-14-01-E	11/15/2017	VW-14-01-E-17_SED_07-10	FS	61.2	J	372					
1711591	VW-14-01-E	11/15/2017	VW-14-01-E-17_SED_10-12	FS	57.8	J	78.1					
1711591	VW-14-01-E	11/15/2017	VW-14-01-E-17_SED_12-14	FS	54.3	J	67.1					
1711591	VW-14-01-E	11/15/2017	VW-14-01-E-17_SED_14-16	FS	52.4	J	60					
1711591	VW-14-01-E	11/15/2017	VW-14-01-E-17_SED_16-18	FS	60.7	J	43.4					
1711591	VW-14-01-E	11/15/2017	VW-14-01-E-17_SED_18-20	FS	57.1	J	43.1					
1711591	VW-14-01-E	11/15/2017	VW-14-01-E-17_SED_18-20-Dup	FD	57.3	J	39.5					
1711592	ON-10-01-B	11/14/2017	ON-10-01-B-17_SED_00-01	FS	39.9	J	561					
1711592	ON-10-01-B	11/14/2017	ON-10-01-B-17_SED_01-03	FS	39.9	J	598					
1711592	ON-10-01-B	11/14/2017	ON-10-01-B-17_SED_03-05	FS	42.4	J	687					
1711592	ON-10-01-B	11/14/2017	ON-10-01-B-17_SED_05-07	FS	45.5	J	696					
1711592	ON-10-01-B	11/14/2017	ON-10-01-B-17_SED_07-09	FS	53.7	J	122					
1711592	ON-10-01-B	11/14/2017	ON-10-01-B-17_SED_09-11	FS	59.2	J	44.3					
1711592	ON-10-01-B	11/14/2017	ON-10-01-B-17_SED_11-15	FS	60.3	J	17.1					
1711592	ON-10-01-B	11/14/2017	ON-10-01-B-17_SED_15-20	FS	61.6	J	19.9					
1711592	ON-10-01-B	11/14/2017	ON-10-01-B-17_SED_20-25	FS	63.4	J	19.1					
1711592	ON-10-01-B	11/14/2017	ON-10-01-B-17_SED_25-28	FS	64.6	J	17.4					

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PENOBSCOT RIVER, MAINE
SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399, L1742400, and L1742401

					SM2540G		EPA 1631		EPA 1630		Lloyd-Kahn	
			Analysis Method									
			Parameter		% Solids		Mercury		Methyl Mercury		TOC	
			Unit		PERCENT		NG/G		NG/G		PERCENT	
			Fraction		Total		Total		Total		Total	
SDG	**Location ID**	**Sample Date**	**Field Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
1711592	ON-10-01-B	11/14/2017	ON-10-01-B-17_SED_28-30	FS	67.2	J	17					
1711592	ON-10-01-B	11/14/2017	ON-10-01-B-17_SED_30-37	FS	62.2	J	18.5					
1711593	VW-02-01-B	11/14/2017	VW-02-01-B-17_SED_00-01	FS	54.7	J	58.9					
1711593	VW-02-01-B	11/14/2017	VW-02-01-B-17_SED_01-03	FS	51.9	J	33.5					
1711593	VW-02-01-B	11/14/2017	VW-02-01-B-17_SED_03-05	FS	53.9	J	41.7					
1711593	VW-02-01-B	11/14/2017	VW-02-01-B-17_SED_05-07	FS	51.9	J	31.3					
1711593	VW-02-01-B	11/14/2017	VW-02-01-B-17_SED_07-09	FS	53.1	J	18.7					
1711593	VW-02-01-B	11/14/2017	VW-02-01-B-17_SED_09-11	FS	52.9	J	20.9					
1711593	VW-02-01-B	11/14/2017	VW-02-01-B-17_SED_11-13	FS	54.1	J	21.6					
1711593	VW-02-01-B	11/14/2017	VW-02-01-B-17_SED_13-15	FS	51.5	J	19.7					
1711593	VW-02-01-B	11/14/2017	VW-02-01-B-17_SED_15-20	FS	51.8	J	23.3					
1711593	VW-02-01-B	11/14/2017	VW-02-01-B-17_SED_20-25	FS	52.5	J	29					
1711593	VW-02-01-B	11/14/2017	VW-02-01-B-17_SED_25-30	FS	52.4	J	26.3					
1711603	VE-10-01-C	11/8/2017	VE-10-01-C-17_SED_00-01	FS	45.4	J	715					
1711603	VE-10-01-C	11/8/2017	VE-10-01-C-17_SED_01-02	FS	44.7	J	851					
1711603	VE-10-01-C	11/8/2017	VE-10-01-C-17_SED_02-03	FS	48.7	J	858					
1711603	VE-10-01-C	11/8/2017	VE-10-01-C-17_SED_03-05	FS	50.3	J	790					
1711603	VE-10-01-C	11/8/2017	VE-10-01-C-17_SED_05-07	FS	46.5	J	1,100					
1711603	VE-10-01-C	11/8/2017	VE-10-01-C-17_SED_07-10	FS	43.2	J	1,510					
1711603	VE-10-01-C	11/8/2017	VE-10-01-C-17_SED_10-13	FS	44.4	J	933					
1711603	VE-10-01-C	11/8/2017	VE-10-01-C-17_SED_13-16	FS	44.5	J	214					
1711603	VE-10-01-C	11/8/2017	VE-10-01-C-17_SED_16-20	FS	55.3	J	87.1					

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SDGs 1711006 1711007, 1711121, 1711122, 1711123, 1711124, 1711125, 1711126, 1711127, 1711309, 1711313, 1711315, 1711317, 1711321, 1711324, 1711326, 1711327, 1711587, 1711588, 1711589, 1711590, 1711591, 1711592, 1711593, 1711603, 1711604, L1742398, L1742399, L1742400, and L1742401

			Analysis Method	SM2540G		EPA 1631		EPA 1630		Lloyd-Kahn	
			Parameter	% Solids		Mercury		Methyl Mercury		TOC	
			Unit	PERCENT		NG/G		NG/G		PERCENT	
			Fraction	Total		Total		Total		Total	
SDG	**Location ID**	**Sample Date**	**Field Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
1711604	VE-09-01-B	11/10/2017	VE-09-01-B-17_SED_00-01	FS	35.4	J	631					
1711604	VE-09-01-B	11/10/2017	VE-09-01-B-17_SED_01-03	FS	37.3	J	753					
1711604	VE-09-01-B	11/10/2017	VE-09-01-B-17_SED_03-05	FS	41.1	J	792					
1711604	VE-09-01-B	11/10/2017	VE-09-01-B-17_SED_05-07	FS	39.4	J	1,110					
1711604	VE-09-01-B	11/10/2017	VE-09-01-B-17_SED_07-10	FS	42.1	J	1,030					
1711604	VE-09-01-B	11/10/2017	VE-09-01-B-17_SED_10-13	FS	42.2	J	1,850					
1711604	VE-09-01-B	11/10/2017	VE-09-01-B-17_SED_13-16	FS	42.4	J	421					
1711604	VE-09-01-B	11/10/2017	VE-09-01-B-17_SED_13-16-Dup	FD	41	J	460					
1711604	VE-09-01-B	11/10/2017	VE-09-01-B-17_SED_16-20	FS	55.1	J	114					
1711604	VE-09-01-B	11/10/2017	VE-09-01-B-17_SED_20-23	FS	56	J	45.4					

Notes:
FD = Field Duplicate
FS = Field Sample
NG/G = Nanogram per gram
SDG = Sample Delivery Group
TOC = Total Organic Carbon

Qualifiers:
J = Value is estimated

Prepared by: BCG 01/05/2018
Checked by: EP 01/18/2018

Data Validation Summary
2017 Intertidal and Subtidal Sediment Characterization – Report 3
Penobscot River Estuary Phase III – Engineering Evaluation
Penobscot River, Maine

1.0 INTRODUCTION

Sediment samples were collected in October and November 2017 from the Penobscot River located in Maine. Samples were analyzed by Eurofins Frontier Global Sciences, Inc. (Eurofins) located in Bothell, Washington and included in sample delivery groups (SDGs) 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048. Samples were also analyzed by Alpha Analytical located in Mansfield, Massachusetts and are reported in SDGs L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060. Samples were analyzed by one or more of the following: Clean Water Act (CWA, 2012) or Standard Methods for the Examination of Water and Wastewater (SM, 2014):

Laboratory	Parameter	Analytical Method	Validation Level
Eurofins	Mercury, methyl	CWA 1630 (KOH Extraction)	10% Stage III/ 90% Stage IIB
Eurofins	Mercury, total	CWA 1631B (Hot aqua regia digestion)	10% Stage III/ 90% Stage IIB
Alpha Analytical	TOC	Lloyd Kahn	10% Stage III/ 90% Stage IIB
Eurofins/ Alpha	% Solids	SM2540	10% Stage III/ 90% Stage IIB

A Stage IIb data validation was completed on all SDGs**.** A Stage III data validation was performed on ten percent of samples. Data validation was completed using National Functional Guidelines for Inorganic Superfund Data Review (USEPA, 2014) and EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures (USEPA, 2013) where applicable. Data quality evaluations were completed using quality control (QC) limits specified in the draft Penobscot River Estuary Phase III Engineering Evaluation Quality Assurance Project Plan (QAPP) [Amec Foster Wheeler, 2016]. The project laboratory reported results using a combination of two detection limits including the reporting limit (RL) and the method detection limit (MDL). Results for compounds that are not detected in samples are reported as U qualified results at the RL. Positive detections between the MDL and RL are qualified as estimated (J) by the laboratory.

Data validation review and qualification actions are discussed in the following subsections. It should be noted that only instances that result in an impact to data quality are presented in this report. There may be QC elements outside of QAPP and/or method control limits not presented in this report since there is no impact to data quality. Samples included in this data evaluation are presented in Table 1.

Data qualifications were completed if necessary in accordance with the guidelines or the professional judgment of the project chemist. The following qualifiers as applied during data validation or reported by the laboratory are included in the final data set:

J = The reported concentration is considered an estimated value

Validation reason codes were applied to results associated with QC measurements outside project QC goals. The validation qualification actions and associated validation reason codes applied to sample

results are summarized on Table 2. The following data validation reason codes were applied to one or more sample results:

HT = Holding time exceeded
LD = Lab Duplicate limit exceeded
FD = Field Duplicate limit exceeded
LR = Lab Replicate RSD limit exceeded
MS-L = MS and/or MSD recovery low
MS-H = MS and/or MSD recovery high
MS-RPD = MS/MSD RPD limit exceeded
TEMP = Sample temperature upon receipt exceeded range

A complete summary of final sample results is provided in Table 3.

Data were evaluated based on the following parameters:

* Data Completeness and Chain of Custody
  Holding Times and Preservation
* Blanks
* Initial Calibration
* Continuing Calibration
* Laboratory Control Sample (LCS)
  Matrix Spike/Matrix Spike Duplicates (MS/MSD)
  Laboratory Duplicates
  Field Duplicates
* Detection Limits
* Sample Result Verification/Electronic Evaluation Verification (EDD)
* Ongoing Precision Recovery

* = indicates that criteria were met and/or no impact to data quality for this parameter

With the exception of the following items discussed below, results were determined to be usable as reported by the laboratory.

2.0 Methyl Mercury – 1630

Results were determined to be usable as reported by the laboratory.

3.0 Mercury – 1631

Matrix Spike

SDG 1711258 – Sample BH-03-01-E-17_SED_00-01 was used for MS/MSD analysis. The MS/MSD relative percent difference (RPD) for mercury (49.6%) is above the acceptance criteria of 35%. The mercury result for sample BH-03-01-E-17_SED_00-01 was qualified estimated (J) due to the imprecision.

SDG 1711601 – Sample VN-02-03-E-17_SED_00-01 was used for MS/MSD analysis. The MSD recovery for mercury (132%) was above the upper QC limit of 125%. Sample result for VN-02-03-E-17_SED_00-01 was qualified as estimated (J) due to the potential high bias.

SDG 1711775 – Sample FF-08-02-J-17_SED_16-19 was used for MS/MSD analysis. For sample FF-08-02-J-17_SED_16-19 the MSD recovery for mercury (67.2%) was below the lower limit of 71% and the MS/MSD RPD (25%) was above the QC limit of 24%. The mercury result for FF-08-02-J-17_SED_16-19 was qualified as estimated (J) due to the potential low bias and imprecision.

SDG 1712042 – Sample BU-10-02-C-17_SED_54-55_R2 was used for MS/MSD analysis. The MSD recovery for mercury (67.2%) was below the lower limit of 71%. The mercury results for samples BU-10-02-C-17_SED_54-55_R1, BU-10-02-C-17_SED_54-55_R2 and BU-10-02-C-17_SED_54-55_R3 were qualified as estimated (J) due to the potential low bias.

Field Duplicate

SDG 1712043 – Sample VN-05-01-D-17_SED_15-17-DUP submitted as a field duplicate of sample VN-05-01-D-17_SED_15-17. The RPD (53%) was above the QC limit of 50. The mercury result for sample VN-05-01-D-17_SED_15-17-DUP was qualified as estimated (J) due to the imprecision.

4.0 Total Organic Carbon – Lloyd Kahn

Holding Times and Preservation

SDG L1742392 – Total organic carbon for samples BH-03-01-A-17_SED_20-25, BH-03-01-A-17_SED_25-30, BH-03-01-A-17_SED_35-39, and BH-03-01-A-17_SED_39-43 in SDG L1742392 were analyzed beyond technical hold time. The results for total organic carbon for samples BH-03-01-A-17_SED_20-25, BH-03-01-A-17_SED_25-30, BH-03-01-A-17_SED_35-39 and BH-03-01-A-17_SED_39-43 were qualified as estimated (J).

SDGs L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, and L1743403 – Total organic carbon for each sample in these SDGs were analyzed beyond technical hold time. The results for total organic carbon were qualified as estimated (J).

SDG L1742403 – Total organic carbon for samples VN-08-01-B-17_SED_03-05, VN-08-01-B-17_SED_05-07, VN-08-01-B-17_SED_07-10, VN-08-01-B-17_SED_10-13, VN-08-01-B-17_SED_13-18, and VN-08-01-B-17_SED_18-21 in SDG L1742403 were analyzed beyond technical hold time. The results for total organic carbon in the listed samples were qualified as estimated (J).

SDG L1744058 – Samples were received above acceptable temperature at 7.3°C. J-qualify total organic carbon in all samples.

Field Duplicate

SDG L1742392, L1742393, L1742395, L1742402, L1742405, L1743404, L1743405, L1743406 - Samples submitted to the laboratory as field duplicates were logged incorrectly by the lab and processed as laboratory duplicates. These sample results are not available in the project database since laboratory duplicates are not included in the electronic data deliverable. The samples were evaluated as laboratory duplicates and assessed based on the more stringent laboratory duplicate criteria and qualified as necessary.

Laboratory Duplicate/Replicate

SDG L1741132 – Sample burn replicate RPDs for samples VN-01-01-E-17_SED_17-18 (31%) and VN-01-01-E-17_SED_18-20 (40%) exceeded the QC limit of 30%. All TOC results for samples VN-01-01-E-17_SED_17-18 and VN-01-01-E-17_SED_18-20 were qualified as estimated (J) due to imprecision.

SDG L1741137 – Sample burn replicate RPD for sample FF-04-01-D-17_SED_07-10 (54%) exceeded the QC limit of 30%. All TOC results for sample FF-04-01-D-17_SED_07-10 were qualified as estimated (J) due to imprecision.

SDG L1741138 – Sample burn replicate RPD for sample FF-08-01-B-17_SED_15-20 (55%) exceeded the QC limit of 30%. All TOC results for sample FF-08-01-B-17_SED_15-20 were qualified as estimated (J) due to imprecision.

SDG L1742402 – Sample VN-04-02-A-17_SED_10-15 was used for laboratory duplicate analysis. Sample VN-04-02-A-17_SED_10-15 RPD for TOC Rep 2 (27%) exceeded the QC limit of 25%. Based on professional judgment, the TOC Rep 2 and average TOC results were qualified estimated (J).

SDG L1743403 – Sample burn replicate RPD for sample FF-08-02-J-17_SED_22-25 (35%) exceeded the QC limit of 30%. All TOC results for sample FF-08-02-J-17_SED_22-25 were qualified as estimated (J) due to imprecision.

SDG L1743406 – Sample VE-05-01-E-17_SED_46-48 was used for laboratory duplicate analysis. Sample VE-05-01-E-17_SED_46-48 RPD for TOC Rep 1 (99%) and Rep 2 (89%) exceeded the QC limit of 25%. Based on professional judgment, all TOC results were qualified estimated (J).

SDG L1743406 – Sample burn replicate RPD for samples VE-05-01-E-17_SED_38-39_R3 (93%), VE-05-01-E-17_SED_44-45 (61%), VE-05-01-E-17_SED_45-46_R3 (69%), VE-05-01-E-17_SED_48-49_R2 (58%), VE-05-01-E-17_SED_60-61_R2 (57%), VE-05-01-E-17_SED_61-62_R1 (33%) and VE-05-01-E-17_SED_61-62_R2 (41%) exceeded the QC limit of 30%. All TOC results for samples VE-05-01-E-17_SED_38-39_R3, VE-05-01-E-17_SED_44-45, VE-05-01-E-17_SED_45-46_R3, VE-05-01-E-17_SED_48-49_R2, VE-05-01-E-17_SED_60-61_R2, VE-05-01-E-17_SED_61-62_R1 and VE-05-01-E-17_SED_61-62_R2 were qualified as estimated (J) due to imprecision.

SDG 1743406 – Samples VE-05-01-E-17_SED_00-01, VE-05-01-E-17_SED_01-03, VE-05-01-E-17_SED_03-05, VE-05-01-E-17_SED_05-07, VE-05-01-E-17_SED_07-10, VE-05-01-E-17_SED_38-39, VE-05-01-E-17_SED_39-40, VE-05-01-E-17_SED_40-42, VE-05-01-E-17_SED_43-44, VE-05-01-E-17_SED_45-46, VE-05-01-E-17_SED_48-49, VE-05-01-E-17_SED_52-54, VE-05-01-E-17_SED_54-55, VE-05-01-E-17_SED_57-58, VE-05-01-E-17_SED_59-60, VE-05-01-E-17_SED_60-61, VE-05-01-E-17_SED_61-62, and VE-05-01-E-17_SED_62-64 were analyzed in triplicate at the laboratory.

SDG 1743406 – The % RSD for the triple replicate analyses of the following samples exceed the QC limit of 30%:

- VE-05-01-E-17_SED_38-39 Rep 2 (62%),
- VE-05-01-E-17_SED_39-40 Rep 2 (37%),
- VE-05-01-E-17_SED_40-42 Rep 1 (33%),
- VE-05-01-E-17_SED_45-46 Rep 1 and Rep 2 (33% and 45%),
- VE-05-01-E-17_SED_48-49 Rep 1 and Rep 2 (56% and 40%),
- VE-05-01-E-17_SED_54-55 Rep 2 (38%),

- VE-05-01-E-17_SED_57-58 Rep 2 (38%), and
- VE-05-01-E-17_SED_61-62 Rep 1 and Rep 2 (54% and 32%)

The above samples and the average TOC results were qualified estimated (J) due to the imprecision.

SDG L1744060 – Sample burn replicate RPD for sample BU-10-02-C-17_SED_13-14 (36%) exceeded the QC limit of 30%. All TOC results for sample BU-10-02-C-17_SED_13-14 were qualified as estimated (J) due to imprecision.

SDG L1744060 – Sample BU-10-02-C-17_SED_12-13 was used for laboratory duplicate analysis. Sample BU-10-02-C-17_SED_12-13 RPD for TOC Rep 2 (29%) exceeded the QC limit of 25%. Based on professional judgment, the TOC Rep 2 and average TOC results were qualified estimated (J).

SDG L1744060 – The % RSD for the triple replicate analyses of sample BU-10-02-C-17_SED_17-20 Rep 1 (38%) exceeded the QC limit of 30%. Rep 1 and the average TOC results were qualified estimated (J) due to the imprecision.

Matrix Spike

SDG L1741132 – Sample VN-01-01-E-17_SED_05-07 was used for MS analysis. The MS recovery for Rep 1 (174%) was above the upper QC limit of 125%. The MS recovery does not apply because the sample concentration is > 4X the spike amount added. Based on professional judgement the Rep 1 TOC result for sample VN-01-01-E-17_SED_05-07 does not need to be qualified. The MS recovery for Rep 2 (69%) was below the lower QC limit of 75%. The TOC Rep 2 and the average TOC results for sample VN-01-01-E-17_SED_05-07 were qualified as estimated (J) due to the potential low bias.

SDG L1741135 – Sample BU-02-01-D-17_SED_00-01 was used for MS analysis. The MS recovery for sample BU-02-01-D17_SED_00-01 Rep 1 (132%) was above the upper QC limit of 125% and the recovery of Rep 2 (52%) was below the lower QC limit of 75%. The MS recovery of Rep 2 does not apply because the sample concentration is >4X the spike amount added. TOC Rep 1 and the average TOC results for sample BU-02-01-D17_SED_00-01 were qualified as estimated (J) due to the potential high bias.

SDG L1741136 – Sample BU-08-01-A-17_SED_00-01 was used for MS analysis. The MS recovery for sample BU-08-01-A17_SED_00-01 Rep 1 (189%) was above the upper QC limit of 125%. TOC Rep 1 and the average TOC results for sample BU-08-01-A17_SED_00-01 were qualified as estimated (J) due to the potential high bias.

SDG L1741141 – Sample WP-06-02-C-17_SED_00-01 was used for MS analysis. The MS recovery for sample WP-06-02-C17_SED_00-01 Rep 2 (58%) was below the lower QC limit of 75%. The MS recovery of Rep 2 does not apply because the sample concentration is >4X the spike amount added. Based on professional judgement the TOC results for sample WP-06-02-C17_SED_00-01 do not need to be qualified.

SDG L1742396 – Sample VE-10-01-C-17_SED_07-10 was used for MS analysis. The MS recoveries for sample VE-10-01-C-17_SED_07-10 Rep 1 (140%) and Rep 2 (187%) were above the upper QC limit of 125%. The MS recoveries do not apply because the sample concentration is >4X the spike amount added. Based on professional judgement the TOC results for sample VE-10-01-C-17_SED_07-10 do not need to be qualified.

SDG L1742405 – Samples VW-14-01-E-17_SED_03-05 and VW-14-01-E-17_SED_18-20 were used for MS analysis. The MS recovery for sample VW-14-01-E-17_SED_03-05 Rep 2 (215%) was above the upper QC limit of 125%. TOC Rep 2 and the average TOC results for sample VW-14-01-E-17_SED_03-05 were qualified as estimated (J) due to the potential high bias. The MS recovery for sample VW-14-01-E-17_SED_18-20 Rep 2 (63%) was below the lower QC limit of 125%. TOC Rep 2 and the average TOC results for sample VW-14-01-E-17_SED_18-20 were qualified as estimated (J) due to the potential low bias.

SDG L1743403 – Sample FF-08-02-J-17_SED_00-01 was used for MS analysis. The MS recovery for sample FF-08-02-J-17_SED_00-01 Rep 1 (34%) was below the lower QC limit of 75%. The MS recovery of Rep 1 does not apply because the sample concentration is >4X the spike amount added. Based on professional judgement the TOC results for sample FF-08-02-J-17_SED_00-01 do not need to be qualified.

SDG L1743404 – Sample ON-18-01-C-17_SED_13-16 was used for MS analysis. The MS recoveries for sample ON-18-01-C-17_SED_13-16 Rep 1 (0%) and Rep 2 (0%) were below the lower QC limit of 75%. The MS recoveries do not apply because the sample concentration is >4X the spike amount added. Based on professional judgement the TOC results for sample ON-18-01-C-17_SED_13-16 do not need to be qualified.

SDG L1743405 – Sample ON-18-02-C-17_SED_17-20 was used for MS analysis. The MS recoveries for sample ON-18-01-C-17_SED_17-20 Rep 1 (150%) and Rep 2 (131%) were above the upper QC limit of 125%. The MS recoveries do not apply because the sample concentration is >4X the spike amount added. Based on professional judgement the TOC results for sample ON-18-02-C-17_SED_17-20 do not need to be qualified.

SDG L1743406 – The MS recoveries for sample VE-05-01-E-17_SED_20-25 Rep 1 (162%) was above the upper QC limit of 125% and Rep 2 (0%) was below the lower QC limit of 75%. The MS recoveries do not apply because the sample concentration is >4X the spike amount added. Based on professional judgement the TOC results for sample VE-05-01-E-17_SED_20-25 do not need to be qualified.

SDG L1743406 – The MS recoveries for sample VE-05-01-E-17_SED_ 44-45 Rep 1 (142%) was above the upper QC limit of 125% and Rep 2 (73%) was below the lower QC limit of 75%. TOC Rep 1 and the average TOC results for sample VE-05-01-E-17_SED_ 44-45 were qualified as estimated (J) due to the potential high bias and TOC Rep 2 and the average TOC results for sample VE-05-01-E-17_SED_ 44-45 were qualified as estimated (J) due to the potential low bias.

SDG L1743406 – The MS recovery for sample VE-05-01-E-17_SED_46-48 Rep 2 (50%) was below the lower QC limit of 75%. TOC Rep 2 and the average TOC results for sample VE-05-01-E-17_SED_46-48 were qualified as estimated (J) due to the potential low bias.

SDG L1743406 – The MS recoveries for sample VE-05-01-E-17_SED_59-60_R1 Rep 1 (385%) and Rep 2 (392%) and sample VE-05-01-E-17_SED_59-60_R2 Rep 1 (317%) and Rep 2 (159%) were above the upper QC limit of 125%. The MS recoveries do not apply because the sample concentrations are >4X the spike amount added. Based on professional judgement the TOC results for samples VE-05-01-E-17_SED_59-60_R1 and VE-05-01-E-17_SED_59-60_R2 do not need to be qualified.

SDG L1744059 – Sample VW-02-01-B-17_SED_70-75 was used for MS analysis. The MS recovery for sample VW-02-01-B-17_SED_70-75 Rep 1 (219%) was above the upper QC limit of 125%. TOC Rep 1

and the average TOC results for sample VW-02-01-B-17_SED_70-75 were qualified as estimated (J) due to the potential high bias.

SDG L1744060 – Sample BU-10-02-C-17_SED_12-13 was used for MS analysis. The MS recoveries for sample BU-10-02-C-17_SED_12-13 Rep 1 (140%) and Rep 2 (325%) were above the upper QC limit of 125%. All TOC results for sample BU-10-02-C-17_SED_12-13 were qualified as estimated (J) due to the potential high bias.

SDG L1744060 – Sample BU-10-02-C-17_SED_38-39 was used for MS analysis. The MS recoveries for sample BU-10-02-C-17_SED_38-39 Rep 1 (190%) and Rep 2 (282%) were above the upper QC limit of 125%. The MS recoveries do not apply because the sample concentrations are >4X the spike amount added. Based on professional judgement the TOC results for sample BU-10-02-C-17_SED_38-39 do not need to be qualified.

SDG L1744060 – Sample BU-10-02-C-17_SED_54-55_R1 was used for MS analysis. The MS recovery for sample BU-10-02-C-17_SED_54-55_R1 (431%) was above the upper QC limit of 125% and Rep 2 (32%) was below the lower QC limit of 75%. The MS recoveries do not apply because the sample concentration is >4X the spike amount added. Based on professional judgement the TOC results for sample BU-10-02-C-17_SED_54-55_R1 do not need to be qualified.

5.0 Percent Solids – 2540G

Holding Times and Preservation

SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043, and 1712048 – Percent total solids for each sample in these SDGs were analyzed beyond technical hold time. The results for total solids were qualified as estimated (J).

Laboratory Duplicate

SDG L1741137 – Sample FF-04-01-D-17_SED_00-01 was selected for duplicate analysis. The RPD (15%) was above the QC limit of 10%. The percent solids result was qualified as estimated for sample FF-04-01-D-17_SED_00-01 due to the imprecision.

References:

Amec Foster Wheeler, 2016. "Draft Penobscot River Estuary Phase III – Engineering Study Quality Assurance Project Plan", Penobscot River, Maine, July 2016.

