APPENDIX I

Qualitative Sample Characteristics
and Chain-of-Custody Forms
for Perimeter Monitoring

PRE-CONSTRUCTION PERIMETER MONITORING
QUALITATIVE SAMPLE CHARACTERISTICS FORMS—JULY 2014

QUALITATIVE SAMPLE CHARACTERISTICS

Page 1 of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	7-14-17	Boeing PL2	SD-PER 301

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
196473	1274633	24.5	f t	1	0.2 Grab		846

Penetration		Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit					
10	c m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel -	Very Loose	Loose	Medium Dense	Dense	Very Dense	
Silt / Clay -	Very Soft	(Soft)	Medium Stiff	Stiff	Very Stiff	Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: trace worms % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER301-0714 Initials: GSM
QSC Form
Date: 7 / 14 /2017 Time: 846

QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	7-14-14	Boeing PL2	SD-PER 301

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
196476	1274643	24.6	f	t	2	0.2 Grab	903

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	CSM			sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-14-14	Boeing PL2	SD-PER 301

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196478	1274638	24.0	f / t	3	0.2 Grab	917

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
8	c / m	GSM			sunny	

Surficial Wood Estimate:

Contact Points ____ X 5 = ____ %

Surficial sediment characteristics:

Biological: ____ % **Debris:** ____ % **Oil Sheen:** None (Trace (<5%)) ____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other ____

Major Constituent (Circle major & underline modifying)
Fine (Medium) Coarse Gravel (Sand) (Silt) Clay ____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand (Silt) Clay ____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose (Loose) Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray (Brown) Black Other ____

Major Constituent (Circle major & underline modifying)
Fine (Medium) Coarse Gravel (Sand) Silt Clay ____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand (Silt) Clay ____

Biological: ____ % **Debris:** ____ % **Oil Sheen:** None Trace (<5%) ____ %

Comments: barnacles and angular ballast rock on surface

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-14-14	Boeing PL2	SD-PER 302

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196409	1274779	25.2	f t	1	0.2 Grab	937

Penetration			Sulfide	VOA	Weather	Fines (%)
Depth	Unit	Initials				
10	c m	GSM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
strong river current
sticks on surface and throughout depth
Clam shells in core

AMEC Proj. BP2 Perimeter
SD-PER302-0714 Initials: GSM
QSC Form
Date: 7/14/2014 Time: 937

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-14-14	Boeing PL2	SD-PER 302

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196417	1274773	24.4	f t	2	0.2 Grab	951

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose (Loose) Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments: trace worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-14-14	Boeing PL2	SD-PER 302

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
196416	1274767	24.3	f	t	3	0.2 Grab	1004

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
10	c	m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 1 % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose (Loose) Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive Gray Brown (Black) Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments: R3 - water high

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-14-14	Boeing PL2	SD-PER 303

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
196259	1274854	12.6	f t	1	0.2 Grab		1022

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	CSM			sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium Dark Olive Gray (Brown) Black Other w/ iron oxide staining

Major Constituent **(Circle major & underline modifying)**
(Fine) ~~Medium~~ NM Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
Algae on surface w/ trace seaweed

AMEC Proj. BP2 Perimeter
SD-PER303-0714 Initials: CSM
QSC Form
Date: 7/14/2014 Time: 1022

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-17-14	Boeing PL2	SD-PER 303

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
196257	1274853	12.7	f	t	2	0.2 Grab	1034

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	GSM			sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments: Trace sea grass on surface

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-14-14	Boeing PL2	SD-PER 303

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196264	1274856	12.4	f t	3	0.2 Grab	1044

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
11	c m	GSM			sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-14-14	Boeing PL2	SD-PER 304

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
196185	1275031	13.5	f	t	1	0.2 Grab	1256

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
10	c	m	ESD			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments: barnacles on surface and shrimp
Woody Material below surface

AMEC Proj. BP2 Perimeter
SD-PER304-0714 Initials: S SM
Metals/TOC/PCB (not homogenized)
Date: 7/14/2014 Time: 1256

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-19-14	Boeing PL2	SD-PER 304

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
196190	1275031	14.0	f	t	2	0.2 Grab	1306

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
10	c	m	GJH			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-14-14	Boeing PL2	SD-PER 304