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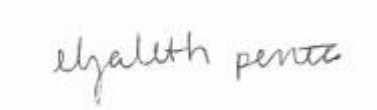
Data Validator: Elizabeth Penta January 9, 2018



Senior Reviewer: Denise King January 10, 2018

TABLE 1
DATA VALIDATION SUMMARY
2017 INTERTIDAL AND SUBTIDAL SEDIMENT- REPORT 3
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
1711118	SED	VW-14-01-F	VW-14-01-F-17_SED_00-01	10/27/17	FS	1	1	1	
1711118	SED	VW-14-01-F	VW-14-01-F-17_SED_01-03	10/27/17	FS	1	1	1	
1711120	SED	VN-08-01-E	VN-08-01-E-17_SED_00-01	10/26/17	FS	1	1	1	
1711120	SED	VN-08-01-E	VN-08-01-E-17_SED_01-03	10/26/17	FS	1	1	1	
1711128	SED	WP-06-02-F	WP-06-02-F-17_SED_00-01	10/27/17	FS	1	1	1	
1711128	SED	WP-06-02-F	WP-06-02-F-17_SED_01-03	10/27/17	FS	1	1	1	
1711258	SED	BH-03-01-E	BH-03-01-E-17_SED_00-01	10/25/17	FS	1	1	1	
1711258	SED	BH-03-01-E	BH-03-01-E-17_SED_01-03	10/25/17	FS	1	1	1	
1711258	SED	BU-02-01-E	BU-02-01-E-17_SED_00-01	10/25/17	FS	1	1	1	
1711258	SED	BU-02-01-E	BU-02-01-E-17_SED_01-03	10/25/17	FS	1	1	1	
1711258	SED	FF-08-02-G	FF-08-02-G-17_SED_00-01	10/26/17	FS	1	1	1	
1711258	SED	FF-08-02-G	FF-08-02-G-17_SED_01-03	10/26/17	FS	1	1	1	
1711258	SED	MM-04-01-F	MM-04-01-F-17_SED_00-01	10/26/17	FS	1	1	1	
1711258	SED	MM-04-01-F	MM-04-01-F-17_SED_01-03	10/26/17	FS	1	1	1	
1711258	SED	ON-10-01-C	ON-10-01-C-17_SED_00-01	10/27/17	FS	1	1	1	
1711258	SED	ON-10-01-C	ON-10-01-C-17_SED_01-03	10/27/17	FS	1	1	1	
1711258	SED	ON-18-01-F	ON-18-01-F-17_SED_00-01	10/26/17	FS	1	1	1	
1711258	SED	ON-18-01-F	ON-18-01-F-17_SED_01-03	10/26/17	FS	1	1	1	
1711258	SED	VE-09-01-E	VE-09-01-E-17_SED_00-01	10/26/17	FS	1	1	1	
1711258	SED	VE-09-01-E	VE-09-01-E-17_SED_01-03	10/26/17	FS	1	1	1	
1711258	SED	VN-01-01-B	VN-01-01-B-17_SED_00-01	10/26/17	FS	1	1	1	
1711258	SED	VN-01-01-B	VN-01-01-B-17_SED_01-03	10/26/17	FS	1	1	1	
1711258	SED	VN-04-01-E	VN-04-01-E-17_SED_00-01	10/26/17	FS	1	1	1	
1711258	SED	VN-04-01-E	VN-04-01-E-17_SED_01-03	10/26/17	FS	1	1	1	

TABLE 1
DATA VALIDATION SUMMARY
2017 INTERTIDAL AND SUBTIDAL SEDIMENT- REPORT 3
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
1711258	SED	VN-04-02-C	VN-04-02-C-17_SED_00-01	10/27/17	FS	1	1	1	
1711258	SED	VN-04-02-C	VN-04-02-C-17_SED_01-03	10/27/17	FS	1	1	1	
1711258	SED	VW-02-01-E	VW-02-01-E-17_SED_00-01	10/27/17	FS	1	1	1	
1711258	SED	VW-02-01-E	VW-02-01-E-17_SED_01-03	10/27/17	FS	1	1	1	
1711258	SED	WP-02-01-D	WP-02-01-D-17_SED_00-01	10/26/17	FS	1	1	1	
1711258	SED	WP-02-01-D	WP-02-01-D-17_SED_01-03	10/26/17	FS	1	1	1	
1711594	SED	VN-08-01-B	VN-08-01-B-17_SED_00-01	11/10/17	FS	1	1		
1711594	SED	VN-08-01-B	VN-08-01-B-17_SED_01-03	11/10/17	FS	1	1		
1711594	SED	VN-08-01-B	VN-08-01-B-17_SED_03-05	11/10/17	FS	1	1		
1711594	SED	VN-08-01-B	VN-08-01-B-17_SED_05-07	11/10/17	FS	1	1		
1711594	SED	VN-08-01-B	VN-08-01-B-17_SED_07-10	11/10/17	FS	1	1		
1711594	SED	VN-08-01-B	VN-08-01-B-17_SED_10-13	11/10/17	FS	1	1		
1711594	SED	VN-08-01-B	VN-08-01-B-17_SED_13-18	11/10/17	FS	1	1		
1711594	SED	VN-08-01-B	VN-08-01-B-17_SED_18-21	11/10/17	FS	1	1		
1711595	SED	VN-03-01-B	VN-03-01-B-17_SED_00-01	11/10/17	FS	1	1		
1711595	SED	VN-03-01-B	VN-03-01-B-17_SED_01-03	11/10/17	FS	1	1		
1711595	SED	VN-03-01-B	VN-03-01-B-17_SED_03-05	11/10/17	FS	1	1		
1711595	SED	VN-03-01-B	VN-03-01-B-17_SED_05-07	11/10/17	FS	1	1		
1711595	SED	VN-03-01-B	VN-03-01-B-17_SED_07-10	11/10/17	FS	1	1		
1711595	SED	VN-03-01-B	VN-03-01-B-17_SED_10-15	11/10/17	FS	1	1		
1711595	SED	VN-03-01-B	VN-03-01-B-17_SED_15-21	11/10/17	FS	1	1		
1711595	SED	VN-03-01-B	VN-03-01-B-17_SED_21-27	11/10/17	FS	1	1		
1711597	SED	VN-02-04-C	VN-02-04-C-17_SED_00-01	11/10/17	FS	1	1		
1711597	SED	VN-02-04-C	VN-02-04-C-17_SED_01-03	11/10/17	FS	1	1		

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2017 INTERTIDAL AND SUBTIDAL SEDIMENT- REPORT 3

PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
1711597	SED	VN-02-04-C	VN-02-04-C-17_SED_03-05	11/10/17	FS	1	1		
1711597	SED	VN-02-04-C	VN-02-04-C-17_SED_05-07	11/10/17	FS	1	1		
1711597	SED	VN-02-04-C	VN-02-04-C-17_SED_07-10	11/10/17	FS	1	1		
1711597	SED	VN-02-04-C	VN-02-04-C-17_SED_10-15	11/10/17	FS	1	1		
1711597	SED	VN-02-04-C	VN-02-04-C-17_SED_15-20	11/10/17	FS	1	1		
1711597	SED	VN-02-04-C	VN-02-04-C-17_SED_20-24	11/10/17	FS	1	1		
1711597	SED	VN-02-04-C	VN-02-04-C-17_SED_20-24-Dup	11/10/17	FD	1	1		
1711597	SED	VN-02-04-C	VN-02-04-C-17_SED_24-29	11/10/17	FS	1	1		
1711601	SED	VN-02-03-E	VN-02-03-E-17_SED_00-01	11/09/17	FS	1	1		
1711601	SED	VN-02-03-E	VN-02-03-E-17_SED_01-03	11/09/17	FS	1	1		
1711601	SED	VN-02-03-E	VN-02-03-E-17_SED_03-05	11/09/17	FS	1	1		
1711601	SED	VN-02-03-E	VN-02-03-E-17_SED_05-07	11/09/17	FS	1	1		
1711601	SED	VN-02-03-E	VN-02-03-E-17_SED_07-10	11/09/17	FS	1	1		
1711601	SED	VN-02-03-E	VN-02-03-E-17_SED_10-15	11/09/17	FS	1	1		
1711601	SED	VN-02-03-E	VN-02-03-E-17_SED_15-19	11/09/17	FS	1	1		
1711601	SED	VN-02-03-E	VN-02-03-E-17_SED_19-22	11/09/17	FS	1	1		
1711601	SED	VN-02-03-E	VN-02-03-E-17_SED_22-25	11/09/17	FS	1	1		
1711601	SED	VN-02-03-E	VN-02-03-E-17_SED_25-27	11/09/17	FS	1	1		
1711602	SED	VN-02-01-D	VN-02-01-D-17_SED_00-01	11/10/17	FS	1	1		
1711602	SED	VN-02-01-D	VN-02-01-D-17_SED_01-03	11/10/17	FS	1	1		
1711602	SED	VN-02-01-D	VN-02-01-D-17_SED_03-05	11/10/17	FS	1	1		
1711602	SED	VN-02-01-D	VN-02-01-D-17_SED_05-07	11/10/17	FS	1	1		
1711602	SED	VN-02-01-D	VN-02-01-D-17_SED_07-10	11/10/17	FS	1	1		
1711602	SED	VN-02-01-D	VN-02-01-D-17_SED_10-15	11/10/17	FS	1	1		

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DATA VALIDATION SUMMARY

2017 INTERTIDAL AND SUBTIDAL SEDIMENT- REPORT 3

PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
1711602	SED	VN-02-01-D	VN-02-01-D-17_SED_15-17	11/10/17	FS	1	1		
1711602	SED	VN-02-01-D	VN-02-01-D-17_SED_17-22	11/10/17	FS	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_00-01	11/20/17	FS	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_01-03	11/20/17	FS	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_03-05	11/20/17	FS	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_05-07	11/20/17	FS	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_07-10_R1	11/20/17	FS	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_07-10_R2	11/20/17	FS	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_07-10_R3	11/20/17	FS	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_10-13	11/20/17	FS	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_13-16_R1	11/20/17	FS	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_13-16_R2	11/20/17	FS	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_13-16_R3	11/20/17	FS	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_16-19	11/20/17	FS	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_16-19-D	11/20/17	FD	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_19-22_R1	11/20/17	FS	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_19-22_R2	11/20/17	FS	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_19-22_R3	11/20/17	FS	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_22-25	11/20/17	FS	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_25-28_R1	11/20/17	FS	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_25-28_R2	11/20/17	FS	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_25-28_R3	11/20/17	FS	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_28-31	11/20/17	FS	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_31-34	11/20/17	FS	1	1		

TABLE 1
DATA VALIDATION SUMMARY
2017 INTERTIDAL AND SUBTIDAL SEDIMENT- REPORT 3
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_34-37	11/20/17	FS	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_37-40	11/20/17	FS	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_40-45	11/20/17	FS	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_45-50	11/20/17	FS	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_50-55	11/20/17	FS	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_50-55-D	11/20/17	FD	1	1		
1711775	SED	FF-08-02-J	FF-08-02-J-17_SED_55-62	11/20/17	FS	1	1		
1711776	SED	ON-18-02-C	ON-18-02-C-17_SED_00-01	11/27/17	FS	1	1		
1711776	SED	ON-18-02-C	ON-18-02-C-17_SED_01-03	11/27/17	FS	1	1		
1711776	SED	ON-18-02-C	ON-18-02-C-17_SED_03-05	11/27/17	FS	1	1		
1711776	SED	ON-18-02-C	ON-18-02-C-17_SED_05-07	11/27/17	FS	1	1		
1711776	SED	ON-18-02-C	ON-18-02-C-17_SED_07-10	11/27/17	FS	1	1		
1711776	SED	ON-18-02-C	ON-18-02-C-17_SED_10-15	11/27/17	FS	1	1		
1711776	SED	ON-18-02-C	ON-18-02-C-17_SED_15-17	11/27/17	FS	1	1		
1711776	SED	ON-18-02-C	ON-18-02-C-17_SED_17-20	11/27/17	FS	1	1		
1711776	SED	ON-18-02-C	ON-18-02-C-17_SED_17-20-D	11/27/17	FD	1	1		
1711776	SED	ON-18-02-C	ON-18-02-C-17_SED_20-22	11/27/17	FS	1	1		
1711799	SED	ON-18-01-C	ON-18-01-C-17_SED_00-01	11/16/17	FS	1	1		
1711799	SED	ON-18-01-C	ON-18-01-C-17_SED_01-03	11/16/17	FS	1	1		
1711799	SED	ON-18-01-C	ON-18-01-C-17_SED_03-05	11/16/17	FS	1	1		
1711799	SED	ON-18-01-C	ON-18-01-C-17_SED_05-07	11/16/17	FS	1	1		
1711799	SED	ON-18-01-C	ON-18-01-C-17_SED_07-10	11/16/17	FS	1	1		
1711799	SED	ON-18-01-C	ON-18-01-C-17_SED_10-13	11/16/17	FS	1	1		
1711799	SED	ON-18-01-C	ON-18-01-C-17_SED_13-16	11/16/17	FS	1	1		

TABLE 1
DATA VALIDATION SUMMARY
2017 INTERTIDAL AND SUBTIDAL SEDIMENT- REPORT 3
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
1711799	SED	ON-18-01-C	ON-18-01-C-17_SED_13-16-D	11/16/17	FD	1	1		
1711799	SED	ON-18-01-C	ON-18-01-C-17_SED_16-18	11/16/17	FS	1	1		
1711799	SED	ON-18-01-C	ON-18-01-C-17_SED_18-20	11/16/17	FS	1	1		
1711799	SED	ON-18-01-C	ON-18-01-C-17_SED_20-25	11/16/17	FS	1	1		
1711799	SED	ON-18-01-C	ON-18-01-C-17_SED_25-30	11/16/17	FS	1	1		
1711799	SED	ON-18-01-C	ON-18-01-C-17_SED_30-35	11/16/17	FS	1	1		
1711799	SED	ON-18-01-C	ON-18-01-C-17_SED_35-40	11/16/17	FS	1	1		
1711799	SED	ON-18-01-C	ON-18-01-C-17_SED_40-45	11/16/17	FS	1	1		
1711799	SED	ON-18-01-C	ON-18-01-C-17_SED_45-50	11/16/17	FS	1	1		
1711799	SED	ON-18-01-C	ON-18-01-C-17_SED_50-55	11/16/17	FS	1	1		
1711799	SED	ON-18-01-C	ON-18-01-C-17_SED_55-60	11/16/17	FS	1	1		
1711799	SED	ON-18-01-C	ON-18-01-C-17_SED_55-60-D	11/16/17	FD	1	1		
1711799	SED	ON-18-01-C	ON-18-01-C-17_SED_60-63	11/16/17	FS	1	1		
1711799	SED	ON-18-01-C	ON-18-01-C-17_SED_63-67	11/16/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_00-01_R1	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_00-01_R2	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_00-01_R3	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_01-03_R1	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_01-03_R2	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_01-03_R3	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_03-05_R1	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_03-05_R2	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_03-05_R3	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_05-07_R1	11/17/17	FS	1	1		

TABLE 1

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PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_05-07_R2	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_05-07_R3	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_07-10_R1	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_07-10_R2	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_07-10_R3	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_10-15	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_15-20	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_20-25	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_20-25-D	11/17/17	FD	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_25-30	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_30-35	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_35-38	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_38-39_R1	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_38-39_R2	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_38-39_R3	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_39-40_R1	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_39-40_R2	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_39-40_R3	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_40-42_R1	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_40-42_R2	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_40-42_R3	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_42-43	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_43-44_R1	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_43-44_R2	11/17/17	FS	1	1		

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DATA VALIDATION SUMMARY
2017 INTERTIDAL AND SUBTIDAL SEDIMENT- REPORT 3
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SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_43-44_R3	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_44-45	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_45-46_R1	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_45-46_R2	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_45-46_R3	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_46-48	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_46-48-D	11/17/17	FD	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_48-49_R1	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_48-49_R2	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_48-49_R3	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_49-52	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_52-54_R1	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_52-54_R2	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_52-54_R3	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_54-55_R1	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_54-55_R2	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_54-55_R3	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_55-57	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_57-58_R1	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_57-58_R2	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_57-58_R3	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_58-59	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_59-60-D_R1	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_59-60-D_R2	11/17/17	FS	1	1		

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DATA VALIDATION SUMMARY
2017 INTERTIDAL AND SUBTIDAL SEDIMENT- REPORT 3
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_59-60-D_R3	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_59-60_R1	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_59-60_R2	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_59-60_R3	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_60-61_R1	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_60-61_R2	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_60-61_R3	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_61-62_R1	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_61-62_R2	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_61-62_R3	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_62-64_R1	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_62-64_R2	11/17/17	FS	1	1		
1711800	SED	VE-05-01-E	VE-05-01-E-17_SED_62-64_R3	11/17/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_00-01_R1	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_00-01_R2	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_00-01_R3	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_01-03_R1	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_01-03_R2	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_01-03_R3	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_03-04	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_04-06_R1	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_04-06_R2	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_04-06_R3	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_06-09	11/29/17	FS	1	1		

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SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_09-11	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_11-12_R1	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_11-12_R2	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_11-12_R3	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_12-13	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_12-13-D	11/29/17	FD	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_13-14	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_14-17	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_17-20_R1	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_17-20_R2	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_17-20_R3	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_20-21	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_21-25_R1	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_21-25_R2	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_21-25_R3	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_25-31_R1	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_25-31_R2	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_25-31_R3	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_31-35	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_35-38_R1	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_35-38_R2	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_35-38_R3	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_38-39	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_38-39-D	11/29/17	FD	1	1		

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SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_39-42	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_42-44_R1	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_42-44_R2	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_42-44_R3	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_44-49_R1	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_44-49_R2	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_44-49_R3	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_49-52	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_52-54	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_54-55_R1	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_54-55_R2	11/29/17	FS	1	1		
1712042	SED	BU-10-02-C	BU-10-02-C-17_SED_54-55_R3	11/29/17	FS	1	1		
1712043	SED	VN-05-01-D	VN-05-01-D-17_SED_00-01	11/28/17	FS	1	1		
1712043	SED	VN-05-01-D	VN-05-01-D-17_SED_01-02	11/28/17	FS	1	1		
1712043	SED	VN-05-01-D	VN-05-01-D-17_SED_02-03	11/28/17	FS	1	1		
1712043	SED	VN-05-01-D	VN-05-01-D-17_SED_03-05	11/28/17	FS	1	1		
1712043	SED	VN-05-01-D	VN-05-01-D-17_SED_05-07	11/28/17	FS	1	1		
1712043	SED	VN-05-01-D	VN-05-01-D-17_SED_07-10	11/28/17	FS	1	1		
1712043	SED	VN-05-01-D	VN-05-01-D-17_SED_10-11	11/28/17	FS	1	1		
1712043	SED	VN-05-01-D	VN-05-01-D-17_SED_11-15	11/28/17	FS	1	1		
1712043	SED	VN-05-01-D	VN-05-01-D-17_SED_15-17	11/28/17	FS	1	1		
1712043	SED	VN-05-01-D	VN-05-01-D-17_SED_15-17-D	11/28/17	FD	1	1		
1712043	SED	VN-05-01-D	VN-05-01-D-17_SED_17-20	11/28/17	FS	1	1		
1712043	SED	VN-05-01-D	VN-05-01-D-17_SED_20-25	11/28/17	FS	1	1		

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SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
1712043	SED	VN-05-01-D	VN-05-01-D-17_SED_25-30	11/28/17	FS	1	1		
1712043	SED	VN-05-01-D	VN-05-01-D-17_SED_30-35	11/28/17	FS	1	1		
1712043	SED	VN-05-01-D	VN-05-01-D-17_SED_35-40	11/28/17	FS	1	1		
1712043	SED	VN-05-01-D	VN-05-01-D-17_SED_40-45	11/28/17	FS	1	1		
1712043	SED	VN-05-01-D	VN-05-01-D-17_SED_45-50	11/28/17	FS	1	1		
1712043	SED	VN-05-01-D	VN-05-01-D-17_SED_50-52	11/28/17	FS	1	1		
1712043	SED	VN-05-01-D	VN-05-01-D-17_SED_52-60	11/28/17	FS	1	1		
1712043	SED	VN-05-01-D	VN-05-01-D-17_SED_60-65	11/28/17	FS	1	1		
1712043	SED	VN-05-01-D	VN-05-01-D-17_SED_60-65-D	11/28/17	FD	1	1		
1712043	SED	VN-05-01-D	VN-05-01-D-17_SED_65-70	11/28/17	FS	1	1		
1712043	SED	VN-05-01-D	VN-05-01-D-17_SED_70-75	11/28/17	FS	1	1		
1712048	SED	VW-02-01-B	VW-02-01-B-17_SED_30-35	11/27/17	FS	1	1		
1712048	SED	VW-02-01-B	VW-02-01-B-17_SED_35-40	11/27/17	FS	1	1		
1712048	SED	VW-02-01-B	VW-02-01-B-17_SED_40-45	11/27/17	FS	1	1		
1712048	SED	VW-02-01-B	VW-02-01-B-17_SED_45-50	11/27/17	FS	1	1		
1712048	SED	VW-02-01-B	VW-02-01-B-17_SED_50-55	11/27/17	FS	1	1		
1712048	SED	VW-02-01-B	VW-02-01-B-17_SED_55-60	11/27/17	FS	1	1		
1712048	SED	VW-02-01-B	VW-02-01-B-17_SED_60-65	11/27/17	FS	1	1		
1712048	SED	VW-02-01-B	VW-02-01-B-17_SED_65-70	11/27/17	FS	1	1		
1712048	SED	VW-02-01-B	VW-02-01-B-17_SED_70-75	11/27/17	FS	1	1		
1712048	SED	VW-02-01-B	VW-02-01-B-17_SED_70-75-D	11/27/17	FD	1	1		
1712048	SED	VW-02-01-B	VW-02-01-B-17_SED_75-80	11/27/17	FS	1	1		
L1741132	SED	VN-01-01-E	VN-01-01-E-17_SED_00-01	11/06/17	FS	1			1
L1741132	SED	VN-01-01-E	VN-01-01-E-17_SED_01-03	11/06/17	FS	1			1

TABLE 1

DATA VALIDATION SUMMARY

2017 INTERTIDAL AND SUBTIDAL SEDIMENT- REPORT 3

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SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
L1741132	SED	VN-01-01-E	VN-01-01-E-17_SED_03-05	11/06/17	FS	1			1
L1741132	SED	VN-01-01-E	VN-01-01-E-17_SED_05-07	11/06/17	FS	1			1
L1741132	SED	VN-01-01-E	VN-01-01-E-17_SED_07-10	11/06/17	FS	1			1
L1741132	SED	VN-01-01-E	VN-01-01-E-17_SED_10-15	11/06/17	FS	1			1
L1741132	SED	VN-01-01-E	VN-01-01-E-17_SED_15-17	11/06/17	FS	1			1
L1741132	SED	VN-01-01-E	VN-01-01-E-17_SED_17-18	11/06/17	FS	1			1
L1741132	SED	VN-01-01-E	VN-01-01-E-17_SED_18-20	11/06/17	FS	1			1
L1741132	SED	VN-01-01-E	VN-01-01-E-17_SED_20-23	11/06/17	FS	1			1
L1741135	SED	BU-02-01-D	BU-02-01-D-17_SED_00-01	10/05/17	FS	1			1
L1741135	SED	BU-02-01-D	BU-02-01-D-17_SED_01-03	10/05/17	FS	1			1
L1741135	SED	BU-02-01-D	BU-02-01-D-17_SED_03-05	10/05/17	FS	1			1
L1741135	SED	BU-02-01-D	BU-02-01-D-17_SED_05-07	10/05/17	FS	1			1
L1741135	SED	BU-02-01-D	BU-02-01-D-17_SED_07-10	10/05/17	FS	1			1
L1741135	SED	BU-02-01-D	BU-02-01-D-17_SED_10-15	10/05/17	FS	1			1
L1741135	SED	BU-02-01-D	BU-02-01-D-17_SED_15-20	10/05/17	FS	1			1
L1741135	SED	BU-02-01-D	BU-02-01-D-17_SED_20-30	10/05/17	FS	1			1
L1741136	SED	BU-08-01-A	BU-08-01-A-17_SED_00-01	10/05/17	FS	1			1
L1741136	SED	BU-08-01-A	BU-08-01-A-17_SED_01-03	10/05/17	FS	1			1
L1741136	SED	BU-08-01-A	BU-08-01-A-17_SED_03-05	10/05/17	FS	1			1
L1741136	SED	BU-08-01-A	BU-08-01-A-17_SED_05-07	10/05/17	FS	1			1
L1741136	SED	BU-08-01-A	BU-08-01-A-17_SED_07-10	10/05/17	FS	1			1
L1741136	SED	BU-08-01-A	BU-08-01-A-17_SED_10-15	10/05/17	FS	1			1
L1741136	SED	BU-08-01-A	BU-08-01-A-17_SED_15-20	10/05/17	FS	1			1
L1741137	SED	FF-04-01-D	FF-04-01-D-17_SED_00-01	10/04/17	FS	1			1

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SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
L1741137	SED	FF-04-01-D	FF-04-01-D-17_SED_01-03	10/04/17	FS	1			1
L1741137	SED	FF-04-01-D	FF-04-01-D-17_SED_03-05	10/04/17	FS	1			1
L1741137	SED	FF-04-01-D	FF-04-01-D-17_SED_05-07	10/04/17	FS	1			1
L1741137	SED	FF-04-01-D	FF-04-01-D-17_SED_07-10	10/04/17	FS	1			1
L1741137	SED	FF-04-01-D	FF-04-01-D-17_SED_10-15	10/04/17	FS	1			1
L1741137	SED	FF-04-01-D	FF-04-01-D-17_SED_15-20	10/04/17	FS	1			1
L1741137	SED	FF-04-01-D	FF-04-01-D-17_SED_20-30	10/04/17	FS	1			1
L1741137	SED	FF-04-01-D	FF-04-01-D-17_SED_30-40	10/04/17	FS	1			1
L1741137	SED	FF-04-01-D	FF-04-01-D-17_SED_40-50	10/04/17	FS	1			1
L1741138	SED	FF-08-01-B	FF-08-01-B-17_SED_00-01	10/04/17	FS	1			1
L1741138	SED	FF-08-01-B	FF-08-01-B-17_SED_01-03	10/04/17	FS	1			1
L1741138	SED	FF-08-01-B	FF-08-01-B-17_SED_03-05	10/04/17	FS	1			1
L1741138	SED	FF-08-01-B	FF-08-01-B-17_SED_05-07	10/04/17	FS	1			1
L1741138	SED	FF-08-01-B	FF-08-01-B-17_SED_07-10	10/04/17	FS	1			1
L1741138	SED	FF-08-01-B	FF-08-01-B-17_SED_10-15	10/04/17	FS	1			1
L1741138	SED	FF-08-01-B	FF-08-01-B-17_SED_15-20	10/04/17	FS	1			1
L1741138	SED	FF-08-01-B	FF-08-01-B-17_SED_20-30	10/04/17	FS	1			1
L1741138	SED	FF-08-01-B	FF-08-01-B-17_SED_30-40	10/04/17	FS	1			1
L1741138	SED	FF-08-01-B	FF-08-01-B-17_SED_40-50	10/04/17	FS	1			1
L1741138	SED	FF-08-01-B	FF-08-01-B-17_SED_50-60	10/04/17	FS	1			1
L1741138	SED	FF-08-01-B	FF-08-01-B-17_SED_60-70	10/04/17	FS	1			1
L1741139	SED	MM-04-01-C	MM-04-01-C-17_SED_00-01	10/05/17	FS	1			1
L1741139	SED	MM-04-01-C	MM-04-01-C-17_SED_01-03	10/05/17	FS	1			1
L1741139	SED	MM-04-01-C	MM-04-01-C-17_SED_03-05	10/05/17	FS	1			1