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
196183	1275027	13.4	f	t	3	0.2 Grab	1314

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	GM			sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-14-14	Boeing PL2	SD-PER 305

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196940	1275097	7.1	f t	1	0.2 Grab	1329

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	GSM			sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter

SD-PER305-0714 Initials: GSM

QSC Form

Date: 7/14/2014 Time: 1329

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-14-14	Boeing PL2	SD-PER 205

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
196034	1275099	6.9	f	t	2	0.2 Grab	1339

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
10	c	m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments: trace seaweed

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-14-14	Boeing PL2	SD-PER 305

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
19504)	1275101	7.7	f t	3	0.2 Grab		1348

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
10	c	m	GJM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

_____

_____

_____

_____

_____

_____

_____

_____

_____

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-14-14	Boeing PL2	SD-PER 306

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196012	1275273	19.4	f t	1	0.2 Grab	1447

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
10	c	m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER306-0714 Initials: GSM
QSC Form
Date: 7/14/2014 Time: 1447

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-14-14	Boeing PL2	SD-PER 325

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196013	1275278	20.1	f t	2	0.2 Grab	1504

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium Dark Olive Gray Brown Black Other w/ orange iron oxide staining

Major Constituent **(Circle major & underline modifying)**
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments: trace polychaets

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-14-14	Boeing PL2	SD-PER 306

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
196020	1275281	21.1	f	t	3	0.2 Grab	1513

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
	c	m	GM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-15-14	Boeing PL2	SD-PER 307

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
195872	1275271	19.9	f	t	1	0.2 Grab	852

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	SSM			Cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments: plant Material throughout

AMEC Proj. BP2 Perimeter
SD-PER307-0714 Initials: SSM
QSC Form
Date: 7/15/2014 Time: 852

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-15-14	Boeing PL2	SD-PER 307

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
195874	1275275	20.6	f	t	2	0.2 Grab	0901

Penetration							
Depth	Unit		Initials	Sulfide	VOA	Weather	Fines (%)
12	c	m	BM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium (Dark) Olive Gray (Brown) Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

_____

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-15-14	Boeing PL2	SD-PER 307

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
195872	1275279	20.0	f	t	3	0.2 Grab	912

Penetration							
Depth	Unit		Initials	Sulfide	VOA	Weather	Fines (%)
12	c	m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-15-14	Boeing PL2	SD-PER 327

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195866	1275273	18.1	f t	1	0.2 Grab	935

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

attempt 1 - water loss
926 attempt 2 - poor penetration
camera lost overboard
gravel @ base of grab

AMEC Proj. BP2 Perimeter
SD-PER327-0714 Initials: GSM
QSC Form
Date: 7/15/2014 Time: 935

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-15-14	Boeing PL2	SD-PER 327

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195859	127528	17.9	f t	2	0.2 Grab	945

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments: plant material @ depth w/ sticks

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-15-14	Boeing PL2	SD-PER 327

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195859	1275274	16.9	f t	3	0.2 Grab	959

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
	c m	GSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
attempt 1 poor penetration - reject

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-15-14	Boeing PL2	SD-PER 308

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
195829	1275490	27.1	f	t	1	0.2 Grab	1024

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
10	c	m	GSM			pt cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
abundant plant material throughout
w/ trace cobbles

AMEC Proj. BP2 Perimeter
SD-PER308-0714 Initials: GSM
QSC Form
Date: 7/5/2014 Time: 1024

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-15-14	Boeing PL2	SD-PER 308

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
195826	1275484	25.6	f	t	2	0.2 Grab	1032

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
	c m	GSM			part cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
trace gravel on surface

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-15-14	Boeing PL2	SD-PER 308

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
195830	1275486	25.9	f	t	3	0.2 Grab	1540

Penetration							
Depth	Unit		Initials	Sulfide	VOA	Weather	Fines (%)
10	c	m	CSM			part cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
3-4" crab on surface
+ trace shell fragments, barnacles, and sticks
trace sticks and gravel throughout

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	7-15-14	Boeing PL2	SD-PER 309

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195659	1275547	17.8	f t	1	0.2 Grab	1057

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
12	c	m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
plant material below surface

AMEC Proj. BP2 Perimeter
SD-PER309-0714 Initials: GSM
QSC Form
Date: 7 / 15 / 2014 Time: 1057