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SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
L1741139	SED	MM-04-01-C	MM-04-01-C-17_SED_05-07	10/05/17	FS	1			1
L1741139	SED	MM-04-01-C	MM-04-01-C-17_SED_07-10	10/05/17	FS	1			1
L1741139	SED	MM-04-01-C	MM-04-01-C-17_SED_10-15	10/05/17	FS	1			1
L1741139	SED	MM-04-01-C	MM-04-01-C-17_SED_15-20	10/05/17	FS	1			1
L1741139	SED	MM-04-01-C	MM-04-01-C-17_SED_20-30	10/05/17	FS	1			1
L1741140	SED	WP-02-01-B	WP-02-01-B-17_SED_00-01	10/05/17	FS	1			1
L1741140	SED	WP-02-01-B	WP-02-01-B-17_SED_01-03	10/05/17	FS	1			1
L1741140	SED	WP-02-01-B	WP-02-01-B-17_SED_03-05	10/05/17	FS	1			1
L1741140	SED	WP-02-01-B	WP-02-01-B-17_SED_05-07	10/05/17	FS	1			1
L1741140	SED	WP-02-01-B	WP-02-01-B-17_SED_07-10	10/05/17	FS	1			1
L1741140	SED	WP-02-01-B	WP-02-01-B-17_SED_10-15	10/05/17	FS	1			1
L1741140	SED	WP-02-01-B	WP-02-01-B-17_SED_15-20	10/05/17	FS	1			1
L1741140	SED	WP-02-01-B	WP-02-01-B-17_SED_20-30	10/05/17	FS	1			1
L1741141	SED	WP-06-02-C	WP-06-02-C-17_SED_00-01	10/05/17	FS	1			1
L1741141	SED	WP-06-02-C	WP-06-02-C-17_SED_01-03	10/05/17	FS	1			1
L1741141	SED	WP-06-02-C	WP-06-02-C-17_SED_03-05	10/05/17	FS	1			1
L1741141	SED	WP-06-02-C	WP-06-02-C-17_SED_05-07	10/05/17	FS	1			1
L1741141	SED	WP-06-02-C	WP-06-02-C-17_SED_07-10	10/05/17	FS	1			1
L1741141	SED	WP-06-02-C	WP-06-02-C-17_SED_10-15	10/05/17	FS	1			1
L1741141	SED	WP-06-02-C	WP-06-02-C-17_SED_15-20	10/05/17	FS	1			1
L1741141	SED	WP-06-02-C	WP-06-02-C-17_SED_20-30	10/05/17	FS	1			1
L1741141	SED	WP-06-02-C	WP-06-02-C-17_SED_30-40	10/05/17	FS	1			1
L1741141	SED	WP-06-02-C	WP-06-02-C-17_SED_40-50	10/05/17	FS	1			1
L1741141	SED	WP-06-02-C	WP-06-02-C-17_SED_50-60	10/05/17	FS	1			1

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SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
L1742392	SED	BH-03-01-A	BH-03-01-A-17_SED_00-01	11/13/17	FS	1			1
L1742392	SED	BH-03-01-A	BH-03-01-A-17_SED_01-03	11/13/17	FS	1			1
L1742392	SED	BH-03-01-A	BH-03-01-A-17_SED_03-05	11/13/17	FS	1			1
L1742392	SED	BH-03-01-A	BH-03-01-A-17_SED_05-07	11/13/17	FS	1			1
L1742392	SED	BH-03-01-A	BH-03-01-A-17_SED_07-10	11/13/17	FS	1			1
L1742392	SED	BH-03-01-A	BH-03-01-A-17_SED_10-13	11/13/17	FS	1			1
L1742392	SED	BH-03-01-A	BH-03-01-A-17_SED_13-17	11/13/17	FS	1			1
L1742392	SED	BH-03-01-A	BH-03-01-A-17_SED_17-20	11/13/17	FS	1			1
L1742392	SED	BH-03-01-A	BH-03-01-A-17_SED_20-25	11/13/17	FS	1			1
L1742392	SED	BH-03-01-A	BH-03-01-A-17_SED_25-30	11/13/17	FS	1			1
L1742392	SED	BH-03-01-A	BH-03-01-A-17_SED_30-35	11/13/17	FS	1			1
L1742392	SED	BH-03-01-A	BH-03-01-A-17_SED_35-39	11/13/17	FS	1			1
L1742392	SED	BH-03-01-A	BH-03-01-A-17_SED_39-43	11/13/17	FS	1			1
L1742393	SED	FF-07-01-E	FF-07-01-E-17_SED_00-01	11/15/17	FS	1			1
L1742393	SED	FF-07-01-E	FF-07-01-E-17_SED_01-03	11/15/17	FS	1			1
L1742393	SED	FF-07-01-E	FF-07-01-E-17_SED_03-05	11/15/17	FS	1			1
L1742393	SED	FF-07-01-E	FF-07-01-E-17_SED_05-07	11/15/17	FS	1			1
L1742393	SED	FF-07-01-E	FF-07-01-E-17_SED_07-10	11/15/17	FS	1			1
L1742393	SED	FF-07-01-E	FF-07-01-E-17_SED_10-15	11/15/17	FS	1			1
L1742393	SED	FF-07-01-E	FF-07-01-E-17_SED_15-20	11/15/17	FS	1			1
L1742393	SED	FF-07-01-E	FF-07-01-E-17_SED_20-25	11/15/17	FS	1			1
L1742393	SED	FF-07-01-E	FF-07-01-E-17_SED_25-27	11/15/17	FS	1			1
L1742393	SED	FF-07-01-E	FF-07-01-E-17_SED_27-30	11/15/17	FS	1			1
L1742393	SED	FF-07-01-E	FF-07-01-E-17_SED_30-40	11/15/17	FS	1			1

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SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
L1742393	SED	FF-07-01-E	FF-07-01-E-17_SED_40-45	11/15/17	FS	1			1
L1742393	SED	FF-07-01-E	FF-07-01-E-17_SED_45-49	11/15/17	FS	1			1
L1742394	SED	ON-10-01-B	ON-10-01-B-17_SED_00-01	11/14/17	FS	1			1
L1742394	SED	ON-10-01-B	ON-10-01-B-17_SED_01-03	11/14/17	FS	1			1
L1742394	SED	ON-10-01-B	ON-10-01-B-17_SED_03-05	11/14/17	FS	1			1
L1742394	SED	ON-10-01-B	ON-10-01-B-17_SED_05-07	11/14/17	FS	1			1
L1742394	SED	ON-10-01-B	ON-10-01-B-17_SED_07-09	11/14/17	FS	1			1
L1742394	SED	ON-10-01-B	ON-10-01-B-17_SED_09-11	11/14/17	FS	1			1
L1742394	SED	ON-10-01-B	ON-10-01-B-17_SED_11-15	11/14/17	FS	1			1
L1742394	SED	ON-10-01-B	ON-10-01-B-17_SED_15-20	11/14/17	FS	1			1
L1742394	SED	ON-10-01-B	ON-10-01-B-17_SED_20-25	11/14/17	FS	1			1
L1742394	SED	ON-10-01-B	ON-10-01-B-17_SED_25-28	11/14/17	FS	1			1
L1742394	SED	ON-10-01-B	ON-10-01-B-17_SED_28-30	11/14/17	FS	1			1
L1742394	SED	ON-10-01-B	ON-10-01-B-17_SED_30-37	11/14/17	FS	1			1
L1742395	SED	VE-09-01-B	VE-09-01-B-17_SED_00-01	11/10/17	FS	1			1
L1742395	SED	VE-09-01-B	VE-09-01-B-17_SED_01-03	11/10/17	FS	1			1
L1742395	SED	VE-09-01-B	VE-09-01-B-17_SED_03-05	11/10/17	FS	1			1
L1742395	SED	VE-09-01-B	VE-09-01-B-17_SED_05-07	11/10/17	FS	1			1
L1742395	SED	VE-09-01-B	VE-09-01-B-17_SED_07-10	11/10/17	FS	1			1
L1742395	SED	VE-09-01-B	VE-09-01-B-17_SED_10-13	11/10/17	FS	1			1
L1742395	SED	VE-09-01-B	VE-09-01-B-17_SED_13-16	11/10/17	FS	1			1
L1742395	SED	VE-09-01-B	VE-09-01-B-17_SED_16-20	11/10/17	FS	1			1
L1742395	SED	VE-09-01-B	VE-09-01-B-17_SED_20-23	11/10/17	FS	1			1
L1742396	SED	VE-10-01-C	VE-10-01-C-17_SED_00-01	11/08/17	FS	1			1

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SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
L1742396	SED	VE-10-01-C	VE-10-01-C-17_SED_01-02	11/08/17	FS	1			1
L1742396	SED	VE-10-01-C	VE-10-01-C-17_SED_02-03	11/08/17	FS	1			1
L1742396	SED	VE-10-01-C	VE-10-01-C-17_SED_03-05	11/08/17	FS	1			1
L1742396	SED	VE-10-01-C	VE-10-01-C-17_SED_05-07	11/08/17	FS	1			1
L1742396	SED	VE-10-01-C	VE-10-01-C-17_SED_07-10	11/08/17	FS	1			1
L1742396	SED	VE-10-01-C	VE-10-01-C-17_SED_10-13	11/08/17	FS	1			1
L1742396	SED	VE-10-01-C	VE-10-01-C-17_SED_13-16	11/08/17	FS	1			1
L1742396	SED	VE-10-01-C	VE-10-01-C-17_SED_16-20	11/08/17	FS	1			1
L1742397	SED	VN-02-01-D	VN-02-01-D-17_SED_00-01	11/10/17	FS	1			1
L1742397	SED	VN-02-01-D	VN-02-01-D-17_SED_01-03	11/10/17	FS	1			1
L1742397	SED	VN-02-01-D	VN-02-01-D-17_SED_03-05	11/10/17	FS	1			1
L1742397	SED	VN-02-01-D	VN-02-01-D-17_SED_05-07	11/10/17	FS	1			1
L1742397	SED	VN-02-01-D	VN-02-01-D-17_SED_07-10	11/10/17	FS	1			1
L1742397	SED	VN-02-01-D	VN-02-01-D-17_SED_10-15	11/10/17	FS	1			1
L1742397	SED	VN-02-01-D	VN-02-01-D-17_SED_15-17	11/10/17	FS	1			1
L1742397	SED	VN-02-01-D	VN-02-01-D-17_SED_17-22	11/10/17	FS	1			1
L1742402	SED	VN-04-02-A	VN-04-02-A-17_SED_00-01	11/10/17	FS	1			1
L1742402	SED	VN-04-02-A	VN-04-02-A-17_SED_01-03	11/10/17	FS	1			1
L1742402	SED	VN-04-02-A	VN-04-02-A-17_SED_03-05	11/10/17	FS	1			1
L1742402	SED	VN-04-02-A	VN-04-02-A-17_SED_05-07	11/10/17	FS	1			1
L1742402	SED	VN-04-02-A	VN-04-02-A-17_SED_07-10	11/10/17	FS	1			1
L1742402	SED	VN-04-02-A	VN-04-02-A-17_SED_10-15	11/10/17	FS	1			1
L1742402	SED	VN-04-02-A	VN-04-02-A-17_SED_15-20	11/10/17	FS	1			1
L1742402	SED	VN-04-02-A	VN-04-02-A-17_SED_20-25	11/10/17	FS	1			1

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SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
L1742402	SED	VN-04-02-A	VN-04-02-A-17_SED_25-31	11/10/17	FS	1			1
L1742403	SED	VN-08-01-B	VN-08-01-B-17_SED_00-01	11/10/17	FS	1			1
L1742403	SED	VN-08-01-B	VN-08-01-B-17_SED_01-03	11/10/17	FS	1			1
L1742403	SED	VN-08-01-B	VN-08-01-B-17_SED_03-05	11/10/17	FS	1			1
L1742403	SED	VN-08-01-B	VN-08-01-B-17_SED_05-07	11/10/17	FS	1			1
L1742403	SED	VN-08-01-B	VN-08-01-B-17_SED_07-10	11/10/17	FS	1			1
L1742403	SED	VN-08-01-B	VN-08-01-B-17_SED_10-13	11/10/17	FS	1			1
L1742403	SED	VN-08-01-B	VN-08-01-B-17_SED_13-18	11/10/17	FS	1			1
L1742403	SED	VN-08-01-B	VN-08-01-B-17_SED_18-21	11/10/17	FS	1			1
L1742404	SED	VW-02-01-B	VW-02-01-B-17_SED_00-01	11/14/17	FS	1			1
L1742404	SED	VW-02-01-B	VW-02-01-B-17_SED_01-03	11/14/17	FS	1			1
L1742404	SED	VW-02-01-B	VW-02-01-B-17_SED_03-05	11/14/17	FS	1			1
L1742404	SED	VW-02-01-B	VW-02-01-B-17_SED_05-07	11/14/17	FS	1			1
L1742404	SED	VW-02-01-B	VW-02-01-B-17_SED_07-09	11/14/17	FS	1			1
L1742404	SED	VW-02-01-B	VW-02-01-B-17_SED_09-11	11/14/17	FS	1			1
L1742404	SED	VW-02-01-B	VW-02-01-B-17_SED_11-13	11/14/17	FS	1			1
L1742404	SED	VW-02-01-B	VW-02-01-B-17_SED_13-15	11/14/17	FS	1			1
L1742404	SED	VW-02-01-B	VW-02-01-B-17_SED_15-20	11/14/17	FS	1			1
L1742404	SED	VW-02-01-B	VW-02-01-B-17_SED_20-25	11/14/17	FS	1			1
L1742404	SED	VW-02-01-B	VW-02-01-B-17_SED_25-30	11/14/17	FS	1			1
L1742405	SED	VW-14-01-E	VW-14-01-E-17_SED_00-01	11/15/17	FS	1			1
L1742405	SED	VW-14-01-E	VW-14-01-E-17_SED_01-03	11/15/17	FS	1			1
L1742405	SED	VW-14-01-E	VW-14-01-E-17_SED_03-05	11/15/17	FS	1			1
L1742405	SED	VW-14-01-E	VW-14-01-E-17_SED_05-07	11/15/17	FS	1			1

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PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
L1742405	SED	VW-14-01-E	VW-14-01-E-17_SED_07-10	11/15/17	FS	1			1
L1742405	SED	VW-14-01-E	VW-14-01-E-17_SED_10-12	11/15/17	FS	1			1
L1742405	SED	VW-14-01-E	VW-14-01-E-17_SED_12-14	11/15/17	FS	1			1
L1742405	SED	VW-14-01-E	VW-14-01-E-17_SED_14-16	11/15/17	FS	1			1
L1742405	SED	VW-14-01-E	VW-14-01-E-17_SED_16-18	11/15/17	FS	1			1
L1742405	SED	VW-14-01-E	VW-14-01-E-17_SED_18-20	11/15/17	FS	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_00-01	11/20/17	FS	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_01-03	11/20/17	FS	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_03-05	11/20/17	FS	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_05-07	11/20/17	FS	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_07-10_R1	11/20/17	FS	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_07-10_R2	11/20/17	FS	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_07-10_R3	11/20/17	FS	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_10-13	11/20/17	FS	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_13-16_R1	11/20/17	FS	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_13-16_R2	11/20/17	FS	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_13-16_R3	11/20/17	FS	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_16-19	11/20/17	FS	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_16-19-D	11/20/17	FD	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_19-22_R1	11/20/17	FS	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_19-22_R2	11/20/17	FS	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_19-22_R3	11/20/17	FS	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_22-25	11/20/17	FS	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_25-28_R1	11/20/17	FS	1			1

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SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_25-28_R2	11/20/17	FS	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_25-28_R3	11/20/17	FS	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_28-31	11/20/17	FS	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_31-34	11/20/17	FS	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_34-37	11/20/17	FS	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_37-40	11/20/17	FS	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_40-45	11/20/17	FS	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_45-50	11/20/17	FS	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_50-55	11/20/17	FS	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_50-55-D	11/20/17	FD	1			1
L1743403	SED	FF-08-02-J	FF-08-02-J-17_SED_55-62	11/20/17	FS	1			1
L1743404	SED	ON-18-01-C	ON-18-01-C-17_SED_00-01	11/16/17	FS	1			1
L1743404	SED	ON-18-01-C	ON-18-01-C-17_SED_01-03	11/16/17	FS	1			1
L1743404	SED	ON-18-01-C	ON-18-01-C-17_SED_03-05	11/16/17	FS	1			1
L1743404	SED	ON-18-01-C	ON-18-01-C-17_SED_05-07	11/16/17	FS	1			1
L1743404	SED	ON-18-01-C	ON-18-01-C-17_SED_07-10	11/16/17	FS	1			1
L1743404	SED	ON-18-01-C	ON-18-01-C-17_SED_10-13	11/16/17	FS	1			1
L1743404	SED	ON-18-01-C	ON-18-01-C-17_SED_13-16	11/16/17	FS	1			1
L1743404	SED	ON-18-01-C	ON-18-01-C-17_SED_16-18	11/16/17	FS	1			1
L1743404	SED	ON-18-01-C	ON-18-01-C-17_SED_18-20	11/16/17	FS	1			1
L1743404	SED	ON-18-01-C	ON-18-01-C-17_SED_20-25	11/16/17	FS	1			1
L1743404	SED	ON-18-01-C	ON-18-01-C-17_SED_25-30	11/16/17	FS	1			1
L1743404	SED	ON-18-01-C	ON-18-01-C-17_SED_30-35	11/16/17	FS	1			1
L1743404	SED	ON-18-01-C	ON-18-01-C-17_SED_35-40	11/16/17	FS	1			1

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SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
L1743404	SED	ON-18-01-C	ON-18-01-C-17_SED_40-45	11/16/17	FS	1			1
L1743404	SED	ON-18-01-C	ON-18-01-C-17_SED_45-50	11/16/17	FS	1			1
L1743404	SED	ON-18-01-C	ON-18-01-C-17_SED_50-55	11/16/17	FS	1			1
L1743404	SED	ON-18-01-C	ON-18-01-C-17_SED_55-60	11/16/17	FS	1			1
L1743404	SED	ON-18-01-C	ON-18-01-C-17_SED_60-63	11/16/17	FS	1			1
L1743404	SED	ON-18-01-C	ON-18-01-C-17_SED_63-67	11/16/17	FS	1			1
L1743405	SED	ON-18-02-C	ON-18-02-C-17_SED_00-01	11/27/17	FS	1			1
L1743405	SED	ON-18-02-C	ON-18-02-C-17_SED_01-03	11/27/17	FS	1			1
L1743405	SED	ON-18-02-C	ON-18-02-C-17_SED_03-05	11/27/17	FS	1			1
L1743405	SED	ON-18-02-C	ON-18-02-C-17_SED_05-07	11/27/17	FS	1			1
L1743405	SED	ON-18-02-C	ON-18-02-C-17_SED_07-10	11/27/17	FS	1			1
L1743405	SED	ON-18-02-C	ON-18-02-C-17_SED_10-15	11/27/17	FS	1			1
L1743405	SED	ON-18-02-C	ON-18-02-C-17_SED_15-17	11/27/17	FS	1			1
L1743405	SED	ON-18-02-C	ON-18-02-C-17_SED_17-20	11/27/17	FS	1			1
L1743405	SED	ON-18-02-C	ON-18-02-C-17_SED_20-22	11/27/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_00-01_R1	11/17/17	FS				1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_00-01_R2	11/17/17	FS				1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_00-01_R3	11/17/17	FS				1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_01-03_R1	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_01-03_R2	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_01-03_R3	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_03-05_R1	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_03-05_R2	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_03-05_R3	11/17/17	FS	1			1

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SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_05-07_R1	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_05-07_R2	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_05-07_R3	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_07-10_R1	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_07-10_R2	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_07-10_R3	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_10-15	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_15-20	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_20-25	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_25-30	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_30-35	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_35-38	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_38-39_R1	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_38-39_R2	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_38-39_R3	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_39-40_R1	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_39-40_R2	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_39-40_R3	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_40-42_R1	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_40-42_R2	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_40-42_R3	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_42-43	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_43-44_R1	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_43-44_R2	11/17/17	FS	1			1

TABLE 1
DATA VALIDATION SUMMARY
2017 INTERTIDAL AND SUBTIDAL SEDIMENT- REPORT 3
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_43-44_R3	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_44-45	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_45-46_R1	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_45-46_R2	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_45-46_R3	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_46-48	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_48-49_R1	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_48-49_R2	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_48-49_R3	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_49-52	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_52-54_R1	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_52-54_R2	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_52-54_R3	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_54-55_R1	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_54-55_R2	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_54-55_R3	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_55-57	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_57-58_R1	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_57-58_R2	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_57-58_R3	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_58-59	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_59-60_R1	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_59-60_R2	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_59-60_R3	11/17/17	FS	1			1

TABLE 1
DATA VALIDATION SUMMARY
2017 INTERTIDAL AND SUBTIDAL SEDIMENT- REPORT 3
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_60-61_R1	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_60-61_R2	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_60-61_R3	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_61-62_R1	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_61-62_R2	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_61-62_R3	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_62-64_R1	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_62-64_R2	11/17/17	FS	1			1
L1743406	SED	VE-05-01-E	VE-05-01-E-17_SED_62-64_R3	11/17/17	FS	1			1
L1744058	SED	VN-05-01-D	VN-05-01-D-17_SED_00-01	11/28/17	FS	1			1
L1744058	SED	VN-05-01-D	VN-05-01-D-17_SED_01-02	11/28/17	FS	1			1
L1744058	SED	VN-05-01-D	VN-05-01-D-17_SED_02-03	11/28/17	FS	1			1
L1744058	SED	VN-05-01-D	VN-05-01-D-17_SED_03-05	11/28/17	FS	1			1
L1744058	SED	VN-05-01-D	VN-05-01-D-17_SED_05-07	11/28/17	FS	1			1
L1744058	SED	VN-05-01-D	VN-05-01-D-17_SED_07-10	11/28/17	FS	1			1
L1744058	SED	VN-05-01-D	VN-05-01-D-17_SED_10-11	11/28/17	FS	1			1
L1744058	SED	VN-05-01-D	VN-05-01-D-17_SED_11-15	11/28/17	FS	1			1
L1744058	SED	VN-05-01-D	VN-05-01-D-17_SED_15-17	11/28/17	FS	1			1
L1744058	SED	VN-05-01-D	VN-05-01-D-17_SED_17-20	11/28/17	FS	1			1
L1744058	SED	VN-05-01-D	VN-05-01-D-17_SED_20-25	11/28/17	FS	1			1
L1744058	SED	VN-05-01-D	VN-05-01-D-17_SED_25-30	11/28/17	FS	1			1
L1744058	SED	VN-05-01-D	VN-05-01-D-17_SED_30-35	11/28/17	FS	1			1
L1744058	SED	VN-05-01-D	VN-05-01-D-17_SED_35-40	11/28/17	FS	1			1
L1744058	SED	VN-05-01-D	VN-05-01-D-17_SED_40-45	11/28/17	FS	1			1

TABLE 1
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SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
L1744058	SED	VN-05-01-D	VN-05-01-D-17_SED_45-50	11/28/17	FS	1			1
L1744058	SED	VN-05-01-D	VN-05-01-D-17_SED_50-52	11/28/17	FS	1			1
L1744058	SED	VN-05-01-D	VN-05-01-D-17_SED_52-60	11/28/17	FS	1			1
L1744058	SED	VN-05-01-D	VN-05-01-D-17_SED_60-65	11/28/17	FS	1			1
L1744058	SED	VN-05-01-D	VN-05-01-D-17_SED_65-70	11/28/17	FS	1			1
L1744058	SED	VN-05-01-D	VN-05-01-D-17_SED_70-75	11/28/17	FS	1			1
L1744059	SED	VW-02-01-B	VW-02-01-B-17_SED_30-35	11/27/17	FS	1			1
L1744059	SED	VW-02-01-B	VW-02-01-B-17_SED_35-40	11/27/17	FS	1			1
L1744059	SED	VW-02-01-B	VW-02-01-B-17_SED_40-45	11/27/17	FS	1			1
L1744059	SED	VW-02-01-B	VW-02-01-B-17_SED_45-50	11/27/17	FS	1			1
L1744059	SED	VW-02-01-B	VW-02-01-B-17_SED_50-55	11/27/17	FS	1			1
L1744059	SED	VW-02-01-B	VW-02-01-B-17_SED_55-60	11/27/17	FS	1			1
L1744059	SED	VW-02-01-B	VW-02-01-B-17_SED_60-65	11/27/17	FS	1			1
L1744059	SED	VW-02-01-B	VW-02-01-B-17_SED_65-70	11/27/17	FS	1			1
L1744059	SED	VW-02-01-B	VW-02-01-B-17_SED_70-75	11/27/17	FS	1			1
L1744059	SED	VW-02-01-B	VW-02-01-B-17_SED_75-80	11/27/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_00-01_R1	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_00-01_R2	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_00-01_R3	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_01-03_R1	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_01-03_R2	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_01-03_R3	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_03-04	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_04-06_R1	11/29/17	FS	1			1

TABLE 1
DATA VALIDATION SUMMARY
2017 INTERTIDAL AND SUBTIDAL SEDIMENT- REPORT 3
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_04-06_R2	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_04-06_R3	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_06-09	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_09-11	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_11-12_R1	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_11-12_R2	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_11-12_R3	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_12-13	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_13-14	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_14-17	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_17-20_R1	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_17-20_R2	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_17-20_R3	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_20-21	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_21-25_R1	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_21-25_R2	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_21-25_R3	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_25-31_R1	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_25-31_R2	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_25-31_R3	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_31-35	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_35-38_R1	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_35-38_R2	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_35-38_R3	11/29/17	FS	1			1

TABLE 1
DATA VALIDATION SUMMARY
2017 INTERTIDAL AND SUBTIDAL SEDIMENT- REPORT 3
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

SDG	Media	Location	Field Sample ID	Sample Date	Method Class Analysis Method QC Code	% Solids Count	Mercury EPA 1631 Count	Methyl Mercury EPA 1630 Count	TOC Lloyd-Kahn Count
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_38-39	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_39-42	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_42-44_R1	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_42-44_R2	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_42-44_R3	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_44-49_R1	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_44-49_R2	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_44-49_R3	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_49-52	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_52-54	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_54-55_R1	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_54-55_R2	11/29/17	FS	1			1
L1744060	SED	BU-10-02-C	BU-10-02-C-17_SED_54-55_R3	11/29/17	FS	1			1

Notes:
Count = # of analytes
FD = Field Duplicate
FS = Field Sample
SDG = Sample Delivery Group
SED = Sediment
TOC = Total Organic Carbon

TABLE 2
DATA VALIDATION SUMMARY
2017 INTERTIDAL AND SUBTIDAL SEDIMENT CHARACTERIZATION – REPORT 3
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690, and L1739692