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-15-14	Boeing PL2	SD-PER 309

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
195655	1275550	17.1	f	t	2	0.2 Grab	1105

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	GSM			Sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

_____

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-15-14	Boeing PL2	SD-PER 309

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
195662	1275552	17.4	f t	3	0.2 Grab		1112

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
10	c	m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments: plant material below surface

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-15-14	Boeing PL2	SD-PER 310

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
			f	t	1	0.2 Grab	1220

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
	c	m	GSR			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments: station under Jorgensen dredge barge

AMEC, 3500 188th St. SW, Suite 601, Lynnwood, WA 98037, (425) 921-4000

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-15-14	Boeing PL2	SD-PER 311

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195 406	1275678	13.8	f t		0.2 Grab	1226

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
11	c m	GSM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt (Clay) _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER311-0714 Initials: GSM
QSC Form
Date: 7/15/2014 Time: 1226

Anstr\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-15-14	Boeing PL2	SD-PER 314

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
195411	1275682	13.4	f	t	2	0.2 Grab	1234

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
	c m	GSH			Sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

Amm\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-15-14	Boeing PL2	SD-PER 311

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
195407	1275684	14.9	f t	3	0.2 Grab		1245

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	GSH			Sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments: trace shell fragments

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-14-14	Boeing PL2	SD-PER 312

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
196219	1274834	4.6	f / t	1	0.2 Grab		1105

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
12	c / m	GSH			sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments: Abundant seaweed

photo recd: SD PER 304 R1

AMEC Proj. BP2 Perimeter
SD-PER312-0714 Initials: GSH
QSC Form
Date: 7/14/2012 Time: 11:05

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-19-14	Boeing PL2	SD-PER 312

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
196225	1274838	4.9	f	t	2	0.2 Grab	1118

Penetration							
Depth	Unit		Initials	Sulfide	VOA	Weather	Fines (%)
12	c	m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments: Abundant seaweed on surface

photo reads SD PER 304R3

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-14-14	Boeing PL2	SD-PER 312

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
196224	1274835	5.3	f	t	3	0.2 Grab	1130

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
	c	m	CJM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments: abundant seaweed

photo label reads SD-PER-312 R3

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-14-14	Boeing PL2	SD-PER 313

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
195992	1275091	2.9	f t	1	0.2 Grab		1408

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments: Abundant Seaweed

AMEC Proj. BP2 Perimeter
SD-PER313-0714 Initials: GSM
QSC Form
Date: 7/14/2012 Time: 1408

Amec\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-14-14	Boeing PL2	SD-PER 313

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195989	1275089	3.4	f t	2	0.2 Grab	1417

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSV			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments: abundant seaweed

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-17-14	Boeing PL2	SD-PER 313

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195991	1275094	3.9	f t	3	0.2 Grab	1427

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments: Abundant Seaweed

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-15-14	Boeing PL2	SD-PER 401

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
194404	1276147	5.9	f	t	1	0.2 Grab	1306

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
10	c	m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose (Loose) Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER401-0714 Initials: ____
QSC Form
Date: ____/____/2014 Time: 1306

AMEC, 3500 188th St. SW, Suite 601, Lynnwood, WA 98037, (425) 921-4000

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-15-14	Boeing PL2	SD-PER 401

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
194402	1276134	6.9	f	t	2	0.2 Grab	1316

Penetration							
Depth	Unit		Initials	Sulfide	VOA	Weather	Fines (%)
12	c	m	GLM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments: algae and plants on surface

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-15-14	Boeing PL2	SD-PER 401

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
194403	1276140	6.8	f	t	3	0.2 Grab	1324

Penetration							
Depth	Unit		Initials	Sulfide	VOA	Weather	Fines (%)
10	c	m	GSM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments: Some plant matter on surface

Amm\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-15-14	Boeing PL2	SD-PER 402

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
194314	1275994	13.0	f t	1	0.2 Grab		1348

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
12	c m	GSR			sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter

SD-PER402-0714 Initials: _____

QSC Form

Date: 7/14/2014 Time: 1348

Amec\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-15-14	Boeing PL2	SD-PER 402

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
194313	1275985	12.8	f t	2	0.2 Grab		1358

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	BJM			sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
barnacle on surface
trace worms below surface

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-15-14	Boeing PL2	SD-PER 402

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
194 309	1275991	12.9	f	t	3	0.2 Grab	1403

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	GJM			sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-15-14	Boeing PL2	SD-PER 403

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
194 315	1276095	14.1	f	t	1	0.2 Grab	1430

Penetration							
Depth	Unit		Initials	Sulfide	VOA	Weather	Fines (%)
11	c	m	LSM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments: large stick on surface
abundant plant debris throughout

AMEC Proj. BP2 Perimeter
SD-PER403-0714 Initials: _____
QSC Form Date: ___/___/2014 Time: _____

Amer\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-15-14	Boeing PL2	SD-PER 403

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
194307	1276094	13.9	f	t	2	0.2 Grab	1437

Penetration							
Depth	Unit		Initials	Sulfide	VOA	Weather	Fines (%)
10	c	m	GSM			sunny	

Surficial Wood Estimate:

Contact Points

_____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

_____

_____

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_____

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-15-14	Boeing PL2	SD-PER 403

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
194315	1276087	14.2	f	t	3	0.2 Grab	14:43

Penetration							
Depth	Unit		Initials	Sulfide	VOA	Weather	Fines (%)
10	c	m	GSM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-16-14	Boeing PL2	SD-PER 404

Coordinates		Water Depth				Time
North	East	Depth	Unit (f / t)	Rep	Gear	
194228	1275947	18.8	f / t	1	0.2 Grab	828

Penetration Depth	Penetration Unit (c / m)	Initials	Sulfide	VOA	Weather	Fines (%)
9	c / m	GSD			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments: trace seaweed on surface

AMEC Proj. BP2 Perimeter SD-PER404-0714 QSC Form Initials: _____

Date: ___/___/2014 Time: 828

Amm\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-16-14	Boeing PL2	SD-PER 424

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
194229	1275942	17.9	f	t	2	0.2 Grab	837

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
12	c m	GJM			sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments: seaweed on surface

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-16-14	Boeing PL2	SD-PER 454

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
194224	1275947	19.1	f t	J	0.2 Grab	848

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	CSM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments: Seaweed on surface

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-16-14	Boeing PL2	SD-PER 405

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
194226	1276045	25.1	f	t	1	0.2 Grab	906

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
0	c m	GSM			sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
2 shrimp on surface
trace seaweed on surface

AMEC Proj. BP2 Perimeter
SD-PER405-0714 Initials: GSM
QSC Form
Date: 7/14/2014 Time: 906

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-16-14	Boeing PL2	SD-PER 405

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
194228	1276038	24.7	f	t	2	0.2 Grab	915

Penetration							
Depth	Unit		Initials	Sulfide	VOA	Weather	Fines (%)
	c	m	GJA			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments: single shell fragment on surface

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-16-14	Boeing PL2	SD-PER 405

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
194228	1276043	24.5	f t	3	0.2 Grab	924

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GLO			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments: single shell fragment on surface

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-16-14	Boeing PL2	SD-PER 406

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
194227	1276151	21.4	f / t	1	0.2 Grab		944

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
11	c / m	CPM			sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet **Wet** Moist Damp Dry

Color (Circle major & underline modifying)
Light **Medium** Dark Olive Gray **Brown** Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand **Silt** Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft **Soft** Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet **Wet** Moist Damp Dry

Color (Circle major & underline modifying)
Light **Medium** Dark Olive **Gray** Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand **Silt** Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
1 shrimp on surface
trace sticks on surface

AMEC Proj. BP2 Perimeter
SD-PER406-0714 Initials: _____
QSC Form
Date: 7 / 14 /2014 Time: 944

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-16-14	Boeing PL2	SD-PER 406

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
194229	1276141	21.7	f	t	2	0.2 Grab	952

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
11	c m	GM			sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt (Clay) _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments: 1 shell on surface

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-16-14	Boeing PL2	SD-PER 406

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
194226	1276144	21-9	f t	3	0.2 Grab		1002

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
	c m	GPM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-16-14	Boeing PL2	SD-PER 426

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
194231	1276152	20.5	f t	1	0.2 Grab	1015