SDG	Analysis Method	Lab Sample ID	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
L1741132	LLOYD_KAHN	L1741132-04	VN-01-01-E-17_SED_05-07	T	Total Organic Carbon	5.925		5.925	J	MS-L	PERCENT
L1741132	LLOYD_KAHN	L1741132-08	VN-01-01-E-17_SED_17-18	T	Total Organic Carbon	4.065		4.065	J	LD	PERCENT
L1741132	LLOYD_KAHN	L1741132-09	VN-01-01-E-17_SED_18-20	T	Total Organic Carbon	4.31		4.31	J	LD	PERCENT
L1741135	LLOYD_KAHN	L1741135-01	BU-02-01-D-17_SED_00-01	T	Total Organic Carbon	8.595		8.595	J	MS-H	PERCENT
L1741136	LLOYD_KAHN	L1741136-01	BU-08-01-A-17_SED_00-01	T	Total Organic Carbon	4.855		4.855	J	MS-H	PERCENT
L1741137	2540G	L1741137-01	FF-04-01-D-17_SED_00-01	T	Percent Solids, Residual	10.2		10.2	J	LD	PERCENT
L1741137	LLOYD_KAHN	L1741137-05	FF-04-01-D-17_SED_07-10	T	Total Organic Carbon	16.75		16.75	J	LD	PERCENT
L1741138	LLOYD_KAHN	L1741138-07	FF-08-01-B-17_SED_15-20	T	Total Organic Carbon	22.15		22.15	J	LD	PERCENT
L1742392	LLOYD_KAHN	L1742392-09	BH-03-01-A-17_SED_20-25	T	Total Organic Carbon	4.845		4.845	J	HT	PERCENT
L1742392	LLOYD_KAHN	L1742392-10	BH-03-01-A-17_SED_25-30	T	Total Organic Carbon	3.17		3.17	J	HT	PERCENT
L1742392	LLOYD_KAHN	L1742392-12	BH-03-01-A-17_SED_35-39	T	Total Organic Carbon	2.72		2.72	J	HT	PERCENT
L1742392	LLOYD_KAHN	L1742392-13	BH-03-01-A-17_SED_39-43	T	Total Organic Carbon	2.61		2.61	J	HT	PERCENT
L1742393	LLOYD_KAHN	L1742393-01	FF-07-01-E-17_SED_00-01	T	Total Organic Carbon	2.405		2.405	J	HT	PERCENT
L1742393	LLOYD_KAHN	L1742393-02	FF-07-01-E-17_SED_01-03	T	Total Organic Carbon	2.005		2.005	J	HT	PERCENT
L1742393	LLOYD_KAHN	L1742393-03	FF-07-01-E-17_SED_03-05	T	Total Organic Carbon	1.93		1.93	J	HT	PERCENT
L1742393	LLOYD_KAHN	L1742393-04	FF-07-01-E-17_SED_05-07	T	Total Organic Carbon	1.95		1.95	J	HT	PERCENT
L1742393	LLOYD_KAHN	L1742393-05	FF-07-01-E-17_SED_07-10	T	Total Organic Carbon	1.725		1.725	J	HT	PERCENT
L1742393	LLOYD_KAHN	L1742393-06	FF-07-01-E-17_SED_10-15	T	Total Organic Carbon	1.71		1.71	J	HT	PERCENT
L1742393	LLOYD_KAHN	L1742393-07	FF-07-01-E-17_SED_15-20	T	Total Organic Carbon	2.305		2.305	J	HT	PERCENT
L1742393	LLOYD_KAHN	L1742393-08	FF-07-01-E-17_SED_20-25	T	Total Organic Carbon	2.32		2.32	J	HT	PERCENT
L1742393	LLOYD_KAHN	L1742393-09	FF-07-01-E-17_SED_25-27	T	Total Organic Carbon	3.14		3.14	J	HT	PERCENT
L1742393	LLOYD_KAHN	L1742393-10	FF-07-01-E-17_SED_27-30	T	Total Organic Carbon	2.175		2.175	J	HT	PERCENT
L1742393	LLOYD_KAHN	L1742393-11	FF-07-01-E-17_SED_30-40	T	Total Organic Carbon	2.48		2.48	J	HT	PERCENT
L1742393	LLOYD_KAHN	L1742393-12	FF-07-01-E-17_SED_40-45	T	Total Organic Carbon	2.325		2.325	J	HT	PERCENT
L1742393	LLOYD_KAHN	L1742393-13	FF-07-01-E-17_SED_45-49	T	Total Organic Carbon	2.785		2.785	J	HT	PERCENT
L1742394	LLOYD_KAHN	L1742394-01	ON-10-01-B-17_SED_00-01	T	Total Organic Carbon	5.45		5.45	J	HT	PERCENT
L1742394	LLOYD_KAHN	L1742394-02	ON-10-01-B-17_SED_01-03	T	Total Organic Carbon	6.05		6.05	J	HT	PERCENT
L1742394	LLOYD_KAHN	L1742394-03	ON-10-01-B-17_SED_03-05	T	Total Organic Carbon	6.075		6.075	J	HT	PERCENT
L1742394	LLOYD_KAHN	L1742394-04	ON-10-01-B-17_SED_05-07	T	Total Organic Carbon	5.165		5.165	J	HT	PERCENT

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SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690, and L1739692

SDG	Analysis Method	Lab Sample ID	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
L1742394	LLOYD_KAHN	L1742394-05	ON-10-01-B-17_SED_07-09	T	Total Organic Carbon	4.01		4.01	J	HT	PERCENT
L1742394	LLOYD_KAHN	L1742394-06	ON-10-01-B-17_SED_09-11	T	Total Organic Carbon	2.935		2.935	J	HT	PERCENT
L1742394	LLOYD_KAHN	L1742394-07	ON-10-01-B-17_SED_11-15	T	Total Organic Carbon	3.06		3.06	J	HT	PERCENT
L1742394	LLOYD_KAHN	L1742394-08	ON-10-01-B-17_SED_15-20	T	Total Organic Carbon	2.895		2.895	J	HT	PERCENT
L1742394	LLOYD_KAHN	L1742394-09	ON-10-01-B-17_SED_20-25	T	Total Organic Carbon	2.605		2.605	J	HT	PERCENT
L1742394	LLOYD_KAHN	L1742394-10	ON-10-01-B-17_SED_25-28	T	Total Organic Carbon	2.34		2.34	J	HT	PERCENT
L1742394	LLOYD_KAHN	L1742394-11	ON-10-01-B-17_SED_28-30	T	Total Organic Carbon	2.15		2.15	J	HT	PERCENT
L1742394	LLOYD_KAHN	L1742394-12	ON-10-01-B-17_SED_30-37	T	Total Organic Carbon	2.555		2.555	J	HT	PERCENT
L1742395	LLOYD_KAHN	L1742395-01	VE-09-01-B-17_SED_00-01	T	Total Organic Carbon	5.77		5.77	J	HT	PERCENT
L1742395	LLOYD_KAHN	L1742395-02	VE-09-01-B-17_SED_01-03	T	Total Organic Carbon	5.985		5.985	J	HT	PERCENT
L1742395	LLOYD_KAHN	L1742395-03	VE-09-01-B-17_SED_03-05	T	Total Organic Carbon	5.99		5.99	J	HT	PERCENT
L1742395	LLOYD_KAHN	L1742395-04	VE-09-01-B-17_SED_05-07	T	Total Organic Carbon	6.32		6.32	J	HT	PERCENT
L1742395	LLOYD_KAHN	L1742395-05	VE-09-01-B-17_SED_07-10	T	Total Organic Carbon	6.465		6.465	J	HT	PERCENT
L1742395	LLOYD_KAHN	L1742395-06	VE-09-01-B-17_SED_10-13	T	Total Organic Carbon	9.01		9.01	J	HT	PERCENT
L1742395	LLOYD_KAHN	L1742395-07	VE-09-01-B-17_SED_13-16	T	Total Organic Carbon	8.49		8.49	J	HT	PERCENT
L1742395	LLOYD_KAHN	L1742395-08	VE-09-01-B-17_SED_16-20	T	Total Organic Carbon	6.045		6.045	J	HT	PERCENT
L1742395	LLOYD_KAHN	L1742395-09	VE-09-01-B-17_SED_20-23	T	Total Organic Carbon	3.36		3.36	J	HT	PERCENT
L1742396	LLOYD_KAHN	L1742396-01	VE-10-01-C-17_SED_00-01	T	Total Organic Carbon	7.315		7.315	J	HT	PERCENT
L1742396	LLOYD_KAHN	L1742396-02	VE-10-01-C-17_SED_01-02	T	Total Organic Carbon	7.505		7.505	J	HT	PERCENT
L1742396	LLOYD_KAHN	L1742396-03	VE-10-01-C-17_SED_02-03	T	Total Organic Carbon	5.585		5.585	J	HT	PERCENT
L1742396	LLOYD_KAHN	L1742396-04	VE-10-01-C-17_SED_03-05	T	Total Organic Carbon	5.07		5.07	J	HT	PERCENT
L1742396	LLOYD_KAHN	L1742396-05	VE-10-01-C-17_SED_05-07	T	Total Organic Carbon	6.825		6.825	J	HT	PERCENT
L1742396	LLOYD_KAHN	L1742396-06	VE-10-01-C-17_SED_07-10	T	Total Organic Carbon	7.535		7.535	J	HT	PERCENT
L1742396	LLOYD_KAHN	L1742396-07	VE-10-01-C-17_SED_10-13	T	Total Organic Carbon	6.085		6.085	J	HT	PERCENT
L1742396	LLOYD_KAHN	L1742396-08	VE-10-01-C-17_SED_13-16	T	Total Organic Carbon	5.845		5.845	J	HT	PERCENT
L1742396	LLOYD_KAHN	L1742396-09	VE-10-01-C-17_SED_16-20	T	Total Organic Carbon	3.72		3.72	J	HT	PERCENT
L1742397	LLOYD_KAHN	L1742397-01	VN-02-01-D-17_SED_00-01	T	Total Organic Carbon	5.91		5.91	J	HT	PERCENT
L1742397	LLOYD_KAHN	L1742397-02	VN-02-01-D-17_SED_01-03	T	Total Organic Carbon	5.46		5.46	J	HT	PERCENT
L1742397	LLOYD_KAHN	L1742397-03	VN-02-01-D-17_SED_03-05	T	Total Organic Carbon	5.695		5.695	J	HT	PERCENT
L1742397	LLOYD_KAHN	L1742397-04	VN-02-01-D-17_SED_05-07	T	Total Organic Carbon	6.125		6.125	J	HT	PERCENT

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SDG	Analysis Method	Lab Sample ID	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
L1742397	LLOYD_KAHN	L1742397-05	VN-02-01-D-17_SED_07-10	T	Total Organic Carbon	7.06		7.06	J	HT	PERCENT
L1742397	LLOYD_KAHN	L1742397-06	VN-02-01-D-17_SED_10-15	T	Total Organic Carbon	5.42		5.42	J	HT	PERCENT
L1742397	LLOYD_KAHN	L1742397-07	VN-02-01-D-17_SED_15-17	T	Total Organic Carbon	4.235		4.235	J	HT	PERCENT
L1742397	LLOYD_KAHN	L1742397-08	VN-02-01-D-17_SED_17-22	T	Total Organic Carbon	2.455		2.455	J	HT	PERCENT
L1742402	LLOYD_KAHN	L1742402-01	VN-04-02-A-17_SED_00-01	T	Total Organic Carbon	1.93		1.93	J	HT	PERCENT
L1742402	LLOYD_KAHN	L1742402-02	VN-04-02-A-17_SED_01-03	T	Total Organic Carbon	2.135		2.135	J	HT	PERCENT
L1742402	LLOYD_KAHN	L1742402-03	VN-04-02-A-17_SED_03-05	T	Total Organic Carbon	2.455		2.455	J	HT	PERCENT
L1742402	LLOYD_KAHN	L1742402-04	VN-04-02-A-17_SED_05-07	T	Total Organic Carbon	2.695		2.695	J	HT	PERCENT
L1742402	LLOYD_KAHN	L1742402-05	VN-04-02-A-17_SED_07-10	T	Total Organic Carbon	2.25		2.25	J	HT	PERCENT
L1742402	LLOYD_KAHN	L1742402-06	VN-04-02-A-17_SED_10-15	T	Total Organic Carbon	2.67		2.67	J	LD,HT	PERCENT
L1742402	LLOYD_KAHN	L1742402-07	VN-04-02-A-17_SED_15-20	T	Total Organic Carbon	1.455		1.455	J	HT	PERCENT
L1742402	LLOYD_KAHN	L1742402-08	VN-04-02-A-17_SED_20-25	T	Total Organic Carbon	1.96		1.96	J	HT	PERCENT
L1742402	LLOYD_KAHN	L1742402-09	VN-04-02-A-17_SED_25-31	T	Total Organic Carbon	2.51		2.51	J	HT	PERCENT
L1742403	LLOYD_KAHN	L1742403-03	VN-08-01-B-17_SED_03-05	T	Total Organic Carbon	6.27		6.27	J	HT	PERCENT
L1742403	LLOYD_KAHN	L1742403-04	VN-08-01-B-17_SED_05-07	T	Total Organic Carbon	5.66		5.66	J	HT	PERCENT
L1742403	LLOYD_KAHN	L1742403-05	VN-08-01-B-17_SED_07-10	T	Total Organic Carbon	7.65		7.65	J	HT	PERCENT
L1742403	LLOYD_KAHN	L1742403-06	VN-08-01-B-17_SED_10-13	T	Total Organic Carbon	7.015		7.015	J	HT	PERCENT
L1742403	LLOYD_KAHN	L1742403-07	VN-08-01-B-17_SED_13-18	T	Total Organic Carbon	8.03		8.03	J	HT	PERCENT
L1742403	LLOYD_KAHN	L1742403-08	VN-08-01-B-17_SED_18-21	T	Total Organic Carbon	4.64		4.64	J	HT	PERCENT
L1742405	LLOYD_KAHN	L1742405-03	VW-14-01-E-17_SED_03-05	T	Total Organic Carbon	2.985		2.985	J	MS-H	PERCENT
L1742405	LLOYD_KAHN	L1742405-10	VW-14-01-E-17_SED_18-20	T	Total Organic Carbon	2.39		2.39	J	MS-L	PERCENT
L1743403	LLOYD_KAHN	L1743403-01	FF-08-02-J-17_SED_00-01	T	Total Organic Carbon	5.45		5.45	J	HT	PERCENT
L1743403	LLOYD_KAHN	L1743403-02	FF-08-02-J-17_SED_01-03	T	Total Organic Carbon	4.735		4.735	J	HT	PERCENT
L1743403	LLOYD_KAHN	L1743403-03	FF-08-02-J-17_SED_03-05	T	Total Organic Carbon	6.95		6.95	J	HT	PERCENT
L1743403	LLOYD_KAHN	L1743403-04	FF-08-02-J-17_SED_05-07	T	Total Organic Carbon	6.96		6.96	J	HT	PERCENT
L1743403	LLOYD_KAHN	L1743403-05	FF-08-02-J-17_SED_07-10_R1	T	Total Organic Carbon	6.025		6.025	J	HT	PERCENT
L1743403	LLOYD_KAHN	L1743403-06	FF-08-02-J-17_SED_07-10_R2	T	Total Organic Carbon	6.305		6.305	J	HT	PERCENT
L1743403	LLOYD_KAHN	L1743403-07	FF-08-02-J-17_SED_07-10_R3	T	Total Organic Carbon	6.65		6.65	J	HT	PERCENT
L1743403	LLOYD_KAHN	L1743403-08	FF-08-02-J-17_SED_10-13	T	Total Organic Carbon	4.225		4.225	J	HT	PERCENT

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SDG	Analysis Method	Lab Sample ID	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
L1743403	LLOYD_KAHN	L1743403-09	FF-08-02-J-17_SED_13-16_R1	T	Total Organic Carbon	4.79		4.79	J	HT	PERCENT
L1743403	LLOYD_KAHN	L1743403-10	FF-08-02-J-17_SED_13-16_R2	T	Total Organic Carbon	6.045		6.045	J	HT	PERCENT
L1743403	LLOYD_KAHN	L1743403-11	FF-08-02-J-17_SED_13-16_R3	T	Total Organic Carbon	5.255		5.255	J	HT	PERCENT
L1743403	LLOYD_KAHN	L1743403-12	FF-08-02-J-17_SED_16-19	T	Total Organic Carbon	4.295		4.295	J	HT	PERCENT
L1743403	LLOYD_KAHN	L1743403-13	FF-08-02-J-17_SED_16-19-D	T	Total Organic Carbon	4.2		4.2	J	HT	PERCENT
L1743403	LLOYD_KAHN	L1743403-14	FF-08-02-J-17_SED_19-22_R1	T	Total Organic Carbon	3.505		3.505	J	HT	PERCENT
L1743403	LLOYD_KAHN	L1743403-15	FF-08-02-J-17_SED_19-22_R2	T	Total Organic Carbon	3.715		3.715	J	HT	PERCENT
L1743403	LLOYD_KAHN	L1743403-16	FF-08-02-J-17_SED_19-22_R3	T	Total Organic Carbon	3.935		3.935	J	HT	PERCENT
L1743403	LLOYD_KAHN	L1743403-17	FF-08-02-J-17_SED_22-25	T	Total Organic Carbon	2.16		2.16	J	LD,HT	PERCENT
L1743403	LLOYD_KAHN	L1743403-18	FF-08-02-J-17_SED_25-28_R1	T	Total Organic Carbon	1.475		1.475	J	HT	PERCENT
L1743403	LLOYD_KAHN	L1743403-19	FF-08-02-J-17_SED_25-28_R2	T	Total Organic Carbon	1.82		1.82	J	HT	PERCENT
L1743403	LLOYD_KAHN	L1743403-20	FF-08-02-J-17_SED_25-28_R3	T	Total Organic Carbon	1.48		1.48	J	HT	PERCENT
L1743403	LLOYD_KAHN	L1743403-21	FF-08-02-J-17_SED_28-31	T	Total Organic Carbon	1.8		1.8	J	HT	PERCENT
L1743403	LLOYD_KAHN	L1743403-22	FF-08-02-J-17_SED_31-34	T	Total Organic Carbon	2.605		2.605	J	HT	PERCENT
L1743403	LLOYD_KAHN	L1743403-23	FF-08-02-J-17_SED_34-37	T	Total Organic Carbon	2.92		2.92	J	HT	PERCENT
L1743403	LLOYD_KAHN	L1743403-24	FF-08-02-J-17_SED_37-40	T	Total Organic Carbon	1.83		1.83	J	HT	PERCENT
L1743403	LLOYD_KAHN	L1743403-25	FF-08-02-J-17_SED_40-45	T	Total Organic Carbon	2.12		2.12	J	HT	PERCENT
L1743403	LLOYD_KAHN	L1743403-26	FF-08-02-J-17_SED_45-50	T	Total Organic Carbon	1.96		1.96	J	HT	PERCENT
L1743403	LLOYD_KAHN	L1743403-27	FF-08-02-J-17_SED_50-55	T	Total Organic Carbon	2.235		2.235	J	HT	PERCENT
L1743403	LLOYD_KAHN	L1743403-28	FF-08-02-J-17_SED_50-55-D	T	Total Organic Carbon	2.16		2.16	J	HT	PERCENT
L1743403	LLOYD_KAHN	L1743403-29	FF-08-02-J-17_SED_55-62	T	Total Organic Carbon	2.37		2.37	J	HT	PERCENT
L1743406	LLOYD_KAHN	L1743406-22	VE-05-01-E-17_SED_38-39_R1	T	Total Organic Carbon	1.075		1.075	J	LR	PERCENT
L1743406	LLOYD_KAHN	L1743406-23	VE-05-01-E-17_SED_38-39_R2	T	Total Organic Carbon	1.051		1.051	J	LR	PERCENT
L1743406	LLOYD_KAHN	L1743406-24	VE-05-01-E-17_SED_38-39_R3	T	Total Organic Carbon	1.82		1.82	J	LD,LR	PERCENT
L1743406	LLOYD_KAHN	L1743406-25	VE-05-01-E-17_SED_39-40_R1	T	Total Organic Carbon	7.155		7.155	J	LR	PERCENT
L1743406	LLOYD_KAHN	L1743406-26	VE-05-01-E-17_SED_39-40_R2	T	Total Organic Carbon	13.35		13.35	J	LR	PERCENT
L1743406	LLOYD_KAHN	L1743406-27	VE-05-01-E-17_SED_39-40_R3	T	Total Organic Carbon	13.3		13.3	J	LR	PERCENT
L1743406	LLOYD_KAHN	L1743406-28	VE-05-01-E-17_SED_40-42_R1	T	Total Organic Carbon	21.05		21.05	J	LR	PERCENT
L1743406	LLOYD_KAHN	L1743406-29	VE-05-01-E-17_SED_40-42_R2	T	Total Organic Carbon	26.5		26.5	J	LR	PERCENT

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SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690, and L1739692

SDG	Analysis Method	Lab Sample ID	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
L1743406	LLOYD_KAHN	L1743406-30	VE-05-01-E-17_SED_40-42_R3	T	Total Organic Carbon	15.4		15.4	J	LR	PERCENT
L1743406	LLOYD_KAHN	L1743406-35	VE-05-01-E-17_SED_44-45	T	Total Organic Carbon	0.7055		0.7055	J	MS-H,MS-L,LD	PERCENT
L1743406	LLOYD_KAHN	L1743406-36	VE-05-01-E-17_SED_45-46_R1	T	Total Organic Carbon	8.19		8.19	J	LR	PERCENT
L1743406	LLOYD_KAHN	L1743406-37	VE-05-01-E-17_SED_45-46_R2	T	Total Organic Carbon	4.415		4.415	J	LR	PERCENT
L1743406	LLOYD_KAHN	L1743406-38	VE-05-01-E-17_SED_45-46_R3	T	Total Organic Carbon	5.07		5.07	J	LD,LR	PERCENT
L1743406	LLOYD_KAHN	L1743406-39	VE-05-01-E-17_SED_46-48	T	Total Organic Carbon	1.705		1.705	J	MS-L,LD	PERCENT
L1743406	LLOYD_KAHN	L1743406-40	VE-05-01-E-17_SED_48-49_R1	T	Total Organic Carbon	1.32		1.32	J	LR	PERCENT
L1743406	LLOYD_KAHN	L1743406-41	VE-05-01-E-17_SED_48-49_R2	T	Total Organic Carbon	1.66		1.66	J	LD,LR	PERCENT
L1743406	LLOYD_KAHN	L1743406-42	VE-05-01-E-17_SED_48-49_R3	T	Total Organic Carbon	3.055		3.055	J	LR	PERCENT
L1743406	LLOYD_KAHN	L1743406-47	VE-05-01-E-17_SED_54-55_R1	T	Total Organic Carbon	5.26		5.26	J	LR	PERCENT
L1743406	LLOYD_KAHN	L1743406-48	VE-05-01-E-17_SED_54-55_R2	T	Total Organic Carbon	2.805		2.805	J	LR	PERCENT
L1743406	LLOYD_KAHN	L1743406-49	VE-05-01-E-17_SED_54-55_R3	T	Total Organic Carbon	5.57		5.57	J	LR	PERCENT
L1743406	LLOYD_KAHN	L1743406-51	VE-05-01-E-17_SED_57-58_R1	T	Total Organic Carbon	6.13		6.13	J	LR	PERCENT
L1743406	LLOYD_KAHN	L1743406-52	VE-05-01-E-17_SED_57-58_R2	T	Total Organic Carbon	5.895		5.895	J	LR	PERCENT
L1743406	LLOYD_KAHN	L1743406-53	VE-05-01-E-17_SED_57-58_R3	T	Total Organic Carbon	9.44		9.44	J	LR	PERCENT
L1743406	LLOYD_KAHN	L1743406-57	VE-05-01-E-17_SED_59-60_R3	T	Total Organic Carbon	14.35		14.35	J	LD	PERCENT
L1743406	LLOYD_KAHN	L1743406-59	VE-05-01-E-17_SED_60-61_R2	T	Total Organic Carbon	5.02		5.02	J	LD	PERCENT
L1743406	LLOYD_KAHN	L1743406-61	VE-05-01-E-17_SED_61-62_R1	T	Total Organic Carbon	5.475		5.475	J	LD,LR	PERCENT
L1743406	LLOYD_KAHN	L1743406-62	VE-05-01-E-17_SED_61-62_R2	T	Total Organic Carbon	12.6		12.6	J	LD,LR	PERCENT
L1743406	LLOYD_KAHN	L1743406-63	VE-05-01-E-17_SED_61-62_R3	T	Total Organic Carbon	11.3		11.3	J	LR	PERCENT
L1744058	LLOYD_KAHN	L1744058-01	VN-05-01-D-17_SED_00-01	T	Total Organic Carbon	6.755		6.755	J	TEMP	PERCENT
L1744058	LLOYD_KAHN	L1744058-02	VN-05-01-D-17_SED_01-02	T	Total Organic Carbon	3.445		3.445	J	TEMP	PERCENT
L1744058	LLOYD_KAHN	L1744058-03	VN-05-01-D-17_SED_02-03	T	Total Organic Carbon	2.67		2.67	J	TEMP	PERCENT
L1744058	LLOYD_KAHN	L1744058-04	VN-05-01-D-17_SED_03-05	T	Total Organic Carbon	2.445		2.445	J	TEMP	PERCENT
L1744058	LLOYD_KAHN	L1744058-05	VN-05-01-D-17_SED_05-07	T	Total Organic Carbon	2.29		2.29	J	TEMP	PERCENT
L1744058	LLOYD_KAHN	L1744058-06	VN-05-01-D-17_SED_07-10	T	Total Organic Carbon	2.03		2.03	J	TEMP	PERCENT
L1744058	LLOYD_KAHN	L1744058-07	VN-05-01-D-17_SED_10-11	T	Total Organic Carbon	2.41		2.41	J	TEMP	PERCENT
L1744058	LLOYD_KAHN	L1744058-08	VN-05-01-D-17_SED_11-15	T	Total Organic Carbon	2.2		2.2	J	TEMP	PERCENT
L1744058	LLOYD_KAHN	L1744058-09	VN-05-01-D-17_SED_15-17	T	Total Organic Carbon	2.465		2.465	J	TEMP	PERCENT
L1744058	LLOYD_KAHN	L1744058-10	VN-05-01-D-17_SED_17-20	T	Total Organic Carbon	2.585		2.585	J	TEMP	PERCENT

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PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690, and L1739692

SDG	Analysis Method	Lab Sample ID	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
L1744058	LLOYD_KAHN	L1744058-11	VN-05-01-D-17_SED_20-25	T	Total Organic Carbon	2.44		2.44	J	TEMP	PERCENT
L1744058	LLOYD_KAHN	L1744058-12	VN-05-01-D-17_SED_25-30	T	Total Organic Carbon	2.315		2.315	J	TEMP	PERCENT
L1744058	LLOYD_KAHN	L1744058-13	VN-05-01-D-17_SED_30-35	T	Total Organic Carbon	2.37		2.37	J	TEMP	PERCENT
L1744058	LLOYD_KAHN	L1744058-14	VN-05-01-D-17_SED_35-40	T	Total Organic Carbon	2.395		2.395	J	TEMP	PERCENT
L1744058	LLOYD_KAHN	L1744058-15	VN-05-01-D-17_SED_40-45	T	Total Organic Carbon	1.485		1.485	J	TEMP	PERCENT
L1744058	LLOYD_KAHN	L1744058-16	VN-05-01-D-17_SED_45-50	T	Total Organic Carbon	1.57		1.57	J	TEMP	PERCENT
L1744058	LLOYD_KAHN	L1744058-17	VN-05-01-D-17_SED_50-52	T	Total Organic Carbon	1.55		1.55	J	TEMP	PERCENT
L1744058	LLOYD_KAHN	L1744058-18	VN-05-01-D-17_SED_52-60	T	Total Organic Carbon	1.98		1.98	J	TEMP	PERCENT
L1744058	LLOYD_KAHN	L1744058-19	VN-05-01-D-17_SED_60-65	T	Total Organic Carbon	2.34		2.34	J	TEMP	PERCENT
L1744058	LLOYD_KAHN	L1744058-20	VN-05-01-D-17_SED_65-70	T	Total Organic Carbon	2.385		2.385	J	TEMP	PERCENT
L1744058	LLOYD_KAHN	L1744058-21	VN-05-01-D-17_SED_70-75	T	Total Organic Carbon	2.17		2.17	J	TEMP	PERCENT
L1744059	LLOYD_KAHN	L1744059-09	VW-02-01-B-17_SED_70-75	T	Total Organic Carbon	1.905		1.905	J	MS-H	PERCENT
L1744060	LLOYD_KAHN	L1744060-16	BU-10-02-C-17_SED_12-13	T	Total Organic Carbon	1.1315		1.1315	J	LD,MS-H	PERCENT
L1744060	LLOYD_KAHN	L1744060-17	BU-10-02-C-17_SED_13-14	T	Total Organic Carbon	1.785		1.785	J	LD	PERCENT
L1744060	LLOYD_KAHN	L1744060-19	BU-10-02-C-17_SED_17-20_R1	T	Total Organic Carbon	6.555		6.555	J	LR	PERCENT
L1744060	LLOYD_KAHN	L1744060-20	BU-10-02-C-17_SED_17-20_R2	T	Total Organic Carbon	4.46		4.46	J	LR	PERCENT
L1744060	LLOYD_KAHN	L1744060-21	BU-10-02-C-17_SED_17-20_R3	T	Total Organic Carbon	4.36		4.36	J	LR	PERCENT
1711118	% Solids	1711118-01	VW-14-01-F-17_SED_00-01	T	Percent Solids	16.9	O-04	16.9	J	HT	% BY WT.
1711118	% Solids	1711118-02	VW-14-01-F-17_SED_01-03	T	Percent Solids	39	O-04	39	J	HT	% BY WT.
1711120	% Solids	1711120-01	VN-08-01-E-17_SED_00-01	T	Percent Solids	32.7	O-04	32.7	J	HT	% BY WT.
1711120	% Solids	1711120-02	VN-08-01-E-17_SED_01-03	T	Percent Solids	45.3	O-04	45.3	J	HT	% BY WT.
1711128	% Solids	1711128-01	WP-06-02-F-17_SED_00-01	T	Percent Solids	33.1	O-04	33.1	J	HT	% BY WT.
1711128	% Solids	1711128-02	WP-06-02-F-17_SED_01-03	T	Percent Solids	34.8	O-04	34.8	J	HT	% BY WT.
1711258	7474_1631	1711258-01	BH-03-01-E-17_SED_00-01	T	Mercury	640		640	J	MS-RPD	NG/G
1711258	% Solids	1711258-01	BH-03-01-E-17_SED_00-01	T	Percent Solids	38.2	O-04	38.2	J	HT	% BY WT.
1711258	% Solids	1711258-02	BH-03-01-E-17_SED_01-03	T	Percent Solids	42	O-04	42	J	HT	% BY WT.
1711258	% Solids	1711258-17	BU-02-01-E-17_SED_00-01	T	Percent Solids	65.3	O-04	65.3	J	HT	% BY WT.
1711258	% Solids	1711258-18	BU-02-01-E-17_SED_01-03	T	Percent Solids	49.6	O-04	49.6	J	HT	% BY WT.
1711258	% Solids	1711258-15	FF-08-02-G-17_SED_00-01	T	Percent Solids	37.6	O-04	37.6	J	HT	% BY WT.
1711258	% Solids	1711258-16	FF-08-02-G-17_SED_01-03	T	Percent Solids	42	O-04	42	J	HT	% BY WT.