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
10	c	m	bsm			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER426-0714 Initials: _____
QSC Form
Date: 7 / 14 /2014 Time: 1015

rms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-16-14	Boeing PL2	SD-PER 426

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
194231	1276148	20.1	f t	2	0.2 Grab	1025

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	BJM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt (Clay) _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments: abundant barnacles on a large stick

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	7-16-14	Boeing PL2	SD-PER 426

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
194227	1276139	21.6	f t	3	0.2 Grab	1036

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	BOM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
several mussels on surface
trace sticks on surface and 1 shrimp

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PRE-CONSTRUCTION PERIMETER MONITORING
QUALITATIVE SAMPLE CHARACTERISTICS FORMS—SEPTEMBER 2014

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-15-14	Boeing PL2	SD-PER 101

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199743	1271445	23.2	f t	1	0.2 Grab	1342

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
16	c m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 10 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** 10 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
leaves, twigs, wood

AMEC Proj. BP2 Perimeter
SD-PER101-0914
QSC Form
Initials: _____
Date: 9/15/2014 Time: 1342

Amm\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-15-14	Boeing PL2	SD-PER 101

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
199747	1271444	23.9	f	t	2	0.2 Grab	1401

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
13	c m	KM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
shrimp, worms, twig, leaves, grass

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-15-14	Boeing PL2	SD-PER 101

Coordinates		Water Depth				
North	East	Depth	Unit	Rep	Gear	Time
199742	1271447	22.4	f t	3	0.2 Grab	1440

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	CJM			runny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

attempt 1 1418 poor penetration
attempt 2 1438 poor penetration
attempt 3

twigs, worms, shells

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-16-14	Boeing PL2	SD-PER 102

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199652 199655	1271397	31.4	f t	1	0.2 Grab	1252

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	SJM			P. cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 10 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Biological: trace % **Debris:** 10 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
leaves, twigs, wood, worms

AMEC Proj. BP2 Perimeter
SD-PER102-0914
QSC Form
Initials: SJM
Date: 9 / 16 /2014 Time: 1252

Amn\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-16-14	Boeing PL2	SD-PER 102

Coordinates		Water Depth				
North	East	Depth	Unit	Rep	Gear	Time
199653	1271395	31.3	f t	2	0.2 Grab	1304

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	CSM			p.cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff (Stiff) Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Shell, wood, gravel, leaves, worms, twigs

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-16-14	Boeing PL2	SD-PER 102

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199656	1271395	31.3	f t	3	0.2 Grab	1212

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
11	c m	GSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Wood, twigs, worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-16-14 9/17/14	Boeing PL2	SD-PER 103

Coordinates		Water Depth				Time
North	East	Depth	Unit (f / t)	Rep	Gear	
199657	1271499	26.1	f / t	1	0.2 Grab	1212

Penetration Depth	Penetration Unit (c / m)	Initials	Sulfide	VOA	Weather	Fines (%)
	c / m	GSM			p.cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

attempt 1 – no recovery – trash in jaws – no sediment
attempt 2 – poor penetration
attempt 3 – no recovery
attempt 4 – poor recovery

no sample

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-17-14	Boeing PL2	SD-PER 103

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
199661	1271498	18.9	f	t	1	0.2 Grab	748

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
24	c m	CSM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 10 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
twigs, shells, leaves
grass, worms

AMEC Proj. BP2 Perimeter
SD-PER103-0914
QSC Form
Initials: CSM
Date: 9/17/2014 Time: 748

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-17-14	Boeing PL2	SD-PER 103

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199660	1271499	18.5	f t	2	0.2 Grab	804

Penetration		Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit					
25	c m	GIN			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** 10 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
attempt 1 poor penetration
attempt 2 good - disturb area from previous grab
shells, twigs, worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-17-14	Boeing PL2	SD-PER 10 3

Coordinates		Water Depth				
North	East	Depth	Unit	Rep	Gear	Time
199658	1271500	19.1	f t	3	0.2 Grab	821

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
25	c m	GSD			p. cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other _____

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose | Loose | Medium Dense | Dense | Very Dense

Silt / Clay - Very Soft | Soft | Medium Stiff | Stiff | Very Stiff | Hard

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other _____

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Biological: trace % **Debris:** 10 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
attempt 1 empty grab
wood, straw, metal, shells
barnacles, algae, jar worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-16-14	Boeing PL2	SD-PER 104

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199571	1271352	29.8	f t	1	0.2 Grab	1330

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GLN			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
leaves, twigs, shells, worms, wood

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-16-14	Boeing PL2	SD-PER 104

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199565	1271350	31.9	f / t	2	0.2 Grab	1341

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c / m	ccm			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
twigs, shells, worms
leaves, grass

AMEC Proj. BP2 Perimeter
SD-PER104-0914
QSC Form
Initials: SJM
Date: 9 / 15 /2014 Time: 1330

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-16-14	Boeing PL2 *	SD-PER 104

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
149571	1271349	29.9	f t	3	0.2 Grab	1355

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Twigs, leaves, metal, worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-16-14	Boeing PL2	SD-PER 105

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199573	1271449	31.2	f t	)	0.2 Grab	1413

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Shrimp, twigs, leaves, worms

AMEC Proj. BP2 Perimeter
SD-PER105-0914
QSC Form
Initials: GSM
Date: 9/16/2014 Time: 1413

AMEC\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-16-14	Boeing PL2	SD-PER 105

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
199571	1271444	30.5	f	t	2	0.2 Grab	1426

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	CSM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
leaves, worms, twigs, grass

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-16-14	Boeing PL2	SD-PER 105

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
1995071 199571	1271446	30.9	f t	3	0.2 Grab	1435

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Shrimp, wood, shells, leaves, barnacles

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-15-14	Boeing PL2	SD-PER 106

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199430	1271456	26.8	f t	1	0.2 Grab	1143

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GSD			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
Shrimp, Shells, grass
worms, twigs
Clam

AMEC Proj. BP2 Perimeter
SD-PER106-0014
QSC Form
Initials: GSD
Date: __/__/2014 Time: 1143

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-15-14	Boeing PL2	SD-PER 106

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199434	1271455	25.9	f t	2	0.2 Grab	1200

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
leaves, twigs, worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-25-14	Boeing PL2	SD-PER 106

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
199430	1271456	26.2	f t	3	0.2 Grab		1214

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Barnacles, shells, twigs & kelp, leaves, worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-15-14	Boeing PL2	SD-PER 126

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199436	1271457	27.6	f t	1	0.2 Grab	1238

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Shrimp, Shells, twigs, worms,

AMEC Proj. BP2 Perimeter
SD-PER126-0914
QSC Form
Initials: _____
Date: ___/___/2014 Time: _____

Amn\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-15-14	Boeing PL2	SD-PER 126

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
199433	1271453	26.3	f t	2	0.2 Grab		1300

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSD			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
shrimp, shells, worms, grass, twigs

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-15-14	Boeing PL2	SD-PER 126

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199433	1271458	25.3	f t	3	0.2 Grab	1318

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
13	c m	GSM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: TRACE % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
Scrap metal, shells, twigs, worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-16-14	Boeing PL2	SD-PER 201

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198393	1272557	21.1	f t	1	0.2 Grab	1010

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** 10 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
twigs, barnacles, leaves
Warm

AMEC Proj. BP2 Perimeter
SD-PER201-0914
QSC Form
Initials: GSM
Date: 9/16/2014 Time: 1010

Amm\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-16-14	Boeing PL2	SD-PER 201

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198398	1272557	28.2	f t	2	0.2 Grab	1025

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GXM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
twigs, leaves, grass
worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-16-14	Boeing PL2	SD-PER 201

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198395	1272560	28.5	f t	3	0.2 Grab	1037

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
leaves, roots, worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-19-14	Boeing PL2	SD-PER 202

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198118	1272922	23.3	f t	1	0.2 Grab	1153

Penetration			Sulfide	VOA	Weather	Fines (%)
Depth	Unit	Initials				
10	c m	GJM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
leaves, shells, twigs

AMEC Proj. BP2 Perimeter
SD-PER202-0914
QSC Form
Initials: GJM
Date: 9/19/2014 Time: 1153

Amn\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-19-14	Boeing PL2	SD-PER 202

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198121	1272923	—	f t	2	0.2 Grab	1209

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GJN			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
current too strong to get water depth
shells, twigs, worms

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-19-14	Boeing PL2	SD-PER 202

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
198123	1272924	26.0	f	t	3	0.2 Grab	1223

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSM			p-cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

strong current

Shells, barnacles, twigs, worms.