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SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690, and L1739692

SDG	Analysis Method	Lab Sample ID	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
1711258	% Solids	1711258-13	MM-04-01-F-17_SED_00-01	T	Percent Solids	42.1	O-04	42.1	J	HT	% BY WT.
1711258	% Solids	1711258-14	MM-04-01-F-17_SED_01-03	T	Percent Solids	35.7	O-04	35.7	J	HT	% BY WT.
1711258	% Solids	1711258-11	ON-10-01-C-17_SED_00-01	T	Percent Solids	29.8	O-04	29.8	J	HT	% BY WT.
1711258	% Solids	1711258-12	ON-10-01-C-17_SED_01-03	T	Percent Solids	15.1	O-04	15.1	J	HT	% BY WT.
1711258	% Solids	1711258-09	ON-18-01-F-17_SED_00-01	T	Percent Solids	38.5	O-04	38.5	J	HT	% BY WT.
1711258	% Solids	1711258-10	ON-18-01-F-17_SED_01-03	T	Percent Solids	35.6	O-04	35.6	J	HT	% BY WT.
1711258	% Solids	1711258-05	VE-09-01-E-17_SED_00-01	T	Percent Solids	36.6	O-04	36.6	J	HT	% BY WT.
1711258	% Solids	1711258-06	VE-09-01-E-17_SED_01-03	T	Percent Solids	36.6	O-04	36.6	J	HT	% BY WT.
1711258	% Solids	1711258-07	VN-01-01-B-17_SED_00-01	T	Percent Solids	39.6	O-04	39.6	J	HT	% BY WT.
1711258	% Solids	1711258-08	VN-01-01-B-17_SED_01-03	T	Percent Solids	41.7	O-04	41.7	J	HT	% BY WT.
1711258	% Solids	1711258-23	VN-04-01-E-17_SED_00-01	T	Percent Solids	64.9	O-04	64.9	J	HT	% BY WT.
1711258	% Solids	1711258-24	VN-04-01-E-17_SED_01-03	T	Percent Solids	43	O-04	43	J	HT	% BY WT.
1711258	% Solids	1711258-19	VN-04-02-C-17_SED_00-01	T	Percent Solids	36.8	O-04	36.8	J	HT	% BY WT.
1711258	% Solids	1711258-20	VN-04-02-C-17_SED_01-03	T	Percent Solids	74.6	O-04	74.6	J	HT	% BY WT.
1711258	% Solids	1711258-21	VW-02-01-E-17_SED_00-01	T	Percent Solids	45.2	O-04	45.2	J	HT	% BY WT.
1711258	% Solids	1711258-22	VW-02-01-E-17_SED_01-03	T	Percent Solids	30.4	O-04	30.4	J	HT	% BY WT.
1711258	% Solids	1711258-03	WP-02-01-D-17_SED_00-01	T	Percent Solids	35	O-04	35	J	HT	% BY WT.
1711258	% Solids	1711258-04	WP-02-01-D-17_SED_01-03	T	Percent Solids	42.3	O-04	42.3	J	HT	% BY WT.
1711594	% Solids	1711594-01	VN-08-01-B-17_SED_00-01	T	Percent Solids	37.5	O-04	37.5	J	HT	% BY WT.
1711594	% Solids	1711594-02	VN-08-01-B-17_SED_01-03	T	Percent Solids	40.5	O-04	40.5	J	HT	% BY WT.
1711594	% Solids	1711594-03	VN-08-01-B-17_SED_03-05	T	Percent Solids	42.5	O-04	42.5	J	HT	% BY WT.
1711594	% Solids	1711594-04	VN-08-01-B-17_SED_05-07	T	Percent Solids	45.7	O-04	45.7	J	HT	% BY WT.
1711594	% Solids	1711594-05	VN-08-01-B-17_SED_07-10	T	Percent Solids	43.6	O-04	43.6	J	HT	% BY WT.
1711594	% Solids	1711594-06	VN-08-01-B-17_SED_10-13	T	Percent Solids	45.7	O-04	45.7	J	HT	% BY WT.
1711594	% Solids	1711594-07	VN-08-01-B-17_SED_13-18	T	Percent Solids	44.9	O-04	44.9	J	HT	% BY WT.
1711594	% Solids	1711594-08	VN-08-01-B-17_SED_18-21	T	Percent Solids	51.1	O-04	51.1	J	HT	% BY WT.
1711595	% Solids	1711595-01	VN-03-01-B-17_SED_00-01	T	Percent Solids	46.3	O-04	46.3	J	HT	% BY WT.
1711595	% Solids	1711595-02	VN-03-01-B-17_SED_01-03	T	Percent Solids	47.5	O-04	47.5	J	HT	% BY WT.
1711595	% Solids	1711595-03	VN-03-01-B-17_SED_03-05	T	Percent Solids	45.9	O-04	45.9	J	HT	% BY WT.
1711595	% Solids	1711595-04	VN-03-01-B-17_SED_05-07	T	Percent Solids	49.2	O-04	49.2	J	HT	% BY WT.

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SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690, and L1739692

SDG	Analysis Method	Lab Sample ID	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
1711595	% Solids	1711595-05	VN-03-01-B-17_SED_07-10	T	Percent Solids	49	O-04	49	J	HT	% BY WT.
1711595	% Solids	1711595-06	VN-03-01-B-17_SED_10-15	T	Percent Solids	48.2	O-04	48.2	J	HT	% BY WT.
1711595	% Solids	1711595-07	VN-03-01-B-17_SED_15-21	T	Percent Solids	48.3	O-04	48.3	J	HT	% BY WT.
1711595	% Solids	1711595-08	VN-03-01-B-17_SED_21-27	T	Percent Solids	68.9	O-04	68.9	J	HT	% BY WT.
1711597	% Solids	1711597-01	VN-02-04-C-17_SED_00-01	T	Percent Solids	41.9	O-04	41.9	J	HT	% BY WT.
1711597	% Solids	1711597-02	VN-02-04-C-17_SED_01-03	T	Percent Solids	43.7	O-04	43.7	J	HT	% BY WT.
1711597	% Solids	1711597-03	VN-02-04-C-17_SED_03-05	T	Percent Solids	41.5	O-04	41.5	J	HT	% BY WT.
1711597	% Solids	1711597-04	VN-02-04-C-17_SED_05-07	T	Percent Solids	42.5	O-04	42.5	J	HT	% BY WT.
1711597	% Solids	1711597-05	VN-02-04-C-17_SED_07-10	T	Percent Solids	38.5	O-04	38.5	J	HT	% BY WT.
1711597	% Solids	1711597-06	VN-02-04-C-17_SED_10-15	T	Percent Solids	44.6	O-04	44.6	J	HT	% BY WT.
1711597	% Solids	1711597-07	VN-02-04-C-17_SED_15-20	T	Percent Solids	46.7	O-04	46.7	J	HT	% BY WT.
1711597	% Solids	1711597-08	VN-02-04-C-17_SED_20-24	T	Percent Solids	65.8	O-04	65.8	J	HT	% BY WT.
1711597	% Solids	1711597-09	VN-02-04-C-17_SED_20-24-Dup	T	Percent Solids	66	O-04	66	J	HT	% BY WT.
1711597	% Solids	1711597-10	VN-02-04-C-17_SED_24-29	T	Percent Solids	66.6	O-04	66.6	J	HT	% BY WT.
1711601	7474_1631	1711601-01	VN-02-03-E-17_SED_00-01	T	Mercury	0.08		0.08	J	MS-H	NG/G
1711601	% Solids	1711601-01	VN-02-03-E-17_SED_00-01	T	Percent Solids	39.2	O-04	39.2	J	HT	% BY WT.
1711601	% Solids	1711601-02	VN-02-03-E-17_SED_01-03	T	Percent Solids	37.9	O-04	37.9	J	HT	% BY WT.
1711601	% Solids	1711601-03	VN-02-03-E-17_SED_03-05	T	Percent Solids	41	O-04	41	J	HT	% BY WT.
1711601	% Solids	1711601-04	VN-02-03-E-17_SED_05-07	T	Percent Solids	42.6	O-04	42.6	J	HT	% BY WT.
1711601	% Solids	1711601-05	VN-02-03-E-17_SED_07-10	T	Percent Solids	44.1	O-04	44.1	J	HT	% BY WT.
1711601	% Solids	1711601-06	VN-02-03-E-17_SED_10-15	T	Percent Solids	43.7	O-04	43.7	J	HT	% BY WT.
1711601	% Solids	1711601-07	VN-02-03-E-17_SED_15-19	T	Percent Solids	47.4	O-04	47.4	J	HT	% BY WT.
1711601	% Solids	1711601-08	VN-02-03-E-17_SED_19-22	T	Percent Solids	51.5	O-04	51.5	J	HT	% BY WT.
1711601	% Solids	1711601-09	VN-02-03-E-17_SED_22-25	T	Percent Solids	58.9	O-04	58.9	J	HT	% BY WT.
1711601	% Solids	1711601-10	VN-02-03-E-17_SED_25-27	T	Percent Solids	60.4	O-04	60.4	J	HT	% BY WT.
1711602	% Solids	1711602-01	VN-02-01-D-17_SED_00-01	T	Percent Solids	45.6	O-04	45.6	J	HT	% BY WT.
1711602	% Solids	1711602-02	VN-02-01-D-17_SED_01-03	T	Percent Solids	45.8	O-04	45.8	J	HT	% BY WT.
1711602	% Solids	1711602-03	VN-02-01-D-17_SED_03-05	T	Percent Solids	46.2	O-04	46.2	J	HT	% BY WT.
1711602	% Solids	1711602-04	VN-02-01-D-17_SED_05-07	T	Percent Solids	44.5	O-04	44.5	J	HT	% BY WT.
1711602	% Solids	1711602-05	VN-02-01-D-17_SED_07-10	T	Percent Solids	44.2	O-04	44.2	J	HT	% BY WT.

TABLE 2
DATA VALIDATION SUMMARY
2017 INTERTIDAL AND SUBTIDAL SEDIMENT CHARACTERIZATION – REPORT 3
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690, and L1739692

SDG	Analysis Method	Lab Sample ID	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
1711602	% Solids	1711602-06	VN-02-01-D-17_SED_10-15	T	Percent Solids	47.3	O-04	47.3	J	HT	% BY WT.
1711602	% Solids	1711602-07	VN-02-01-D-17_SED_15-17	T	Percent Solids	51.9	O-04	51.9	J	HT	% BY WT.
1711602	% Solids	1711602-08	VN-02-01-D-17_SED_17-22	T	Percent Solids	61	O-04	61	J	HT	% BY WT.
1711775	7474_1631	1711775-01	FF-08-02-J-17_SED_00-01	T	Mercury	701		701	J	MS-L,MS-RPD	NG/G
1711775	% Solids	1711775-01	FF-08-02-J-17_SED_00-01	T	Percent Solids	41.1	O-04	41.1	J	HT	% BY WT.
1711775	% Solids	1711775-02	FF-08-02-J-17_SED_01-03	T	Percent Solids	42.5	O-04	42.5	J	HT	% BY WT.
1711775	% Solids	1711775-03	FF-08-02-J-17_SED_03-05	T	Percent Solids	37.8	O-04	37.8	J	HT	% BY WT.
1711775	% Solids	1711775-04	FF-08-02-J-17_SED_05-07	T	Percent Solids	39.7	O-04	39.7	J	HT	% BY WT.
1711775	% Solids	1711775-05	FF-08-02-J-17_SED_07-10_R1	T	Percent Solids	39.9	O-04	39.9	J	HT	% BY WT.
1711775	% Solids	1711775-06	FF-08-02-J-17_SED_07-10_R2	T	Percent Solids	41.8	O-04	41.8	J	HT	% BY WT.
1711775	% Solids	1711775-07	FF-08-02-J-17_SED_07-10_R3	T	Percent Solids	39.6	O-04	39.6	J	HT	% BY WT.
1711775	% Solids	1711775-08	FF-08-02-J-17_SED_10-13	T	Percent Solids	39.6	O-04	39.6	J	HT	% BY WT.
1711775	% Solids	1711775-09	FF-08-02-J-17_SED_13-16_R1	T	Percent Solids	41.4	O-04	41.4	J	HT	% BY WT.
1711775	% Solids	1711775-10	FF-08-02-J-17_SED_13-16_R2	T	Percent Solids	39.9	O-04	39.9	J	HT	% BY WT.
1711775	% Solids	1711775-11	FF-08-02-J-17_SED_13-16_R3	T	Percent Solids	39	O-04	39	J	HT	% BY WT.
1711775	% Solids	1711775-12	FF-08-02-J-17_SED_16-19	T	Percent Solids	47.3	O-04	47.3	J	HT	% BY WT.
1711775	% Solids	1711775-13	FF-08-02-J-17_SED_16-19-D	T	Percent Solids	47.6	O-04	47.6	J	HT	% BY WT.
1711775	% Solids	1711775-14	FF-08-02-J-17_SED_19-22_R1	T	Percent Solids	46.7	O-04	46.7	J	HT	% BY WT.
1711775	% Solids	1711775-15	FF-08-02-J-17_SED_19-22_R2	T	Percent Solids	47.2	O-04	47.2	J	HT	% BY WT.
1711775	% Solids	1711775-16	FF-08-02-J-17_SED_19-22_R3	T	Percent Solids	48.3	O-04	48.3	J	HT	% BY WT.
1711775	% Solids	1711775-17	FF-08-02-J-17_SED_22-25	T	Percent Solids	57.1	O-04	57.1	J	HT	% BY WT.
1711775	% Solids	1711775-18	FF-08-02-J-17_SED_25-28_R1	T	Percent Solids	64	O-04	64	J	HT	% BY WT.
1711775	% Solids	1711775-19	FF-08-02-J-17_SED_25-28_R2	T	Percent Solids	63	O-04	63	J	HT	% BY WT.
1711775	% Solids	1711775-20	FF-08-02-J-17_SED_25-28_R3	T	Percent Solids	63.1	O-04	63.1	J	HT	% BY WT.
1711775	% Solids	1711775-21	FF-08-02-J-17_SED_28-31	T	Percent Solids	63.6	O-04	63.6	J	HT	% BY WT.
1711775	% Solids	1711775-22	FF-08-02-J-17_SED_31-34	T	Percent Solids	58.8	O-04	58.8	J	HT	% BY WT.
1711775	% Solids	1711775-23	FF-08-02-J-17_SED_34-37	T	Percent Solids	55.6	O-04	55.6	J	HT	% BY WT.
1711775	% Solids	1711775-24	FF-08-02-J-17_SED_37-40	T	Percent Solids	57.1	O-04	57.1	J	HT	% BY WT.
1711775	% Solids	1711775-25	FF-08-02-J-17_SED_40-45	T	Percent Solids	62.9	O-04	62.9	J	HT	% BY WT.
1711775	% Solids	1711775-26	FF-08-02-J-17_SED_45-50	T	Percent Solids	62.7	O-04	62.7	J	HT	% BY WT.

TABLE 2
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SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690, and L1739692

SDG	Analysis Method	Lab Sample ID	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
1711775	% Solids	1711775-27	FF-08-02-J-17_SED_50-55	T	Percent Solids	63.2	O-04	63.2	J	HT	% BY WT.
1711775	% Solids	1711775-28	FF-08-02-J-17_SED_50-55-D	T	Percent Solids	62.7	O-04	62.7	J	HT	% BY WT.
1711775	% Solids	1711775-29	FF-08-02-J-17_SED_55-62	T	Percent Solids	61.2	O-04	61.2	J	HT	% BY WT.
1711776	% Solids	1711776-01	ON-18-02-C-17_SED_00-01	T	Percent Solids	27.1	O-04	27.1	J	HT	% BY WT.
1711776	% Solids	1711776-02	ON-18-02-C-17_SED_01-03	T	Percent Solids	29	O-04	29	J	HT	% BY WT.
1711776	% Solids	1711776-03	ON-18-02-C-17_SED_03-05	T	Percent Solids	27.8	O-04	27.8	J	HT	% BY WT.
1711776	% Solids	1711776-04	ON-18-02-C-17_SED_05-07	T	Percent Solids	27.9	O-04	27.9	J	HT	% BY WT.
1711776	% Solids	1711776-05	ON-18-02-C-17_SED_07-10	T	Percent Solids	27.4	O-04	27.4	J	HT	% BY WT.
1711776	% Solids	1711776-06	ON-18-02-C-17_SED_10-15	T	Percent Solids	33.6	O-04	33.6	J	HT	% BY WT.
1711776	% Solids	1711776-07	ON-18-02-C-17_SED_15-17	T	Percent Solids	33.7	O-04	33.7	J	HT	% BY WT.
1711776	% Solids	1711776-08	ON-18-02-C-17_SED_17-20	T	Percent Solids	33	O-04	33	J	HT	% BY WT.
1711776	% Solids	1711776-09	ON-18-02-C-17_SED_17-20-D	T	Percent Solids	35.6	O-04	35.6	J	HT	% BY WT.
1711776	% Solids	1711776-10	ON-18-02-C-17_SED_20-22	T	Percent Solids	76	O-04	76	J	HT	% BY WT.
1711799	% Solids	1711799-01	ON-18-01-C-17_SED_00-01	T	Percent Solids	38.6	O-04	38.6	J	HT	% BY WT.
1711799	% Solids	1711799-02	ON-18-01-C-17_SED_01-03	T	Percent Solids	41.7	O-04	41.7	J	HT	% BY WT.
1711799	% Solids	1711799-03	ON-18-01-C-17_SED_03-05	T	Percent Solids	45.8	O-04	45.8	J	HT	% BY WT.
1711799	% Solids	1711799-04	ON-18-01-C-17_SED_05-07	T	Percent Solids	42.8	O-04	42.8	J	HT	% BY WT.
1711799	% Solids	1711799-05	ON-18-01-C-17_SED_07-10	T	Percent Solids	40.4	O-04	40.4	J	HT	% BY WT.
1711799	% Solids	1711799-06	ON-18-01-C-17_SED_10-13	T	Percent Solids	40.9	O-04	40.9	J	HT	% BY WT.
1711799	% Solids	1711799-07	ON-18-01-C-17_SED_13-16	T	Percent Solids	42.1	O-04	42.1	J	HT	% BY WT.
1711799	% Solids	1711799-08	ON-18-01-C-17_SED_13-16-D	T	Percent Solids	38.8	O-04	38.8	J	HT	% BY WT.
1711799	% Solids	1711799-09	ON-18-01-C-17_SED_16-18	T	Percent Solids	44.5	O-04	44.5	J	HT	% BY WT.
1711799	% Solids	1711799-10	ON-18-01-C-17_SED_18-20	T	Percent Solids	36	O-04	36	J	HT	% BY WT.
1711799	% Solids	1711799-11	ON-18-01-C-17_SED_20-25	T	Percent Solids	40.6	O-04	40.6	J	HT	% BY WT.
1711799	% Solids	1711799-12	ON-18-01-C-17_SED_25-30	T	Percent Solids	35	O-04	35	J	HT	% BY WT.
1711799	% Solids	1711799-13	ON-18-01-C-17_SED_30-35	T	Percent Solids	35.4	O-04	35.4	J	HT	% BY WT.
1711799	% Solids	1711799-14	ON-18-01-C-17_SED_35-40	T	Percent Solids	36.4	O-04	36.4	J	HT	% BY WT.
1711799	% Solids	1711799-15	ON-18-01-C-17_SED_40-45	T	Percent Solids	36.8	O-04	36.8	J	HT	% BY WT.
1711799	% Solids	1711799-16	ON-18-01-C-17_SED_45-50	T	Percent Solids	38	O-04	38	J	HT	% BY WT.
1711799	% Solids	1711799-17	ON-18-01-C-17_SED_50-55	T	Percent Solids	37.2	O-04	37.2	J	HT	% BY WT.

TABLE 2
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SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690, and L1739692

SDG	Analysis Method	Lab Sample ID	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
1711799	% Solids	1711799-18	ON-18-01-C-17_SED_55-60	T	Percent Solids	37.8	O-04	37.8	J	HT	% BY WT.
1711799	% Solids	1711799-19	ON-18-01-C-17_SED_55-60-D	T	Percent Solids	37.8	O-04	37.8	J	HT	% BY WT.
1711799	% Solids	1711799-20	ON-18-01-C-17_SED_60-63	T	Percent Solids	38.3	O-04	38.3	J	HT	% BY WT.
1711799	% Solids	1711799-21	ON-18-01-C-17_SED_63-67	T	Percent Solids	33.7	O-04	33.7	J	HT	% BY WT.
1711800	% Solids	1711800-01	VE-05-01-E-17_SED_00-01_R1	T	Percent Solids	18	O-04	18	J	HT	% BY WT.
1711800	% Solids	1711800-02	VE-05-01-E-17_SED_00-01_R2	T	Percent Solids	18	O-04	18	J	HT	% BY WT.
1711800	% Solids	1711800-03	VE-05-01-E-17_SED_00-01_R3	T	Percent Solids	17.4	O-04	17.4	J	HT	% BY WT.
1711800	% Solids	1711800-04	VE-05-01-E-17_SED_01-03_R1	T	Percent Solids	15.5	O-04	15.5	J	HT	% BY WT.
1711800	% Solids	1711800-05	VE-05-01-E-17_SED_01-03_R2	T	Percent Solids	15.8	O-04	15.8	J	HT	% BY WT.
1711800	% Solids	1711800-06	VE-05-01-E-17_SED_01-03_R3	T	Percent Solids	15.7	O-04	15.7	J	HT	% BY WT.
1711800	% Solids	1711800-07	VE-05-01-E-17_SED_03-05_R1	T	Percent Solids	16.8	O-04	16.8	J	HT	% BY WT.
1711800	% Solids	1711800-08	VE-05-01-E-17_SED_03-05_R2	T	Percent Solids	16.9	O-04	16.9	J	HT	% BY WT.
1711800	% Solids	1711800-09	VE-05-01-E-17_SED_03-05_R3	T	Percent Solids	16.7	O-04	16.7	J	HT	% BY WT.
1711800	% Solids	1711800-10	VE-05-01-E-17_SED_05-07_R1	T	Percent Solids	18.1	O-04	18.1	J	HT	% BY WT.
1711800	% Solids	1711800-11	VE-05-01-E-17_SED_05-07_R2	T	Percent Solids	18.2	O-04	18.2	J	HT	% BY WT.
1711800	% Solids	1711800-12	VE-05-01-E-17_SED_05-07_R3	T	Percent Solids	18.2	O-04	18.2	J	HT	% BY WT.
1711800	% Solids	1711800-13	VE-05-01-E-17_SED_07-10_R1	T	Percent Solids	16.3	O-04	16.3	J	HT	% BY WT.
1711800	% Solids	1711800-14	VE-05-01-E-17_SED_07-10_R2	T	Percent Solids	16.6	O-04	16.6	J	HT	% BY WT.
1711800	% Solids	1711800-15	VE-05-01-E-17_SED_07-10_R3	T	Percent Solids	16.9	O-04	16.9	J	HT	% BY WT.
1711800	% Solids	1711800-16	VE-05-01-E-17_SED_10-15	T	Percent Solids	15	O-04	15	J	HT	% BY WT.
1711800	% Solids	1711800-17	VE-05-01-E-17_SED_15-20	T	Percent Solids	15.7	O-04	15.7	J	HT	% BY WT.
1711800	% Solids	1711800-18	VE-05-01-E-17_SED_20-25	T	Percent Solids	15.8	O-04	15.8	J	HT	% BY WT.
1711800	% Solids	1711800-19	VE-05-01-E-17_SED_20-25-D	T	Percent Solids	15.3	O-04	15.3	J	HT	% BY WT.
1711800	% Solids	1711800-20	VE-05-01-E-17_SED_25-30	T	Percent Solids	15.2	O-04	15.2	J	HT	% BY WT.
1711800	% Solids	1711800-21	VE-05-01-E-17_SED_30-35	T	Percent Solids	16.1	O-04	16.1	J	HT	% BY WT.
1711800	% Solids	1711800-22	VE-05-01-E-17_SED_35-38	T	Percent Solids	17.8	O-04	17.8	J	HT	% BY WT.
1711800	% Solids	1711800-23	VE-05-01-E-17_SED_38-39_R1	T	Percent Solids	62	O-04	62	J	HT	% BY WT.
1711800	% Solids	1711800-24	VE-05-01-E-17_SED_38-39_R2	T	Percent Solids	60.8	O-04	60.8	J	HT	% BY WT.
1711800	% Solids	1711800-25	VE-05-01-E-17_SED_38-39_R3	T	Percent Solids	63	O-04	63	J	HT	% BY WT.
1711800	% Solids	1711800-26	VE-05-01-E-17_SED_39-40_R1	T	Percent Solids	30.8	O-04	30.8	J	HT	% BY WT.