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-17-14	Boeing PL2	SD-PER 203

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198133	1272621	11.2	f t	1	0.2 Grab	1012

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 10 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Shells, twigs, grass, leaves

AMEC Proj. BP2 Perimeter
SD-PER203-0914
QSC Form
Initials: GSM
Date: 9/17/2014 Time: 1012

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-17-14	Boeing PL2	SD-PER 203

Coordinates		Water Depth		Rep	Gear	Time
North	East	Depth	Unit			
198131	1272634 1272624	11.8	f t	2	0.2 Grab	1022

Penetration		Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit					
11	c m	GW			Windy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
twig worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-17-14	Boeing PL2	SD-PER 203

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
198137	1272621		f	t	3	0.2 Grab	1032

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
11	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Shells, twigs, roots, worm

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QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-17-14	Boeing PL2	SD-PER 204

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197914	1273013	27.3	f t	1	0.2 Grab	1342

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
13	c m	CSM			partly	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
twigs, leaves, worms

AMEC Proj. BP2 Perimeter
SD-PER204-0914
QSC Form
Initials: CSM
Date: 9/17/2014 Time: 1342

i Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-17-14	Boeing PL2	SD-PER 204

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197914	1273011	26.9	f t	2	0.2 Grab	1356

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
11	c m	GSM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
twig, worms, grass

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-17-14	Boeing PL2	SD-PER 204

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197919	1273017	27.1	f t	3	0.2 Grab	1411

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
13	c m	GSM			p. cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** None (Trace (<5%)) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** traces % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
worms, twigs, leaves

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-19-14	Boeing PL2	SD-PER 205

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
197723	1273383	25.2	f	t	1	0.2 Grab	1244

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
10	c	m	GM			P. cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose (Medium Dense) Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Shrimp, twigs, leaves
worms

AMEC Proj. BP2 Perimeter
SD-PER205-0914
QSC Form
Initials: GM
Date: 9/19/2014 Time: 1244

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-19-14	Boeing PL2	SD-PER 205

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197721	1273380	257	f t	2	0.2 Grab	1300

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GSM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
strong current
twigs, leaves, worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-19-14	Boeing PL2	SD-PER 205

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197722	1273380	25.2	f t	3	0.2 Grab	1315

Penetration		Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit					
11	c m	GSN			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
twigs, shells, Clam, worm

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-17-14	Boeing PL2	SD-PER 206

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
197704	1273137	8.0	f	t	1	0.2 Grab	848

Penetration							Fines (%)
Depth	Unit	Initials	Sulfide	VOA	Weather		
25	c m	GSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) (Medium) Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel -	Very Loose	Loose	(Medium Dense)	Dense	Very Dense
Silt / Clay -	Very Soft	Soft	(Medium Stiff)	Stiff	Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
grass, shells, twigs

AMEC Proj. BP2 Perimeter
SD-PER206-0914
QSC Form
Initials: GSM
Date: 9/17/2014 Time: 848

Amm\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-17-14	Boeing PL2	SD-PER 206

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
197704	1273139	8.3	f	t	2	0.2 Grab	904

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
	c m	GM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) (Medium) Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose (Medium Dense) Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) (Medium) Coarse Gravel (Sand) Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Shells, twigs, grass

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-17-14	Boeing PL2	SD-PER 206

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197706	1273135	8.9	f t	3	0.2 Grab	912

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	BJH			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
algae, twigs, shells

AmuriField Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-19-14	Boeing PL2	SD-PER 207

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197504	1273487	26.3	f t	1	0.2 Grab	1336

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
11	c m	GM			P cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
grass, wood, twigs, worms

AMEC Proj. 392 Perimeter
SD-PER207-0914
QSC Form
Initials: ___
Date: __/__/2014 Time: ____

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-19-14	Boeing PL2	SD-PER 297

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
197502	1273482	25.4	f	t	2	0.2 Grab	1348

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
11	c / m	GM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Worms, twigs leaves

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-19-14	Boeing PL2	SD-PER 207

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
197498	1973487	25.2	f	t	3	0.2 Grab	1409

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GJM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
leaves, twigs, worms