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SDG	Analysis Method	Lab Sample ID	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
1711800	% Solids	1711800-27	VE-05-01-E-17_SED_39-40_R2	T	Percent Solids	31.3	O-04	31.3	J	HT	% BY WT.
1711800	% Solids	1711800-28	VE-05-01-E-17_SED_39-40_R3	T	Percent Solids	34.5	O-04	34.5	J	HT	% BY WT.
1711800	% Solids	1711800-29	VE-05-01-E-17_SED_40-42_R1	T	Percent Solids	27.8	O-04	27.8	J	HT	% BY WT.
1711800	% Solids	1711800-30	VE-05-01-E-17_SED_40-42_R2	T	Percent Solids	28.1	O-04	28.1	J	HT	% BY WT.
1711800	% Solids	1711800-31	VE-05-01-E-17_SED_40-42_R3	T	Percent Solids	29.7	O-04	29.7	J	HT	% BY WT.
1711800	% Solids	1711800-32	VE-05-01-E-17_SED_42-43	T	Percent Solids	65.3	O-04	65.3	J	HT	% BY WT.
1711800	% Solids	1711800-33	VE-05-01-E-17_SED_43-44_R1	T	Percent Solids	43.2	O-04	43.2	J	HT	% BY WT.
1711800	% Solids	1711800-34	VE-05-01-E-17_SED_43-44_R2	T	Percent Solids	42.9	O-04	42.9	J	HT	% BY WT.
1711800	% Solids	1711800-35	VE-05-01-E-17_SED_43-44_R3	T	Percent Solids	42.7	O-04	42.7	J	HT	% BY WT.
1711800	% Solids	1711800-36	VE-05-01-E-17_SED_44-45	T	Percent Solids	70.9	O-04	70.9	J	HT	% BY WT.
1711800	% Solids	1711800-37	VE-05-01-E-17_SED_45-46_R1	T	Percent Solids	41.9	O-04	41.9	J	HT	% BY WT.
1711800	% Solids	1711800-38	VE-05-01-E-17_SED_45-46_R2	T	Percent Solids	42.6	O-04	42.6	J	HT	% BY WT.
1711800	% Solids	1711800-39	VE-05-01-E-17_SED_45-46_R3	T	Percent Solids	42.9	O-04	42.9	J	HT	% BY WT.
1711800	% Solids	1711800-40	VE-05-01-E-17_SED_46-48	T	Percent Solids	68.7	O-04	68.7	J	HT	% BY WT.
1711800	% Solids	1711800-42	VE-05-01-E-17_SED_46-48-D	T	Percent Solids	67.4	O-04	67.4	J	HT	% BY WT.
1711800	% Solids	1711800-43	VE-05-01-E-17_SED_48-49_R1	T	Percent Solids	54.6	O-04	54.6	J	HT	% BY WT.
1711800	% Solids	1711800-44	VE-05-01-E-17_SED_48-49_R2	T	Percent Solids	53.5	O-04	53.5	J	HT	% BY WT.
1711800	% Solids	1711800-45	VE-05-01-E-17_SED_48-49_R3	T	Percent Solids	53.2	O-04	53.2	J	HT	% BY WT.
1711800	% Solids	1711800-46	VE-05-01-E-17_SED_49-52	T	Percent Solids	63	O-04	63	J	HT	% BY WT.
1711800	% Solids	1711800-47	VE-05-01-E-17_SED_52-54_R1	T	Percent Solids	46.2	O-04	46.2	J	HT	% BY WT.
1711800	% Solids	1711800-48	VE-05-01-E-17_SED_52-54_R2	T	Percent Solids	45.6	O-04	45.6	J	HT	% BY WT.
1711800	% Solids	1711800-49	VE-05-01-E-17_SED_52-54_R3	T	Percent Solids	45.2	O-04	45.2	J	HT	% BY WT.
1711800	% Solids	1711800-50	VE-05-01-E-17_SED_54-55_R1	T	Percent Solids	46.9	O-04	46.9	J	HT	% BY WT.
1711800	% Solids	1711800-51	VE-05-01-E-17_SED_54-55_R2	T	Percent Solids	46.5	O-04	46.5	J	HT	% BY WT.
1711800	% Solids	1711800-52	VE-05-01-E-17_SED_54-55_R3	T	Percent Solids	46.8	O-04	46.8	J	HT	% BY WT.
1711800	% Solids	1711800-53	VE-05-01-E-17_SED_55-57	T	Percent Solids	59.9	O-04	59.9	J	HT	% BY WT.
1711800	% Solids	1711800-54	VE-05-01-E-17_SED_57-58_R1	T	Percent Solids	36.9	O-04	36.9	J	HT	% BY WT.
1711800	% Solids	1711800-55	VE-05-01-E-17_SED_57-58_R2	T	Percent Solids	38.6	O-04	38.6	J	HT	% BY WT.
1711800	% Solids	1711800-56	VE-05-01-E-17_SED_57-58_R3	T	Percent Solids	38.1	O-04	38.1	J	HT	% BY WT.
1711800	% Solids	1711800-57	VE-05-01-E-17_SED_58-59	T	Percent Solids	54.1	O-04	54.1	J	HT	% BY WT.

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SDG	Analysis Method	Lab Sample ID	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
1711800	% Solids	1711800-61	VE-05-01-E-17_SED_59-60-D_R1	T	Percent Solids	27.4	O-04	27.4	J	HT	% BY WT.
1711800	% Solids	1711800-62	VE-05-01-E-17_SED_59-60-D_R2	T	Percent Solids	28.1	O-04	28.1	J	HT	% BY WT.
1711800	% Solids	1711800-63	VE-05-01-E-17_SED_59-60-D_R3	T	Percent Solids	28.4	O-04	28.4	J	HT	% BY WT.
1711800	% Solids	1711800-58	VE-05-01-E-17_SED_59-60_R1	T	Percent Solids	27.7	O-04	27.7	J	HT	% BY WT.
1711800	% Solids	1711800-59	VE-05-01-E-17_SED_59-60_R2	T	Percent Solids	28.8	O-04	28.8	J	HT	% BY WT.
1711800	% Solids	1711800-60	VE-05-01-E-17_SED_59-60_R3	T	Percent Solids	29.7	O-04	29.7	J	HT	% BY WT.
1711800	% Solids	1711800-64	VE-05-01-E-17_SED_60-61_R1	T	Percent Solids	41.9	O-04	41.9	J	HT	% BY WT.
1711800	% Solids	1711800-65	VE-05-01-E-17_SED_60-61_R2	T	Percent Solids	42.1	O-04	42.1	J	HT	% BY WT.
1711800	% Solids	1711800-66	VE-05-01-E-17_SED_60-61_R3	T	Percent Solids	41.9	O-04	41.9	J	HT	% BY WT.
1711800	% Solids	1711800-67	VE-05-01-E-17_SED_61-62_R1	T	Percent Solids	30.1	O-04	30.1	J	HT	% BY WT.
1711800	% Solids	1711800-68	VE-05-01-E-17_SED_61-62_R2	T	Percent Solids	30.2	O-04	30.2	J	HT	% BY WT.
1711800	% Solids	1711800-69	VE-05-01-E-17_SED_61-62_R3	T	Percent Solids	29.1	O-04	29.1	J	HT	% BY WT.
1711800	% Solids	1711800-70	VE-05-01-E-17_SED_62-64_R1	T	Percent Solids	42.3	O-04	42.3	J	HT	% BY WT.
1711800	% Solids	1711800-71	VE-05-01-E-17_SED_62-64_R2	T	Percent Solids	41.8	O-04	41.8	J	HT	% BY WT.
1711800	% Solids	1711800-72	VE-05-01-E-17_SED_62-64_R3	T	Percent Solids	42.4	O-04	42.4	J	HT	% BY WT.
1712042	% Solids	1712042-01	BU-10-02-C-17_SED_00-01_R1	T	Percent Solids	18.2	O-04	18.2	J	HT	% BY WT.
1712042	% Solids	1712042-02	BU-10-02-C-17_SED_00-01_R2	T	Percent Solids	17.8	O-04	17.8	J	HT	% BY WT.
1712042	% Solids	1712042-03	BU-10-02-C-17_SED_00-01_R3	T	Percent Solids	17.9	O-04	17.9	J	HT	% BY WT.
1712042	% Solids	1712042-04	BU-10-02-C-17_SED_01-03_R1	T	Percent Solids	24.7	O-04	24.7	J	HT	% BY WT.
1712042	% Solids	1712042-05	BU-10-02-C-17_SED_01-03_R2	T	Percent Solids	25.5	O-04	25.5	J	HT	% BY WT.
1712042	% Solids	1712042-06	BU-10-02-C-17_SED_01-03_R3	T	Percent Solids	25.6	O-04	25.6	J	HT	% BY WT.
1712042	% Solids	1712042-07	BU-10-02-C-17_SED_03-04	T	Percent Solids	36.5	O-04	36.5	J	HT	% BY WT.
1712042	% Solids	1712042-08	BU-10-02-C-17_SED_04-06_R1	T	Percent Solids	34.2	O-04	34.2	J	HT	% BY WT.
1712042	% Solids	1712042-09	BU-10-02-C-17_SED_04-06_R2	T	Percent Solids	33.7	O-04	33.7	J	HT	% BY WT.
1712042	% Solids	1712042-10	BU-10-02-C-17_SED_04-06_R3	T	Percent Solids	34.6	O-04	34.6	J	HT	% BY WT.
1712042	% Solids	1712042-11	BU-10-02-C-17_SED_06-09	T	Percent Solids	46.9	O-04	46.9	J	HT	% BY WT.
1712042	% Solids	1712042-12	BU-10-02-C-17_SED_09-11	T	Percent Solids	47.8	O-04	47.8	J	HT	% BY WT.
1712042	% Solids	1712042-13	BU-10-02-C-17_SED_11-12_R1	T	Percent Solids	38.3	O-04	38.3	J	HT	% BY WT.
1712042	% Solids	1712042-14	BU-10-02-C-17_SED_11-12_R2	T	Percent Solids	38.5	O-04	38.5	J	HT	% BY WT.
1712042	% Solids	1712042-15	BU-10-02-C-17_SED_11-12_R3	T	Percent Solids	38.5	O-04	38.5	J	HT	% BY WT.

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SDG	Analysis Method	Lab Sample ID	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
1712042	% Solids	1712042-16	BU-10-02-C-17_SED_12-13	T	Percent Solids	73.6	O-04	73.6	J	HT	% BY WT.
1712042	% Solids	1712042-17	BU-10-02-C-17_SED_12-13-D	T	Percent Solids	73.7	O-04	73.7	J	HT	% BY WT.
1712042	% Solids	1712042-18	BU-10-02-C-17_SED_13-14	T	Percent Solids	66.7	O-04	66.7	J	HT	% BY WT.
1712042	% Solids	1712042-19	BU-10-02-C-17_SED_14-17	T	Percent Solids	49.7	O-04	49.7	J	HT	% BY WT.
1712042	% Solids	1712042-20	BU-10-02-C-17_SED_17-20_R1	T	Percent Solids	48.6	O-04	48.6	J	HT	% BY WT.
1712042	% Solids	1712042-21	BU-10-02-C-17_SED_17-20_R2	T	Percent Solids	49.6	O-04	49.6	J	HT	% BY WT.
1712042	% Solids	1712042-22	BU-10-02-C-17_SED_17-20_R3	T	Percent Solids	48.2	O-04	48.2	J	HT	% BY WT.
1712042	% Solids	1712042-23	BU-10-02-C-17_SED_20-21	T	Percent Solids	49.2	O-04	49.2	J	HT	% BY WT.
1712042	% Solids	1712042-24	BU-10-02-C-17_SED_21-25_R1	T	Percent Solids	43.4	O-04	43.4	J	HT	% BY WT.
1712042	% Solids	1712042-25	BU-10-02-C-17_SED_21-25_R2	T	Percent Solids	43.2	O-04	43.2	J	HT	% BY WT.
1712042	% Solids	1712042-26	BU-10-02-C-17_SED_21-25_R3	T	Percent Solids	44.3	O-04	44.3	J	HT	% BY WT.
1712042	% Solids	1712042-27	BU-10-02-C-17_SED_25-31_R1	T	Percent Solids	48.4	O-04	48.4	J	HT	% BY WT.
1712042	% Solids	1712042-28	BU-10-02-C-17_SED_25-31_R2	T	Percent Solids	44.9	O-04	44.9	J	HT	% BY WT.
1712042	% Solids	1712042-29	BU-10-02-C-17_SED_25-31_R3	T	Percent Solids	48.4	O-04	48.4	J	HT	% BY WT.
1712042	% Solids	1712042-30	BU-10-02-C-17_SED_31-35	T	Percent Solids	73.5	O-04	73.5	J	HT	% BY WT.
1712042	% Solids	1712042-31	BU-10-02-C-17_SED_35-38_R1	T	Percent Solids	37.4	O-04	37.4	J	HT	% BY WT.
1712042	% Solids	1712042-32	BU-10-02-C-17_SED_35-38_R2	T	Percent Solids	34.3	O-04	34.3	J	HT	% BY WT.
1712042	% Solids	1712042-33	BU-10-02-C-17_SED_35-38_R3	T	Percent Solids	36.9	O-04	36.9	J	HT	% BY WT.
1712042	% Solids	1712042-34	BU-10-02-C-17_SED_38-39	T	Percent Solids	38.5	O-04	38.5	J	HT	% BY WT.
1712042	% Solids	1712042-35	BU-10-02-C-17_SED_38-39-D	T	Percent Solids	38.1	O-04	38.1	J	HT	% BY WT.
1712042	% Solids	1712042-36	BU-10-02-C-17_SED_39-42	T	Percent Solids	38	O-04	38	J	HT	% BY WT.
1712042	% Solids	1712042-37	BU-10-02-C-17_SED_42-44_R1	T	Percent Solids	39	O-04	39	J	HT	% BY WT.
1712042	% Solids	1712042-38	BU-10-02-C-17_SED_42-44_R2	T	Percent Solids	39	O-04	39	J	HT	% BY WT.
1712042	% Solids	1712042-39	BU-10-02-C-17_SED_42-44_R3	T	Percent Solids	39.3	O-04	39.3	J	HT	% BY WT.
1712042	% Solids	1712042-40	BU-10-02-C-17_SED_44-49_R1	T	Percent Solids	31.6	O-04	31.6	J	HT	% BY WT.
1712042	% Solids	1712042-41	BU-10-02-C-17_SED_44-49_R2	T	Percent Solids	30.7	O-04	30.7	J	HT	% BY WT.
1712042	% Solids	1712042-42	BU-10-02-C-17_SED_44-49_R3	T	Percent Solids	30.8	O-04	30.8	J	HT	% BY WT.
1712042	% Solids	1712042-43	BU-10-02-C-17_SED_49-52	T	Percent Solids	36.9	O-04	36.9	J	HT	% BY WT.
1712042	% Solids	1712042-44	BU-10-02-C-17_SED_52-54	T	Percent Solids	39.1	O-04	39.1	J	HT	% BY WT.
1712042	7474_1631	1712042-45	BU-10-02-C-17_SED_54-55_R1	T	Mercury	1460		1,460	J	MS-L	NG/G

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SDG	Analysis Method	Lab Sample ID	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
1712042	% Solids	1712042-45	BU-10-02-C-17_SED_54-55_R1	T	Percent Solids	26.2	O-04	26.2	J	HT	% BY WT.
1712042	7474_1631	1712042-46	BU-10-02-C-17_SED_54-55_R2	T	Mercury	1560		1,560	J	MS-L	NG/G
1712042	% Solids	1712042-46	BU-10-02-C-17_SED_54-55_R2	T	Percent Solids	26.5	O-04	26.5	J	HT	% BY WT.
1712042	7474_1631	1712042-47	BU-10-02-C-17_SED_54-55_R3	T	Mercury	1520		1,520	J	MS-L	NG/G
1712042	% Solids	1712042-47	BU-10-02-C-17_SED_54-55_R3	T	Percent Solids	25	O-04	25	J	HT	% BY WT.
1712043	% Solids	1712043-01	VN-05-01-D-17_SED_00-01	T	Percent Solids	39.5	O-04	39.5	J	HT	% BY WT.
1712043	% Solids	1712043-02	VN-05-01-D-17_SED_01-02	T	Percent Solids	47.4	O-04	47.4	J	HT	% BY WT.
1712043	% Solids	1712043-03	VN-05-01-D-17_SED_02-03	T	Percent Solids	53.7	O-04	53.7	J	HT	% BY WT.
1712043	% Solids	1712043-04	VN-05-01-D-17_SED_03-05	T	Percent Solids	54	O-04	54	J	HT	% BY WT.
1712043	% Solids	1712043-05	VN-05-01-D-17_SED_05-07	T	Percent Solids	45.1	O-04	45.1	J	HT	% BY WT.
1712043	% Solids	1712043-06	VN-05-01-D-17_SED_07-10	T	Percent Solids	58.8	O-04	58.8	J	HT	% BY WT.
1712043	% Solids	1712043-07	VN-05-01-D-17_SED_10-11	T	Percent Solids	57	O-04	57	J	HT	% BY WT.
1712043	% Solids	1712043-08	VN-05-01-D-17_SED_11-15	T	Percent Solids	56.6	O-04	56.6	J	HT	% BY WT.
1712043	7474_1631	1712043-09RE1	VN-05-01-D-17_SED_15-17	T	Mercury	42.9		42.9	J	FD	NG/G
1712043	% Solids	1712043-09	VN-05-01-D-17_SED_15-17	T	Percent Solids	55.2	O-04	55.2	J	HT	% BY WT.
1712043	7474_1631	1712043-10RE1	VN-05-01-D-17_SED_15-17-D	T	Mercury	74		74	J	FD	NG/G
1712043	% Solids	1712043-10	VN-05-01-D-17_SED_15-17-D	T	Percent Solids	54.3	O-04	54.3	J	HT	% BY WT.
1712043	% Solids	1712043-11	VN-05-01-D-17_SED_17-20	T	Percent Solids	52.9	O-04	52.9	J	HT	% BY WT.
1712043	% Solids	1712043-12	VN-05-01-D-17_SED_20-25	T	Percent Solids	55.1	O-04	55.1	J	HT	% BY WT.
1712043	% Solids	1712043-13	VN-05-01-D-17_SED_25-30	T	Percent Solids	55.4	O-04	55.4	J	HT	% BY WT.
1712043	% Solids	1712043-14	VN-05-01-D-17_SED_30-35	T	Percent Solids	56.5	O-04	56.5	J	HT	% BY WT.
1712043	% Solids	1712043-15	VN-05-01-D-17_SED_35-40	T	Percent Solids	55.6	O-04	55.6	J	HT	% BY WT.
1712043	% Solids	1712043-16	VN-05-01-D-17_SED_40-45	T	Percent Solids	64	O-04	64	J	HT	% BY WT.
1712043	% Solids	1712043-17	VN-05-01-D-17_SED_45-50	T	Percent Solids	66	O-04	66	J	HT	% BY WT.
1712043	% Solids	1712043-18	VN-05-01-D-17_SED_50-52	T	Percent Solids	65.8	O-04	65.8	J	HT	% BY WT.
1712043	% Solids	1712043-19	VN-05-01-D-17_SED_52-60	T	Percent Solids	61.3	O-04	61.3	J	HT	% BY WT.
1712043	% Solids	1712043-20	VN-05-01-D-17_SED_60-65	T	Percent Solids	58.2	O-04	58.2	J	HT	% BY WT.
1712043	% Solids	1712043-21	VN-05-01-D-17_SED_60-65-D	T	Percent Solids	58.4	O-04	58.4	J	HT	% BY WT.
1712043	% Solids	1712043-22	VN-05-01-D-17_SED_65-70	T	Percent Solids	56.9	O-04	56.9	J	HT	% BY WT.
1712043	% Solids	1712043-23	VN-05-01-D-17_SED_70-75	T	Percent Solids	60.2	O-04	60.2	J	HT	% BY WT.

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SDGs 1708709, 1709528, 1709561, 1709575, 1709576, 1709577, 1709579, 1709581, 1710899, 1711005, 1711043, 1711044, 1711045, 1711048, 1711049, 1711051, 1711052, 1711053, 1711054, 1711055, 1711072, 1711074, 1711075, 1711076, 1711078, 1711079, 1711080, 1711081, 1711082, L1729881, L1732496, L1733613, L1733614, L1733615, L1733616, L1733617, L1733622, L1739125, L1739533, L1739534, L1739535, L1739538, L1739539, L1739574, L1739575, L1739576, L1739654, L1739655, L1739657, L1739658, L1739659, L1739660, L1739661, L1739662, L1739686, L1739687, L1739688, L1739689, L1739690, and L1739692

SDG	Analysis Method	Lab Sample ID	Field Sample Id	Fraction	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Validation Reason Code	Result Units
1712048	% Solids	1712048-01	VW-02-01-B-17_SED_30-35	T	Percent Solids	55	O-04	55	J	HT	% BY WT.
1712048	% Solids	1712048-02	VW-02-01-B-17_SED_35-40	T	Percent Solids	55.6	O-04	55.6	J	HT	% BY WT.
1712048	% Solids	1712048-03	VW-02-01-B-17_SED_40-45	T	Percent Solids	55.5	O-04	55.5	J	HT	% BY WT.
1712048	% Solids	1712048-04	VW-02-01-B-17_SED_45-50	T	Percent Solids	55.5	O-04	55.5	J	HT	% BY WT.
1712048	% Solids	1712048-05	VW-02-01-B-17_SED_50-55	T	Percent Solids	55.9	O-04	55.9	J	HT	% BY WT.
1712048	% Solids	1712048-06	VW-02-01-B-17_SED_55-60	T	Percent Solids	59.3	O-04	59.3	J	HT	% BY WT.
1712048	% Solids	1712048-07	VW-02-01-B-17_SED_60-65	T	Percent Solids	58.9	O-04	58.9	J	HT	% BY WT.
1712048	% Solids	1712048-08	VW-02-01-B-17_SED_65-70	T	Percent Solids	58.7	O-04	58.7	J	HT	% BY WT.
1712048	% Solids	1712048-09	VW-02-01-B-17_SED_70-75	T	Percent Solids	56.8	O-04	56.8	J	HT	% BY WT.
1712048	% Solids	1712048-10	VW-02-01-B-17_SED_70-75-D	T	Percent Solids	56.3	O-04	56.3	J	HT	% BY WT.
1712048	% Solids	1712048-11	VW-02-01-B-17_SED_75-80	T	Percent Solids	57.6	O-04	57.6	J	HT	% BY WT.

Units
% = Percent
NG/G = Nanograms per gram

Validation Qualifier:
J = Value is estimated

Validatio Reason Codes:
HT = Holding time exceeded
LD = Lab Duplicate limit exceeded
FD = Field Duplicate limit exceeded
LR = Lab Replicate RSD limit exceeded
MS-L = MS and/or MSD recovery low
MS-H = MS and/or MSD recovery high
MS-RPD = MS/MSD RPD limit exceeded
TEMP = Sample temperature upon receipt exceeded range

TABLE 3
DATA VALIDATION SUMMARY
2017 INTERTIDAL AND SUBTIDAL SEDIMENT CHARACTERIZATION – REPORT 3
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

			Analysis Method				EPA 1631		EPA 1630		LLOYD KAHN	
			Parameter		% Solids		Mercury		Methyl Mercury		TOC	
			Unit		PERCENT		NG/G		NG/G		PERCENT	
			Fraction		Total		Total		Total		Total	
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
L1741132	VN-01-01-E	11/06/17	VN-01-01-E-17_SED_00-01	FS	39.1						5.11	
L1741132	VN-01-01-E	11/06/17	VN-01-01-E-17_SED_01-03	FS	44						5.62	
L1741132	VN-01-01-E	11/06/17	VN-01-01-E-17_SED_03-05	FS	45.3						5.07	
L1741132	VN-01-01-E	11/06/17	VN-01-01-E-17_SED_05-07	FS	41.5						5.925	J
L1741132	VN-01-01-E	11/06/17	VN-01-01-E-17_SED_07-10	FS	47.3						6.62	
L1741132	VN-01-01-E	11/06/17	VN-01-01-E-17_SED_10-15	FS	47.9						8.74	
L1741132	VN-01-01-E	11/06/17	VN-01-01-E-17_SED_15-17	FS	44.3						7.71	
L1741132	VN-01-01-E	11/06/17	VN-01-01-E-17_SED_17-18	FS	49.2						4.065	J
L1741132	VN-01-01-E	11/06/17	VN-01-01-E-17_SED_18-20	FS	54.3						4.31	J
L1741132	VN-01-01-E	11/06/17	VN-01-01-E-17_SED_20-23	FS	45						5.28	
L1741135	BU-02-01-D	10/05/17	BU-02-01-D-17_SED_00-01	FS	35						8.595	J
L1741135	BU-02-01-D	10/05/17	BU-02-01-D-17_SED_01-03	FS	21.8						4.935	
L1741135	BU-02-01-D	10/05/17	BU-02-01-D-17_SED_03-05	FS	51.9						7.815	
L1741135	BU-02-01-D	10/05/17	BU-02-01-D-17_SED_05-07	FS	52.1						8.13	
L1741135	BU-02-01-D	10/05/17	BU-02-01-D-17_SED_07-10	FS	46.2						4.085	
L1741135	BU-02-01-D	10/05/17	BU-02-01-D-17_SED_10-15	FS	34						6.87	
L1741135	BU-02-01-D	10/05/17	BU-02-01-D-17_SED_15-20	FS	39.3						6.13	
L1741135	BU-02-01-D	10/05/17	BU-02-01-D-17_SED_20-30	FS	48.9						6.47	
L1741136	BU-08-01-A	10/05/17	BU-08-01-A-17_SED_00-01	FS	45.8						4.855	J
L1741136	BU-08-01-A	10/05/17	BU-08-01-A-17_SED_01-03	FS	44.6						4.79	
L1741136	BU-08-01-A	10/05/17	BU-08-01-A-17_SED_03-05	FS	50.7						5.73	
L1741136	BU-08-01-A	10/05/17	BU-08-01-A-17_SED_05-07	FS	48						6.695	
L1741136	BU-08-01-A	10/05/17	BU-08-01-A-17_SED_07-10	FS	49.3						6.15	
L1741136	BU-08-01-A	10/05/17	BU-08-01-A-17_SED_10-15	FS	52.5						4.295	

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PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

				Analysis Method		EPA 1631		EPA 1630		LLOYD KAHN	
				Parameter	% Solids	Mercury		Methyl Mercury		TOC	
				Unit	PERCENT	NG/G		NG/G		PERCENT	
				Fraction	Total	Total		Total		Total	
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
L1741136	BU-08-01-A	10/05/17	BU-08-01-A-17_SED_15-20	FS	64.9						2.59	
L1741137	FF-04-01-D	10/04/17	FF-04-01-D-17_SED_00-01	FS	10.2	J					41.1	
L1741137	FF-04-01-D	10/04/17	FF-04-01-D-17_SED_01-03	FS	10.9						40.6	
L1741137	FF-04-01-D	10/04/17	FF-04-01-D-17_SED_03-05	FS	12.6						38.25	
L1741137	FF-04-01-D	10/04/17	FF-04-01-D-17_SED_05-07	FS	19.4						33.95	
L1741137	FF-04-01-D	10/04/17	FF-04-01-D-17_SED_07-10	FS	22.6						16.75	J
L1741137	FF-04-01-D	10/04/17	FF-04-01-D-17_SED_10-15	FS	28						15.55	
L1741137	FF-04-01-D	10/04/17	FF-04-01-D-17_SED_15-20	FS	30						7.735	
L1741137	FF-04-01-D	10/04/17	FF-04-01-D-17_SED_20-30	FS	25.6						11.35	
L1741137	FF-04-01-D	10/04/17	FF-04-01-D-17_SED_30-40	FS	48						8.62	
L1741137	FF-04-01-D	10/04/17	FF-04-01-D-17_SED_40-50	FS	64.1						1.325	
L1741138	FF-08-01-B	10/04/17	FF-08-01-B-17_SED_00-01	FS	21						36.75	
L1741138	FF-08-01-B	10/04/17	FF-08-01-B-17_SED_01-03	FS	14.7						33.25	
L1741138	FF-08-01-B	10/04/17	FF-08-01-B-17_SED_03-05	FS	14.2						24.85	
L1741138	FF-08-01-B	10/04/17	FF-08-01-B-17_SED_05-07	FS	18.8						25.1	
L1741138	FF-08-01-B	10/04/17	FF-08-01-B-17_SED_07-10	FS	18.5						17.95	
L1741138	FF-08-01-B	10/04/17	FF-08-01-B-17_SED_10-15	FS	31.1						10.75	
L1741138	FF-08-01-B	10/04/17	FF-08-01-B-17_SED_15-20	FS	19						22.15	J
L1741138	FF-08-01-B	10/04/17	FF-08-01-B-17_SED_20-30	FS	29.7						5.745	
L1741138	FF-08-01-B	10/04/17	FF-08-01-B-17_SED_30-40	FS	25						9.5	
L1741138	FF-08-01-B	10/04/17	FF-08-01-B-17_SED_40-50	FS	38.6						5.605	
L1741138	FF-08-01-B	10/04/17	FF-08-01-B-17_SED_50-60	FS	71.8						1.605	
L1741138	FF-08-01-B	10/04/17	FF-08-01-B-17_SED_60-70	FS	80.5						1.21	
L1741139	MM-04-01-C	10/05/17	MM-04-01-C-17_SED_00-01	FS	33.9						7.15	
L1741139	MM-04-01-C	10/05/17	MM-04-01-C-17_SED_01-03	FS	35.5						7.63	

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TABLE 3

DATA VALIDATION SUMMARY

2017 INTERTIDAL AND SUBTIDAL SEDIMENT CHARACTERIZATION – REPORT 3

PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

			Analysis Method			EPA 1631		EPA 1630		LLOYD KAHN			
			Parameter		% Solids	Mercury		Methyl Mercury		TOC			
			Unit		PERCENT	NG/G		NG/G		PERCENT			
			Fraction		Total	Total		Total		Total			
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
L1741139	MM-04-01-C	10/05/17	MM-04-01-C-17_SED_03-05	FS	36.7						7.67	
L1741139	MM-04-01-C	10/05/17	MM-04-01-C-17_SED_05-07	FS	36.8						6.345	
L1741139	MM-04-01-C	10/05/17	MM-04-01-C-17_SED_07-10	FS	45.6						6.985	
L1741139	MM-04-01-C	10/05/17	MM-04-01-C-17_SED_10-15	FS	36						8.495	
L1741139	MM-04-01-C	10/05/17	MM-04-01-C-17_SED_15-20	FS	45.8						5.885	
L1741139	MM-04-01-C	10/05/17	MM-04-01-C-17_SED_20-30	FS	56.7						3.81	
L1741140	WP-02-01-B	10/05/17	WP-02-01-B-17_SED_00-01	FS	38.1						5.58	
L1741140	WP-02-01-B	10/05/17	WP-02-01-B-17_SED_01-03	FS	37.1						6.195	
L1741140	WP-02-01-B	10/05/17	WP-02-01-B-17_SED_03-05	FS	41.3						7.715	
L1741140	WP-02-01-B	10/05/17	WP-02-01-B-17_SED_05-07	FS	39.1						9.16	
L1741140	WP-02-01-B	10/05/17	WP-02-01-B-17_SED_07-10	FS	41.1						7.475	
L1741140	WP-02-01-B	10/05/17	WP-02-01-B-17_SED_10-15	FS	66.8						4.755	
L1741140	WP-02-01-B	10/05/17	WP-02-01-B-17_SED_15-20	FS	58.6						2.935	
L1741140	WP-02-01-B	10/05/17	WP-02-01-B-17_SED_20-30	FS	49.2						2.285	
L1741141	WP-06-02-C	10/05/17	WP-06-02-C-17_SED_00-01	FS	24.4						8.32	
L1741141	WP-06-02-C	10/05/17	WP-06-02-C-17_SED_01-03	FS	34.6						7.625	
L1741141	WP-06-02-C	10/05/17	WP-06-02-C-17_SED_03-05	FS	29.8						7.41	
L1741141	WP-06-02-C	10/05/17	WP-06-02-C-17_SED_05-07	FS	32.2						7.05	
L1741141	WP-06-02-C	10/05/17	WP-06-02-C-17_SED_07-10	FS	30.3						7.28	
L1741141	WP-06-02-C	10/05/17	WP-06-02-C-17_SED_10-15	FS	36.7						7.005	
L1741141	WP-06-02-C	10/05/17	WP-06-02-C-17_SED_15-20	FS	29						9.655	
L1741141	WP-06-02-C	10/05/17	WP-06-02-C-17_SED_20-30	FS	54.7						5.415	
L1741141	WP-06-02-C	10/05/17	WP-06-02-C-17_SED_30-40	FS	47.2						3.545	
L1741141	WP-06-02-C	10/05/17	WP-06-02-C-17_SED_40-50	FS	46.4						3.29	
L1741141	WP-06-02-C	10/05/17	WP-06-02-C-17_SED_50-60	FS	65.9						1.73	

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			Analysis Method				EPA 1631		EPA 1630		LLOYD KAHN	
			Parameter		% Solids		Mercury		Methyl Mercury		TOC	
			Unit		PERCENT		NG/G		NG/G		PERCENT	
			Fraction		Total		Total		Total		Total	
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
L1742392	BH-03-01-A	11/13/17	BH-03-01-A-17_SED_00-01	FS	52.4						2.325	
L1742392	BH-03-01-A	11/13/17	BH-03-01-A-17_SED_01-03	FS	54.7						2.48	
L1742392	BH-03-01-A	11/13/17	BH-03-01-A-17_SED_03-05	FS	52						3.89	
L1742392	BH-03-01-A	11/13/17	BH-03-01-A-17_SED_05-07	FS	53.7						2.475	
L1742392	BH-03-01-A	11/13/17	BH-03-01-A-17_SED_07-10	FS	51.5						3.465	
L1742392	BH-03-01-A	11/13/17	BH-03-01-A-17_SED_10-13	FS	56.2						2.965	
L1742392	BH-03-01-A	11/13/17	BH-03-01-A-17_SED_13-17	FS	53.9						2.93	
L1742392	BH-03-01-A	11/13/17	BH-03-01-A-17_SED_17-20	FS	47.1						4.485	
L1742392	BH-03-01-A	11/13/17	BH-03-01-A-17_SED_20-25	FS	48.1						4.845	J
L1742392	BH-03-01-A	11/13/17	BH-03-01-A-17_SED_25-30	FS	49.6						3.17	J
L1742392	BH-03-01-A	11/13/17	BH-03-01-A-17_SED_30-35	FS	58.1						2.61	
L1742392	BH-03-01-A	11/13/17	BH-03-01-A-17_SED_35-39	FS	53.6						2.72	J
L1742392	BH-03-01-A	11/13/17	BH-03-01-A-17_SED_39-43	FS	65.2						2.61	J
L1742393	FF-07-01-E	11/15/17	FF-07-01-E-17_SED_00-01	FS	53.5						2.405	J
L1742393	FF-07-01-E	11/15/17	FF-07-01-E-17_SED_01-03	FS	58.7						2.005	J
L1742393	FF-07-01-E	11/15/17	FF-07-01-E-17_SED_03-05	FS	62.1						1.93	J
L1742393	FF-07-01-E	11/15/17	FF-07-01-E-17_SED_05-07	FS	61.7						1.95	J
L1742393	FF-07-01-E	11/15/17	FF-07-01-E-17_SED_07-10	FS	61.6						1.725	J
L1742393	FF-07-01-E	11/15/17	FF-07-01-E-17_SED_10-15	FS	74.4						1.71	J
L1742393	FF-07-01-E	11/15/17	FF-07-01-E-17_SED_15-20	FS	55.3						2.305	J
L1742393	FF-07-01-E	11/15/17	FF-07-01-E-17_SED_20-25	FS	57.6						2.32	J
L1742393	FF-07-01-E	11/15/17	FF-07-01-E-17_SED_25-27	FS	53.2						3.14	J
L1742393	FF-07-01-E	11/15/17	FF-07-01-E-17_SED_27-30	FS	58.1						2.175	J
L1742393	FF-07-01-E	11/15/17	FF-07-01-E-17_SED_30-40	FS	57.1						2.48	J
L1742393	FF-07-01-E	11/15/17	FF-07-01-E-17_SED_40-45	FS	57.1						2.325	J

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SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

			Analysis Method			EPA 1631		EPA 1630		LLOYD KAHN			
			Parameter		% Solids	Mercury		Methyl Mercury		TOC			
			Unit		PERCENT	NG/G		NG/G		PERCENT			
			Fraction		Total	Total		Total		Total			
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
L1742393	FF-07-01-E	11/15/17	FF-07-01-E-17_SED_45-49	FS	55.7						2.785	J
L1742394	ON-10-01-B	11/14/17	ON-10-01-B-17_SED_00-01	FS	40						5.45	J
L1742394	ON-10-01-B	11/14/17	ON-10-01-B-17_SED_01-03	FS	37.9						6.05	J
L1742394	ON-10-01-B	11/14/17	ON-10-01-B-17_SED_03-05	FS	40.9						6.075	J
L1742394	ON-10-01-B	11/14/17	ON-10-01-B-17_SED_05-07	FS	44.9						5.165	J
L1742394	ON-10-01-B	11/14/17	ON-10-01-B-17_SED_07-09	FS	50.9						4.01	J
L1742394	ON-10-01-B	11/14/17	ON-10-01-B-17_SED_09-11	FS	89.7						2.935	J
L1742394	ON-10-01-B	11/14/17	ON-10-01-B-17_SED_11-15	FS	45.9						3.06	J
L1742394	ON-10-01-B	11/14/17	ON-10-01-B-17_SED_15-20	FS	57.8						2.895	J
L1742394	ON-10-01-B	11/14/17	ON-10-01-B-17_SED_20-25	FS	93.3						2.605	J
L1742394	ON-10-01-B	11/14/17	ON-10-01-B-17_SED_25-28	FS	31.8						2.34	J
L1742394	ON-10-01-B	11/14/17	ON-10-01-B-17_SED_28-30	FS	67.4						2.15	J
L1742394	ON-10-01-B	11/14/17	ON-10-01-B-17_SED_30-37	FS	63.1						2.555	J
L1742395	VE-09-01-B	11/10/17	VE-09-01-B-17_SED_00-01	FS	35.6						5.77	J
L1742395	VE-09-01-B	11/10/17	VE-09-01-B-17_SED_01-03	FS	33.7						5.985	J
L1742395	VE-09-01-B	11/10/17	VE-09-01-B-17_SED_03-05	FS	38.2						5.99	J
L1742395	VE-09-01-B	11/10/17	VE-09-01-B-17_SED_05-07	FS	37.2						6.32	J
L1742395	VE-09-01-B	11/10/17	VE-09-01-B-17_SED_07-10	FS	40						6.465	J
L1742395	VE-09-01-B	11/10/17	VE-09-01-B-17_SED_10-13	FS	39.5						9.01	J
L1742395	VE-09-01-B	11/10/17	VE-09-01-B-17_SED_13-16	FS	40.2						8.49	J
L1742395	VE-09-01-B	11/10/17	VE-09-01-B-17_SED_16-20	FS	50.8						6.045	J
L1742395	VE-09-01-B	11/10/17	VE-09-01-B-17_SED_20-23	FS	53.8						3.36	J
L1742396	VE-10-01-C	11/08/17	VE-10-01-C-17_SED_00-01	FS	46.1						7.315	J
L1742396	VE-10-01-C	11/08/17	VE-10-01-C-17_SED_01-02	FS	42.6						7.505	J
L1742396	VE-10-01-C	11/08/17	VE-10-01-C-17_SED_02-03	FS	46.7						5.585	J

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PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

			Analysis Method			EPA 1631		EPA 1630		LLOYD KAHN			
			Parameter		% Solids	Mercury		Methyl Mercury		TOC			
			Unit		PERCENT	NG/G		NG/G		PERCENT			
			Fraction		Total	Total		Total		Total			
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
L1742396	VE-10-01-C	11/08/17	VE-10-01-C-17_SED_03-05	FS	50						5.07	J
L1742396	VE-10-01-C	11/08/17	VE-10-01-C-17_SED_05-07	FS	45.6						6.825	J
L1742396	VE-10-01-C	11/08/17	VE-10-01-C-17_SED_07-10	FS	41.2						7.535	J
L1742396	VE-10-01-C	11/08/17	VE-10-01-C-17_SED_10-13	FS	44.3						6.085	J
L1742396	VE-10-01-C	11/08/17	VE-10-01-C-17_SED_13-16	FS	43.2						5.845	J
L1742396	VE-10-01-C	11/08/17	VE-10-01-C-17_SED_16-20	FS	55						3.72	J
L1742397	VN-02-01-D	11/10/17	VN-02-01-D-17_SED_00-01	FS	40.9						5.91	J
L1742397	VN-02-01-D	11/10/17	VN-02-01-D-17_SED_01-03	FS	43.6						5.46	J
L1742397	VN-02-01-D	11/10/17	VN-02-01-D-17_SED_03-05	FS	44						5.695	J
L1742397	VN-02-01-D	11/10/17	VN-02-01-D-17_SED_05-07	FS	41.8						6.125	J
L1742397	VN-02-01-D	11/10/17	VN-02-01-D-17_SED_07-10	FS	41.5						7.06	J
L1742397	VN-02-01-D	11/10/17	VN-02-01-D-17_SED_10-15	FS	45.6						5.42	J
L1742397	VN-02-01-D	11/10/17	VN-02-01-D-17_SED_15-17	FS	51.4						4.235	J
L1742397	VN-02-01-D	11/10/17	VN-02-01-D-17_SED_17-22	FS	61.2						2.455	J
L1742402	VN-04-02-A	11/10/17	VN-04-02-A-17_SED_00-01	FS	70.3						1.93	J
L1742402	VN-04-02-A	11/10/17	VN-04-02-A-17_SED_01-03	FS	63.8						2.135	J
L1742402	VN-04-02-A	11/10/17	VN-04-02-A-17_SED_03-05	FS	54						2.455	J
L1742402	VN-04-02-A	11/10/17	VN-04-02-A-17_SED_05-07	FS	56.4						2.695	J
L1742402	VN-04-02-A	11/10/17	VN-04-02-A-17_SED_07-10	FS	60.3						2.25	J
L1742402	VN-04-02-A	11/10/17	VN-04-02-A-17_SED_10-15	FS	58						2.67	J
L1742402	VN-04-02-A	11/10/17	VN-04-02-A-17_SED_15-20	FS	65.3						1.455	J
L1742402	VN-04-02-A	11/10/17	VN-04-02-A-17_SED_20-25	FS	60.3						1.96	J
L1742402	VN-04-02-A	11/10/17	VN-04-02-A-17_SED_25-31	FS	53						2.51	J
L1742403	VN-08-01-B	11/10/17	VN-08-01-B-17_SED_00-01	FS	38						6.5	
L1742403	VN-08-01-B	11/10/17	VN-08-01-B-17_SED_01-03	FS	38.1						6.095	

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			Analysis Method			EPA 1631		EPA 1630		LLOYD KAHN			
			Parameter		% Solids	Mercury		Methyl Mercury		TOC			
			Unit		PERCENT	NG/G		NG/G		PERCENT			
			Fraction		Total	Total		Total		Total			
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
L1742403	VN-08-01-B	11/10/17	VN-08-01-B-17_SED_03-05	FS	41						6.27	J
L1742403	VN-08-01-B	11/10/17	VN-08-01-B-17_SED_05-07	FS	45.2						5.66	J
L1742403	VN-08-01-B	11/10/17	VN-08-01-B-17_SED_07-10	FS	42.9						7.65	J
L1742403	VN-08-01-B	11/10/17	VN-08-01-B-17_SED_10-13	FS	44.1						7.015	J
L1742403	VN-08-01-B	11/10/17	VN-08-01-B-17_SED_13-18	FS	42.6						8.03	J
L1742403	VN-08-01-B	11/10/17	VN-08-01-B-17_SED_18-21	FS	47.5						4.64	J
L1742404	VW-02-01-B	11/14/17	VW-02-01-B-17_SED_00-01	FS	52.6						1.955	
L1742404	VW-02-01-B	11/14/17	VW-02-01-B-17_SED_01-03	FS	50.3						1.845	
L1742404	VW-02-01-B	11/14/17	VW-02-01-B-17_SED_03-05	FS	56.5						1.765	
L1742404	VW-02-01-B	11/14/17	VW-02-01-B-17_SED_05-07	FS	50.6						2.04	
L1742404	VW-02-01-B	11/14/17	VW-02-01-B-17_SED_07-09	FS	52.1						1.87	
L1742404	VW-02-01-B	11/14/17	VW-02-01-B-17_SED_09-11	FS	49						1.905	
L1742404	VW-02-01-B	11/14/17	VW-02-01-B-17_SED_11-13	FS	50.6						2.015	
L1742404	VW-02-01-B	11/14/17	VW-02-01-B-17_SED_13-15	FS	52.3						2.02	
L1742404	VW-02-01-B	11/14/17	VW-02-01-B-17_SED_15-20	FS	49.1						2.01	
L1742404	VW-02-01-B	11/14/17	VW-02-01-B-17_SED_20-25	FS	50.3						1.96	
L1742404	VW-02-01-B	11/14/17	VW-02-01-B-17_SED_25-30	FS	51.7						1.925	
L1742405	VW-14-01-E	11/15/17	VW-14-01-E-17_SED_00-01	FS	46.2						3.53	
L1742405	VW-14-01-E	11/15/17	VW-14-01-E-17_SED_01-03	FS	43						4.455	
L1742405	VW-14-01-E	11/15/17	VW-14-01-E-17_SED_03-05	FS	48.1						2.985	J
L1742405	VW-14-01-E	11/15/17	VW-14-01-E-17_SED_05-07	FS	54.3						3.425	
L1742405	VW-14-01-E	11/15/17	VW-14-01-E-17_SED_07-10	FS	61.5						1.665	
L1742405	VW-14-01-E	11/15/17	VW-14-01-E-17_SED_10-12	FS	58						2.785	
L1742405	VW-14-01-E	11/15/17	VW-14-01-E-17_SED_12-14	FS	53.8						2.62	
L1742405	VW-14-01-E	11/15/17	VW-14-01-E-17_SED_14-16	FS	50.9						3.07	

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			Analysis Method			EPA 1631		EPA 1630		LLOYD KAHN			
			Parameter		% Solids	Mercury		Methyl Mercury		TOC			
			Unit		PERCENT	NG/G		NG/G		PERCENT			
			Fraction		Total	Total		Total		Total			
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
L1742405	VW-14-01-E	11/15/17	VW-14-01-E-17_SED_16-18	FS	58.7						1.775	
L1742405	VW-14-01-E	11/15/17	VW-14-01-E-17_SED_18-20	FS	56.2						2.39	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_00-01	FS	44.9						5.45	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_01-03	FS	42.3						4.735	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_03-05	FS	40.5						6.95	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_05-07	FS	42.5						6.96	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_07-10_R1	FS	41.7						6.025	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_07-10_R2	FS	41.3						6.305	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_07-10_R3	FS	42.3						6.65	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_10-13	FS	47.4						4.225	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_13-16_R1	FS	43.2						4.79	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_13-16_R2	FS	41.8						6.045	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_13-16_R3	FS	42.6						5.255	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_16-19	FS	45						4.295	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_16-19-D	FD	44.4						4.2	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_19-22_R1	FS	45.8						3.505	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_19-22_R2	FS	47.7						3.715	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_19-22_R3	FS	47						3.935	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_22-25	FS	55.8						2.16	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_25-28_R1	FS	68.2						1.475	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_25-28_R2	FS	64.8						1.82	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_25-28_R3	FS	66.7						1.48	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_28-31	FS	60.3						1.8	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_31-34	FS	57.7						2.605	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_34-37	FS	62.3						2.92	J

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			Analysis Method			EPA 1631		EPA 1630		LLOYD KAHN			
			Parameter		% Solids	Mercury		Methyl Mercury		TOC			
			Unit		PERCENT	NG/G		NG/G		PERCENT			
			Fraction		Total	Total		Total		Total			
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_37-40	FS	62.3						1.83	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_40-45	FS	62						2.12	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_45-50	FS	61.6						1.96	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_50-55	FS	60.5						2.235	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_50-55-D	FD	60.8						2.16	J
L1743403	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_55-62	FS	61.9						2.37	J
L1743404	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_00-01	FS	40.3						7.785	
L1743404	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_01-03	FS	44						5.58	
L1743404	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_03-05	FS	45.7						4.55	
L1743404	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_05-07	FS	45.4						4.66	
L1743404	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_07-10	FS	45.4						5.415	
L1743404	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_10-13	FS	38.9						5.625	
L1743404	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_13-16	FS	37.5						6.625	
L1743404	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_16-18	FS	38.6						6.34	
L1743404	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_18-20	FS	35.6						7.825	
L1743404	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_20-25	FS	39.8						6.525	
L1743404	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_25-30	FS	35.7						8.43	
L1743404	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_30-35	FS	35.8						9.42	
L1743404	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_35-40	FS	35.9						9.055	
L1743404	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_40-45	FS	36.6						9.43	
L1743404	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_45-50	FS	37.5						8.945	
L1743404	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_50-55	FS	37.8						9.135	
L1743404	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_55-60	FS	37						9.615	
L1743404	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_60-63	FS	37.6						9.925	
L1743404	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_63-67	FS	34.2						11.5	

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SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

			Analysis Method			EPA 1631		EPA 1630		LLOYD KAHN			
			Parameter		% Solids	Mercury		Methyl Mercury		TOC			
			Unit		PERCENT	NG/G		NG/G		PERCENT			
			Fraction		Total	Total		Total		Total			
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
L1743405	ON-18-02-C	11/27/17	ON-18-02-C-17_SED_00-01	FS	28.1						8.125	
L1743405	ON-18-02-C	11/27/17	ON-18-02-C-17_SED_01-03	FS	27.2						7.74	
L1743405	ON-18-02-C	11/27/17	ON-18-02-C-17_SED_03-05	FS	24						8.16	
L1743405	ON-18-02-C	11/27/17	ON-18-02-C-17_SED_05-07	FS	25.1						7.735	
L1743405	ON-18-02-C	11/27/17	ON-18-02-C-17_SED_07-10	FS	28.1						8.295	
L1743405	ON-18-02-C	11/27/17	ON-18-02-C-17_SED_10-15	FS	28.1						7.98	
L1743405	ON-18-02-C	11/27/17	ON-18-02-C-17_SED_15-17	FS	24.8						8.345	
L1743405	ON-18-02-C	11/27/17	ON-18-02-C-17_SED_17-20	FS	40						7.89	
L1743405	ON-18-02-C	11/27/17	ON-18-02-C-17_SED_20-22	FS	90						3.31	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_00-01_R1	FS							43.7	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_00-01_R2	FS							43.4	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_00-01_R3	FS							44.5	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_01-03_R1	FS	15.6						45.4	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_01-03_R2	FS	15						42.35	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_01-03_R3	FS	14						46.05	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_03-05_R1	FS	16						43.45	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_03-05_R2	FS	15.1						43	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_03-05_R3	FS	16.9						42.15	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_05-07_R1	FS	17						42.8	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_05-07_R2	FS	17.4						41.9	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_05-07_R3	FS	17.3						40.2	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_07-10_R1	FS	14						38.75	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_07-10_R2	FS	15						40.3	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_07-10_R3	FS	13.9						40.3	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_10-15	FS	15.6						41.85	

TABLE 3
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PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

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			Analysis Method			EPA 1631		EPA 1630		LLOYD KAHN			
			Parameter		% Solids	Mercury		Methyl Mercury		TOC			
			Unit		PERCENT	NG/G		NG/G		PERCENT			
			Fraction		Total	Total		Total		Total			
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_15-20	FS	15.6						39.4	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_20-25	FS	14.8						30.9	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_25-30	FS	14.6						39.5	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_30-35	FS	15						39.2	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_35-38	FS	15.9						28.4	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_38-39_R1	FS	60.2						1.075	J
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_38-39_R2	FS	57.4						1.051	J
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_38-39_R3	FS	56.6						1.82	J
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_39-40_R1	FS	32						7.155	J
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_39-40_R2	FS	29.8						13.35	J
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_39-40_R3	FS	30.1						13.3	J
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_40-42_R1	FS	23.3						21.05	J
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_40-42_R2	FS	24.7						26.5	J
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_40-42_R3	FS	23.7						15.4	J
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_42-43	FS	61.5						1.325	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_43-44_R1	FS	38.3						6.75	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_43-44_R2	FS	40.2						8.465	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_43-44_R3	FS	38.7						5.32	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_44-45	FS	70						0.7055	J
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_45-46_R1	FS	40.2						8.19	J
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_45-46_R2	FS	39.1						4.415	J
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_45-46_R3	FS	38.5						5.07	J
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_46-48	FS	66.8						1.705	J
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_48-49_R1	FS	53.6						1.32	J
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_48-49_R2	FS	54.1						1.66	J

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			Analysis Method				EPA 1631		EPA 1630		LLOYD KAHN	
			Parameter		% Solids		Mercury		Methyl Mercury		TOC	
			Unit		PERCENT		NG/G		NG/G		PERCENT	
			Fraction		Total		Total		Total		Total	
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_48-49_R3	FS	57.9						3.055	J
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_49-52	FS	63.3						1.22	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_52-54_R1	FS	32.1						4.315	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_52-54_R2	FS	37.8						2.88	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_52-54_R3	FS	33.3						3.275	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_54-55_R1	FS	46						5.26	J
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_54-55_R2	FS	45.7						2.805	J
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_54-55_R3	FS	47.6						5.57	J
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_55-57	FS	55.4						2.565	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_57-58_R1	FS	32						6.13	J
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_57-58_R2	FS	33.8						5.895	J
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_57-58_R3	FS	40.2						9.44	J
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_58-59	FS	48.1						3.255	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_59-60_R1	FS	30.2						14.55	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_59-60_R2	FS	27.4						11.25	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_59-60_R3	FS	27.2						14.35	J
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_60-61_R1	FS	41.3						4.965	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_60-61_R2	FS	40.5						5.02	J
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_60-61_R3	FS	40.5						4.465	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_61-62_R1	FS	30.2						5.475	J
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_61-62_R2	FS	30.5						12.6	J
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_61-62_R3	FS	29.2						11.3	J
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_62-64_R1	FS	39.4						6.025	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_62-64_R2	FS	41.5						8.215	
L1743406	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_62-64_R3	FS	40.2						6.885	

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			Analysis Method			EPA 1631		EPA 1630		LLOYD KAHN			
			Parameter		% Solids	Mercury		Methyl Mercury		TOC			
			Unit		PERCENT	NG/G		NG/G		PERCENT			
			Fraction		Total	Total		Total		Total			
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
L1744058	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_00-01	FS	57.7						6.755	J
L1744058	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_01-02	FS	52						3.445	J
L1744058	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_02-03	FS	51.2						2.67	J
L1744058	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_03-05	FS	50.9						2.445	J
L1744058	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_05-07	FS	53.6						2.29	J
L1744058	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_07-10	FS	53.7						2.03	J
L1744058	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_10-11	FS	53.2						2.41	J
L1744058	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_11-15	FS	53.6						2.2	J
L1744058	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_15-17	FS	51.8						2.465	J
L1744058	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_17-20	FS	51						2.585	J
L1744058	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_20-25	FS	53.6						2.44	J
L1744058	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_25-30	FS	55.2						2.315	J
L1744058	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_30-35	FS	53.3						2.37	J
L1744058	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_35-40	FS	53.6						2.395	J
L1744058	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_40-45	FS	64.6						1.485	J
L1744058	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_45-50	FS	65.4						1.57	J
L1744058	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_50-52	FS	66.4						1.55	J
L1744058	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_52-60	FS	60.4						1.98	J
L1744058	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_60-65	FS	57.7						2.34	J
L1744058	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_65-70	FS	53.8						2.385	J
L1744058	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_70-75	FS	62.8						2.17	J
L1744059	VW-02-01-B	11/27/17	VW-02-01-B-17_SED_30-35	FS	53.3						1.66	
L1744059	VW-02-01-B	11/27/17	VW-02-01-B-17_SED_35-40	FS	56						1.64	
L1744059	VW-02-01-B	11/27/17	VW-02-01-B-17_SED_40-45	FS	52.8						1.715	
L1744059	VW-02-01-B	11/27/17	VW-02-01-B-17_SED_45-50	FS	55.2						1.755	

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			Analysis Method			EPA 1631		EPA 1630		LLOYD KAHN			
			Parameter		% Solids	Mercury		Methyl Mercury		TOC			
			Unit		PERCENT	NG/G		NG/G		PERCENT			
			Fraction		Total	Total		Total		Total			
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
L1744059	VW-02-01-B	11/27/17	VW-02-01-B-17_SED_50-55	FS	55.6						1.825	
L1744059	VW-02-01-B	11/27/17	VW-02-01-B-17_SED_55-60	FS	56.1						1.615	
L1744059	VW-02-01-B	11/27/17	VW-02-01-B-17_SED_60-65	FS	59.7						1.55	
L1744059	VW-02-01-B	11/27/17	VW-02-01-B-17_SED_65-70	FS	58						1.525	
L1744059	VW-02-01-B	11/27/17	VW-02-01-B-17_SED_70-75	FS	53.1						1.905	J
L1744059	VW-02-01-B	11/27/17	VW-02-01-B-17_SED_75-80	FS	56.2						1.84	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_00-01_R1	FS	17.4						34.15	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_00-01_R2	FS	17.2						37.35	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_00-01_R3	FS	18						34.85	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_01-03_R1	FS	25						31.95	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_01-03_R2	FS	24.6						29.3	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_01-03_R3	FS	24.7						25.75	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_03-04	FS	35.7						12.65	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_04-06_R1	FS	34						18.35	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_04-06_R2	FS	32						15.25	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_04-06_R3	FS	33.8						19.8	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_06-09	FS	45.6						7.87	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_09-11	FS	41.8						4.75	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_11-12_R1	FS	37.3						11.4	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_11-12_R2	FS	38						11.6	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_11-12_R3	FS	38.9						15.6	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_12-13	FS	73.3						1.1315	J
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_13-14	FS	68.4						1.785	J
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_14-17	FS	46.8						5.67	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_17-20_R1	FS	48.8						6.555	J

TABLE 3
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2017 INTERTIDAL AND SUBTIDAL SEDIMENT CHARACTERIZATION – REPORT 3
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

			Analysis Method			EPA 1631		EPA 1630		LLOYD KAHN			
			Parameter		% Solids	Mercury		Methyl Mercury		TOC			
			Unit		PERCENT	NG/G		NG/G		PERCENT			
			Fraction		Total	Total		Total		Total			
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_17-20_R2	FS	49.1						4.46	J
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_17-20_R3	FS	49						4.36	J
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_20-21	FS	47.2						3.805	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_21-25_R1	FS	40.4						7.07	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_21-25_R2	FS	38.6						7.28	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_21-25_R3	FS	40.1						6.33	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_25-31_R1	FS	38.2						5.445	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_25-31_R2	FS	29.2						5.565	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_25-31_R3	FS	45						5.86	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_31-35	FS	74.5						1.045	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_35-38_R1	FS	34.6						12.85	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_35-38_R2	FS	35						15.4	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_35-38_R3	FS	37.2						19.3	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_38-39	FS	36.9						8.795	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_39-42	FS	34.2						10.75	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_42-44_R1	FS	35.8						12.75	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_42-44_R2	FS	37.4						12.85	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_42-44_R3	FS	35.7						13.25	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_44-49_R1	FS	28.5						17.45	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_44-49_R2	FS	27.3						18.8	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_44-49_R3	FS	27.6						22.05	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_49-52	FS	34.5						11.75	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_52-54	FS	38.8						11.04	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_54-55_R1	FS	24						25.5	
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_54-55_R2	FS	24.7						25.75	

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			Analysis Method			EPA 1631		EPA 1630		LLOYD KAHN			
			Parameter		% Solids		Mercury		Methyl Mercury		TOC		
			Unit		PERCENT		NG/G		NG/G		PERCENT		
			Fraction		Total		Total		Total		Total		
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
L1744060	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_54-55_R3	FS	24.8						24.9	
1711118	VW-14-01-F	10/27/17	VW-14-01-F-17_SED_00-01	FS	16.9	J	1140		9.4	J		
1711118	VW-14-01-F	10/27/17	VW-14-01-F-17_SED_01-03	FS	39	J	635		14.5			
1711120	VN-08-01-E	10/26/17	VN-08-01-E-17_SED_00-01	FS	32.7	J	856		18			
1711120	VN-08-01-E	10/26/17	VN-08-01-E-17_SED_01-03	FS	45.3	J	715		11.2			
1711128	WP-06-02-F	10/27/17	WP-06-02-F-17_SED_00-01	FS	33.1	J	992		8.4			
1711128	WP-06-02-F	10/27/17	WP-06-02-F-17_SED_01-03	FS	34.8	J	838		6.2			
1711258	BH-03-01-E	10/25/17	BH-03-01-E-17_SED_00-01	FS	38.2	J	640	J	21.1			
1711258	BH-03-01-E	10/25/17	BH-03-01-E-17_SED_01-03	FS	42	J	539		15.6			
1711258	BU-02-01-E	10/25/17	BU-02-01-E-17_SED_00-01	FS	65.3	J	414		4.3			
1711258	BU-02-01-E	10/25/17	BU-02-01-E-17_SED_01-03	FS	49.6	J	743		2.7	J		
1711258	FF-08-02-G	10/26/17	FF-08-02-G-17_SED_00-01	FS	37.6	J	715		15.8			
1711258	FF-08-02-G	10/26/17	FF-08-02-G-17_SED_01-03	FS	42	J	622		12.2			
1711258	MM-04-01-F	10/26/17	MM-04-01-F-17_SED_00-01	FS	42.1	J	536		6.4			
1711258	MM-04-01-F	10/26/17	MM-04-01-F-17_SED_01-03	FS	35.7	J	784		12.6			
1711258	ON-10-01-C	10/27/17	ON-10-01-C-17_SED_00-01	FS	29.8	J	901		23.9			
1711258	ON-10-01-C	10/27/17	ON-10-01-C-17_SED_01-03	FS	15.1	J	2110		37.4			
1711258	ON-18-01-F	10/26/17	ON-18-01-F-17_SED_00-01	FS	38.5	J	710		10.2			
1711258	ON-18-01-F	10/26/17	ON-18-01-F-17_SED_01-03	FS	35.6	J	844		11.6			
1711258	VE-09-01-E	10/26/17	VE-09-01-E-17_SED_00-01	FS	36.6	J	575		12.6			
1711258	VE-09-01-E	10/26/17	VE-09-01-E-17_SED_01-03	FS	36.6	J	692		13.5			
1711258	VN-01-01-B	10/26/17	VN-01-01-B-17_SED_00-01	FS	39.6	J	856		7.3			
1711258	VN-01-01-B	10/26/17	VN-01-01-B-17_SED_01-03	FS	41.7	J	852		14.4			
1711258	VN-04-01-E	10/26/17	VN-04-01-E-17_SED_00-01	FS	64.9	J	393		6.4			
1711258	VN-04-01-E	10/26/17	VN-04-01-E-17_SED_01-03	FS	43	J	650		11.4			

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PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

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			Analysis Method			EPA 1631		EPA 1630		LLOYD KAHN			
			Parameter		% Solids		Mercury		Methyl Mercury		TOC		
			Unit		PERCENT		NG/G		NG/G		PERCENT		
			Fraction		Total		Total		Total		Total		
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
1711258	VN-04-02-C	10/27/17	VN-04-02-C-17_SED_00-01	FS	36.8	J	379		5.9			
1711258	VN-04-02-C	10/27/17	VN-04-02-C-17_SED_01-03	FS	74.6	J	89.2		1.4	J		
1711258	VW-02-01-E	10/27/17	VW-02-01-E-17_SED_00-01	FS	45.2	J	409		3.7	J		
1711258	VW-02-01-E	10/27/17	VW-02-01-E-17_SED_01-03	FS	30.4	J	120		2.6	J		
1711258	WP-02-01-D	10/26/17	WP-02-01-D-17_SED_00-01	FS	35	J	648		16.4			
1711258	WP-02-01-D	10/26/17	WP-02-01-D-17_SED_01-03	FS	42.3	J	532		9.7			
1711594	VN-08-01-B	11/10/17	VN-08-01-B-17_SED_00-01	FS	37.5	J	779					
1711594	VN-08-01-B	11/10/17	VN-08-01-B-17_SED_01-03	FS	40.5	J	856					
1711594	VN-08-01-B	11/10/17	VN-08-01-B-17_SED_03-05	FS	42.5	J	995					
1711594	VN-08-01-B	11/10/17	VN-08-01-B-17_SED_05-07	FS	45.7	J	1050					
1711594	VN-08-01-B	11/10/17	VN-08-01-B-17_SED_07-10	FS	43.6	J	1230					
1711594	VN-08-01-B	11/10/17	VN-08-01-B-17_SED_10-13	FS	45.7	J	284					
1711594	VN-08-01-B	11/10/17	VN-08-01-B-17_SED_13-18	FS	44.9	J	274					
1711594	VN-08-01-B	11/10/17	VN-08-01-B-17_SED_18-21	FS	51.1	J	126					
1711595	VN-03-01-B	11/10/17	VN-03-01-B-17_SED_00-01	FS	46.3	J	679					
1711595	VN-03-01-B	11/10/17	VN-03-01-B-17_SED_01-03	FS	47.5	J	673					
1711595	VN-03-01-B	11/10/17	VN-03-01-B-17_SED_03-05	FS	45.9	J	779					
1711595	VN-03-01-B	11/10/17	VN-03-01-B-17_SED_05-07	FS	49.2	J	805					
1711595	VN-03-01-B	11/10/17	VN-03-01-B-17_SED_07-10	FS	49	J	1170					
1711595	VN-03-01-B	11/10/17	VN-03-01-B-17_SED_10-15	FS	48.2	J	1780					
1711595	VN-03-01-B	11/10/17	VN-03-01-B-17_SED_15-21	FS	48.3	J	312					
1711595	VN-03-01-B	11/10/17	VN-03-01-B-17_SED_21-27	FS	68.9	J	78					
1711597	VN-02-04-C	11/10/17	VN-02-04-C-17_SED_00-01	FS	41.9	J	756					
1711597	VN-02-04-C	11/10/17	VN-02-04-C-17_SED_01-03	FS	43.7	J	1220					
1711597	VN-02-04-C	11/10/17	VN-02-04-C-17_SED_03-05	FS	41.5	J	1630					

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			Analysis Method			EPA 1631		EPA 1630		LLOYD KAHN			
			Parameter		% Solids		Mercury		Methyl Mercury		TOC		
			Unit		PERCENT		NG/G		NG/G		PERCENT		
			Fraction		Total		Total		Total		Total		
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
1711597	VN-02-04-C	11/10/17	VN-02-04-C-17_SED_05-07	FS	42.5	J	419					
1711597	VN-02-04-C	11/10/17	VN-02-04-C-17_SED_07-10	FS	38.5	J	385					
1711597	VN-02-04-C	11/10/17	VN-02-04-C-17_SED_10-15	FS	44.6	J	351					
1711597	VN-02-04-C	11/10/17	VN-02-04-C-17_SED_15-20	FS	46.7	J	160					
1711597	VN-02-04-C	11/10/17	VN-02-04-C-17_SED_20-24	FS	65.8	J	21.6					
1711597	VN-02-04-C	11/10/17	VN-02-04-C-17_SED_20-24-Dup	FD	66	J	24.8					
1711597	VN-02-04-C	11/10/17	VN-02-04-C-17_SED_24-29	FS	66.6	J	23.7					
1711601	VN-02-03-E	11/09/17	VN-02-03-E-17_SED_00-01	FS	39.2	J	0.08	J				
1711601	VN-02-03-E	11/09/17	VN-02-03-E-17_SED_01-03	FS	37.9	J	837					
1711601	VN-02-03-E	11/09/17	VN-02-03-E-17_SED_03-05	FS	41	J	804					
1711601	VN-02-03-E	11/09/17	VN-02-03-E-17_SED_05-07	FS	42.6	J	945					
1711601	VN-02-03-E	11/09/17	VN-02-03-E-17_SED_07-10	FS	44.1	J	1210					
1711601	VN-02-03-E	11/09/17	VN-02-03-E-17_SED_10-15	FS	43.7	J	1400					
1711601	VN-02-03-E	11/09/17	VN-02-03-E-17_SED_15-19	FS	47.4	J	94.2					
1711601	VN-02-03-E	11/09/17	VN-02-03-E-17_SED_19-22	FS	51.5	J	61.1					
1711601	VN-02-03-E	11/09/17	VN-02-03-E-17_SED_22-25	FS	58.9	J	27					
1711601	VN-02-03-E	11/09/17	VN-02-03-E-17_SED_25-27	FS	60.4	J	22.4					
1711602	VN-02-01-D	11/10/17	VN-02-01-D-17_SED_00-01	FS	45.6	J	817					
1711602	VN-02-01-D	11/10/17	VN-02-01-D-17_SED_01-03	FS	45.8	J	879					
1711602	VN-02-01-D	11/10/17	VN-02-01-D-17_SED_03-05	FS	46.2	J	1010					
1711602	VN-02-01-D	11/10/17	VN-02-01-D-17_SED_05-07	FS	44.5	J	1810					
1711602	VN-02-01-D	11/10/17	VN-02-01-D-17_SED_07-10	FS	44.2	J	944					
1711602	VN-02-01-D	11/10/17	VN-02-01-D-17_SED_10-15	FS	47.3	J	236					
1711602	VN-02-01-D	11/10/17	VN-02-01-D-17_SED_15-17	FS	51.9	J	102					
1711602	VN-02-01-D	11/10/17	VN-02-01-D-17_SED_17-22	FS	61	J	39.2					

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			Analysis Method			EPA 1631		EPA 1630		LLOYD KAHN			
			Parameter		% Solids		Mercury		Methyl Mercury		TOC		
			Unit		PERCENT		NG/G		NG/G		PERCENT		
			Fraction		Total		Total		Total		Total		
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_00-01	FS	41.1	J	701	J				
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_01-03	FS	42.5	J	694					
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_03-05	FS	37.8	J	1670					
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_05-07	FS	39.7	J	1970					
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_07-10_R1	FS	39.9	J	2130					
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_07-10_R2	FS	41.8	J	2160					
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_07-10_R3	FS	39.6	J	2140					
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_10-13	FS	39.6	J	1280					
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_13-16_R1	FS	41.4	J	293					
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_13-16_R2	FS	39.9	J	291					
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_13-16_R3	FS	39	J	297					
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_16-19	FS	47.3	J	219					
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_16-19-D	FD	47.6	J	236					
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_19-22_R1	FS	46.7	J	246					
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_19-22_R2	FS	47.2	J	168					
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_19-22_R3	FS	48.3	J	261					
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_22-25	FS	57.1	J	80.1					
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_25-28_R1	FS	64	J	48.4					
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_25-28_R2	FS	63	J	50.4					
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_25-28_R3	FS	63.1	J	53.2					
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_28-31	FS	63.6	J	40.3					
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_31-34	FS	58.8	J	54.5					
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_34-37	FS	55.6	J	60.7					
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_37-40	FS	57.1	J	28.9					
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_40-45	FS	62.9	J	31.5					

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TABLE 3
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2017 INTERTIDAL AND SUBTIDAL SEDIMENT CHARACTERIZATION – REPORT 3
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

				Analysis Method			EPA 1631		EPA 1630		LLOYD KAHN	
				Parameter	% Solids		Mercury		Methyl Mercury		TOC	
				Unit	PERCENT		NG/G		NG/G		PERCENT	
				Fraction	Total		Total		Total		Total	
SDG	Location ID	Sample Date	Sample ID	QC Code	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_45-50	FS	62.7	J	36.3					
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_50-55	FS	63.2	J	33.1					
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_50-55-D	FD	62.7	J	32.7					
1711775	FF-08-02-J	11/20/17	FF-08-02-J-17_SED_55-62	FS	61.2	J	29.1					
1711776	ON-18-02-C	11/27/17	ON-18-02-C-17_SED_00-01	FS	27.1	J	1150					
1711776	ON-18-02-C	11/27/17	ON-18-02-C-17_SED_01-03	FS	29	J	1200					
1711776	ON-18-02-C	11/27/17	ON-18-02-C-17_SED_03-05	FS	27.8	J	1120					
1711776	ON-18-02-C	11/27/17	ON-18-02-C-17_SED_05-07	FS	27.9	J	886					
1711776	ON-18-02-C	11/27/17	ON-18-02-C-17_SED_07-10	FS	27.4	J	974					
1711776	ON-18-02-C	11/27/17	ON-18-02-C-17_SED_10-15	FS	33.6	J	693					
1711776	ON-18-02-C	11/27/17	ON-18-02-C-17_SED_15-17	FS	33.7	J	862					
1711776	ON-18-02-C	11/27/17	ON-18-02-C-17_SED_17-20	FS	33	J	888					
1711776	ON-18-02-C	11/27/17	ON-18-02-C-17_SED_17-20-D	FD	35.6	J	929					
1711776	ON-18-02-C	11/27/17	ON-18-02-C-17_SED_20-22	FS	76	J	112					
1711799	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_00-01	FS	38.6	J	880					
1711799	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_01-03	FS	41.7	J	748					
1711799	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_03-05	FS	45.8	J	630					
1711799	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_05-07	FS	42.8	J	858					
1711799	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_07-10	FS	40.4	J	726					
1711799	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_10-13	FS	40.9	J	863					
1711799	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_13-16	FS	42.1	J	779					
1711799	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_13-16-D	FD	38.8	J	866					
1711799	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_16-18	FS	44.5	J	816					
1711799	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_18-20	FS	36	J	1430					
1711799	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_20-25	FS	40.6	J	1550					

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PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

				Analysis Method			EPA 1631		EPA 1630		LLOYD KAHN	
				Parameter	% Solids		Mercury		Methyl Mercury		TOC	
				Unit	PERCENT		NG/G		NG/G		PERCENT	
				Fraction	Total		Total		Total		Total	
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
1711799	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_25-30	FS	35	J	1900					
1711799	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_30-35	FS	35.4	J	2580					
1711799	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_35-40	FS	36.4	J	2390					
1711799	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_40-45	FS	36.8	J	510					
1711799	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_45-50	FS	38	J	395					
1711799	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_50-55	FS	37.2	J	376					
1711799	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_55-60	FS	37.8	J	428					
1711799	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_55-60-D	FD	37.8	J	410					
1711799	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_60-63	FS	38.3	J	944					
1711799	ON-18-01-C	11/16/17	ON-18-01-C-17_SED_63-67	FS	33.7	J	373					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_00-01_R1	FS	18	J	1370					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_00-01_R2	FS	18	J	1820					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_00-01_R3	FS	17.4	J	1470					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_01-03_R1	FS	15.5	J	1270					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_01-03_R2	FS	15.8	J	1390					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_01-03_R3	FS	15.7	J	1380					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_03-05_R1	FS	16.8	J	1590					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_03-05_R2	FS	16.9	J	1630					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_03-05_R3	FS	16.7	J	1640					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_05-07_R1	FS	18.1	J	1740					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_05-07_R2	FS	18.2	J	1700					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_05-07_R3	FS	18.2	J	1880					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_07-10_R1	FS	16.3	J	1480					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_07-10_R2	FS	16.6	J	1320					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_07-10_R3	FS	16.9	J	1390					

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			Analysis Method			EPA 1631		EPA 1630		LLOYD KAHN			
			Parameter		% Solids		Mercury		Methyl Mercury		TOC		
			Unit		PERCENT		NG/G		NG/G		PERCENT		
			Fraction		Total		Total		Total		Total		
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_10-15	FS	15	J	1330					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_15-20	FS	15.7	J	1290					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_20-25	FS	15.8	J	1320					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_20-25-D	FD	15.3	J	1470					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_25-30	FS	15.2	J	1340					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_30-35	FS	16.1	J	1390					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_35-38	FS	17.8	J	1250					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_38-39_R1	FS	62	J	374					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_38-39_R2	FS	60.8	J	227					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_38-39_R3	FS	63	J	332					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_39-40_R1	FS	30.8	J	1330					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_39-40_R2	FS	31.3	J	1370					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_39-40_R3	FS	34.5	J	1270					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_40-42_R1	FS	27.8	J	1120					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_40-42_R2	FS	28.1	J	1070					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_40-42_R3	FS	29.7	J	853					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_42-43	FS	65.3	J	289					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_43-44_R1	FS	43.2	J	980					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_43-44_R2	FS	42.9	J	987					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_43-44_R3	FS	42.7	J	962					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_44-45	FS	70.9	J	287					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_45-46_R1	FS	41.9	J	899					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_45-46_R2	FS	42.6	J	878					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_45-46_R3	FS	42.9	J	933					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_46-48	FS	68.7	J	446					

TABLE 3

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2017 INTERTIDAL AND SUBTIDAL SEDIMENT CHARACTERIZATION – REPORT 3

PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

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			Analysis Method			EPA 1631		EPA 1630		LLOYD KAHN			
			Parameter		% Solids	Mercury		Methyl Mercury		TOC			
			Unit		PERCENT	NG/G		NG/G		PERCENT			
			Fraction		Total	Total		Total		Total			
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_46-48-D	FD	67.4	J	414					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_48-49_R1	FS	54.6	J	673					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_48-49_R2	FS	53.5	J	650					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_48-49_R3	FS	53.2	J	660					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_49-52	FS	63	J	240					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_52-54_R1	FS	46.2	J	212					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_52-54_R2	FS	45.6	J	158					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_52-54_R3	FS	45.2	J	176					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_54-55_R1	FS	46.9	J	194					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_54-55_R2	FS	46.5	J	172					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_54-55_R3	FS	46.8	J	191					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_55-57	FS	59.9	J	126					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_57-58_R1	FS	36.9	J	147					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_57-58_R2	FS	38.6	J	153					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_57-58_R3	FS	38.1	J	171					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_58-59	FS	54.1	J	149					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_59-60-D_R1	FS	27.4	J	232					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_59-60-D_R2	FS	28.1	J	216					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_59-60-D_R3	FS	28.4	J	202					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_59-60_R1	FS	27.7	J	201					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_59-60_R2	FS	28.8	J	191					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_59-60_R3	FS	29.7	J	167					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_60-61_R1	FS	41.9	J	165					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_60-61_R2	FS	42.1	J	156					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_60-61_R3	FS	41.9	J	165					

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			Analysis Method				EPA 1631		EPA 1630		LLOYD KAHN	
			Parameter		% Solids		Mercury		Methyl Mercury		TOC	
			Unit		PERCENT		NG/G		NG/G		PERCENT	
			Fraction		Total		Total		Total		Total	
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_61-62_R1	FS	30.1	J	156					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_61-62_R2	FS	30.2	J	140					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_61-62_R3	FS	29.1	J	177					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_62-64_R1	FS	42.3	J	200					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_62-64_R2	FS	41.8	J	200					
1711800	VE-05-01-E	11/17/17	VE-05-01-E-17_SED_62-64_R3	FS	42.4	J	190					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_00-01_R1	FS	18.2	J	989					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_00-01_R2	FS	17.8	J	926					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_00-01_R3	FS	17.9	J	980					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_01-03_R1	FS	24.7	J	917					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_01-03_R2	FS	25.5	J	844					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_01-03_R3	FS	25.6	J	1180					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_03-04	FS	36.5	J	844					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_04-06_R1	FS	34.2	J	792					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_04-06_R2	FS	33.7	J	655					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_04-06_R3	FS	34.6	J	706					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_06-09	FS	46.9	J	561					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_09-11	FS	47.8	J	753					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_11-12_R1	FS	38.3	J	914					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_11-12_R2	FS	38.5	J	877					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_11-12_R3	FS	38.5	J	864					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_12-13	FS	73.6	J	163					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_12-13-D	FD	73.7	J	159					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_13-14	FS	66.7	J	251					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_14-17	FS	49.7	J	736					

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TABLE 3

DATA VALIDATION SUMMARY

2017 INTERTIDAL AND SUBTIDAL SEDIMENT CHARACTERIZATION – REPORT 3

PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

			Analysis Method			EPA 1631		EPA 1630		LLOYD KAHN			
			Parameter		% Solids	Mercury		Methyl Mercury		TOC			
			Unit		PERCENT	NG/G		NG/G		PERCENT			
			Fraction		Total	Total		Total		Total			
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_17-20_R1	FS	48.6	J	741					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_17-20_R2	FS	49.6	J	762					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_17-20_R3	FS	48.2	J	756					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_20-21	FS	49.2	J	791					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_21-25_R1	FS	43.4	J	1250					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_21-25_R2	FS	43.2	J	1160					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_21-25_R3	FS	44.3	J	1050					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_25-31_R1	FS	48.4	J	1150					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_25-31_R2	FS	44.9	J	1300					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_25-31_R3	FS	48.4	J	1220					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_31-35	FS	73.5	J	261					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_35-38_R1	FS	37.4	J	781					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_35-38_R2	FS	34.3	J	876					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_35-38_R3	FS	36.9	J	866					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_38-39	FS	38.5	J	2870					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_38-39-D	FD	38.1	J	3170					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_39-42	FS	38	J	2320					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_42-44_R1	FS	39	J	2030					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_42-44_R2	FS	39	J	2060					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_42-44_R3	FS	39.3	J	2060					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_44-49_R1	FS	31.6	J	1970					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_44-49_R2	FS	30.7	J	1900					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_44-49_R3	FS	30.8	J	2040					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_49-52	FS	36.9	J	2230					
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_52-54	FS	39.1	J	2280					

TABLE 3
DATA VALIDATION SUMMARY
2017 INTERTIDAL AND SUBTIDAL SEDIMENT CHARACTERIZATION – REPORT 3
PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

			Analysis Method			EPA 1631		EPA 1630		LLOYD KAHN			
			Parameter		% Solids		Mercury		Methyl Mercury		TOC		
			Unit		PERCENT		NG/G		NG/G		PERCENT		
			Fraction		Total		Total		Total		Total		
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_54-55_R1	FS	26.2	J	1460	J				
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_54-55_R2	FS	26.5	J	1560	J				
1712042	BU-10-02-C	11/29/17	BU-10-02-C-17_SED_54-55_R3	FS	25	J	1520	J				
1712043	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_00-01	FS	39.5	J	2030					
1712043	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_01-02	FS	47.4	J	1300					
1712043	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_02-03	FS	53.7	J	405					
1712043	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_03-05	FS	54	J	143					
1712043	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_05-07	FS	45.1	J	474					
1712043	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_07-10	FS	58.8	J	109					
1712043	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_10-11	FS	57	J	57.4					
1712043	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_11-15	FS	56.6	J	64.3					
1712043	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_15-17	FS	55.2	J	42.9	J				
1712043	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_15-17-D	FD	54.3	J	74	J				
1712043	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_17-20	FS	52.9	J	31.3					
1712043	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_20-25	FS	55.1	J	36					
1712043	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_25-30	FS	55.4	J	34.3					
1712043	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_30-35	FS	56.5	J	43.2					
1712043	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_35-40	FS	55.6	J	17.7					
1712043	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_40-45	FS	64	J	17.9					
1712043	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_45-50	FS	66	J	15					
1712043	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_50-52	FS	65.8	J	17.1					
1712043	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_52-60	FS	61.3	J	17.6					
1712043	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_60-65	FS	58.2	J	17.1					
1712043	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_60-65-D	FD	58.4	J	18.4					
1712043	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_65-70	FS	56.9	J	20.4					

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PENOBSCOT RIVER ESTUARY PHASE III - ENGINEERING EVALUATION

SDGs 1711118, 1711120, 1711128, 1711258, 1711594, 1711595, 1711597, 1711601, 1711602, 1711775, 1711776, 1711799, 1711800, 1712042, 1712043 and 1712048, L1741132, L1741135, L1741136, L1741137, L1741138, L1741139, L1741140, L1741141, L1742392, L1742393, L1742394, L1742395, L1742396, L1742397, L1742402, L1742403, L1742404, L1742405, L1743403, L1743404, L1743405, L1743406, L1744058, L1744059 and L1744060

			Analysis Method			EPA 1631		EPA 1630		LLOYD KAHN			
			Parameter		% Solids	Mercury		Methyl Mercury		TOC			
			Unit		PERCENT	NG/G		NG/G		PERCENT			
			Fraction		Total	Total		Total		Total			
SDG	**Location ID**	**Sample Date**	**Sample ID**	**QC Code**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**	**Final Result**	**Final Qualifier**
1712043	VN-05-01-D	11/28/17	VN-05-01-D-17_SED_70-75	FS	60.2	J	17.8					
1712048	VW-02-01-B	11/27/17	VW-02-01-B-17_SED_30-35	FS	55	J	13.4					
1712048	VW-02-01-B	11/27/17	VW-02-01-B-17_SED_35-40	FS	55.6	J	18.8					
1712048	VW-02-01-B	11/27/17	VW-02-01-B-17_SED_40-45	FS	55.5	J	12.5					
1712048	VW-02-01-B	11/27/17	VW-02-01-B-17_SED_45-50	FS	55.5	J	13					
1712048	VW-02-01-B	11/27/17	VW-02-01-B-17_SED_50-55	FS	55.9	J	12.6					
1712048	VW-02-01-B	11/27/17	VW-02-01-B-17_SED_55-60	FS	59.3	J	10.8					
1712048	VW-02-01-B	11/27/17	VW-02-01-B-17_SED_60-65	FS	58.9	J	10					
1712048	VW-02-01-B	11/27/17	VW-02-01-B-17_SED_65-70	FS	58.7	J	9.68					
1712048	VW-02-01-B	11/27/17	VW-02-01-B-17_SED_70-75	FS	56.8	J	18.8					
1712048	VW-02-01-B	11/27/17	VW-02-01-B-17_SED_70-75-D	FD	56.3	J	13					
1712048	VW-02-01-B	11/27/17	VW-02-01-B-17_SED_75-80	FS	57.6	J	11.6					

Notes:
% = Percent
NG/G = Nanogram per gram
FD = Field Duplicate
FS = Field Sample
SDG = Sample Delivery Group
TOC = Total Organic Carbon

Qualifiers:
J = Value is estimated