AMEC, 3500 188th St. SW, Suite 601, Lynnwood, WA 98037, (425) 921-4000

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-25-14	Boeing PL2	SD-PER 208

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197341	1273796	25.0	f t	1	0.2 Grab	1552

Penetration							
Depth	Unit		Initials	Sulfide	VOA	Weather	Fines (%)
11	c	m	GSM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) 0 %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet (Moist) Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
Leaves on surface

AMEC Proj. BP2 Perimeter
SD-PER208-0914
QSC Form
Initials: GSM
Date: 9/25/2014 Time: _____

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-25-14	Boeing PL2	SD-PER 208

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
197344	1273790	25.5	f	t	2	0.2 Grab	1606

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
8	c m	GSH			p cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet (Moist) Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-25-14	Boeing PL2	SD-PER 208

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
197343	1273798	25.5	f	t	3	0.2 Grab	1617

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	GJM			p cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet (Moist) Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine (Medium) Coarse (Gravel) Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments: Red rock crab on surface

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9/17/2014	Boeing PL2	SD-PER 209

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197313	1273589	14.2	f t	1	0.2 Grab	1053

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
0	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose (Medium Dense) Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray Brown Black Other red-brown

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
branch
Collected Sample in upstream area

AMEC Proj. BP2 Perimeter
SD-PER209-0914
QSC Form
Initials: GSM
Date: 9/17/2014 Time: 1053

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-17-14	Boeing PL2	SD-PER 209

Coordinates		Water Depth				Time
North	East	Depth	Unit (f / t)	Rep	Gear	
197307	1273588	12.8	f / t	2	0.2 Grab	1104

Penetration Depth	Penetration Unit (c / m)	Initials	Sulfide	VOA	Weather	Fines (%)
10	c / m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose (Medium Dense) Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray Brown Black Other Red-brown

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Damaged

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-17-14	Boeing PL2	SD-PER 209

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197310	1273584	13.0	f t	3	0.2 Grab	1112

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose (Medium Dense) Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray Brown Black Other Red brown

Major Constituent (Circle major & underline modifying)
(Fine) (Medium) Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Biological: trace % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Shells, worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-22-14	Boeing PL2	SD-PER 210

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
147084	1273949	21.2	f t	1	0.2 Grab	1220

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSM			sl cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
barnacles, shells, worms

AMEC Proj. BP2 Perimeter
SD-PER210-0914
QSC Form
Initials: GSM
Date: 9/22/2014 Time: 1220

Amec\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-22-14	Boeing PL2	SD-PER 210

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
197087	1273951	22.2	f	t	2	0.2 Grab	1230

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSM			P cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
root, Clam shell, twigs, worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-22-14	Boeing PL2	SD-PER 210

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
197087	1273943	22.3	f t	3	0.2 Grab		1241

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
	c m	BSM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: - 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
worms, shell
roots, twigs

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-22-14	Boeing PL2	SD-PER 211

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196838	1274301	21.9	f t	1	0.2 Grab	1026

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	GSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
shells, barnacles, tunicates, worms

AMEC Proj. BP2 Perimeter
SD-PER211-0914
QSC Form
Initials: GSM
Date: 9/22/2014 Time: 1026

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-22-14	Boeing PL2	SD-PER 211

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196844	1274301	21.7	f t	2	0.2 Grab	1045

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSA			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium (Coarse) Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
attempt 1 poor penetration
attempt 2 good
Barnacles, twigs, shells, worms, leaf

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-22-14	Boeing PL2	SD-PER 211

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
196841	1274301	21.4	f	t	3	0.2 Grab	1054

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	KSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff (Stiff) Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
twigs, shells, grass, worms, leaves

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-17-14	Boeing PL2	SD-PER 212

Coordinates		Water Depth				
North	East	Depth	Unit	Rep	Gear	Time
196824	1274129	13.8	f t	1	0.2 Grab	1155

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GMM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
Fine (Medium) Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose (Medium Dense) Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray Brown Black Other Red-brown

Major Constituent (Circle major & underline modifying)
Fine (Medium) Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand (Silt) Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

attempt 1 no recovery
attempt 2 good
twigs, shells

AMEC Proj. BP2 Perimeter
SD-PER212-0914
QSC Form
Initials: GMM
Date: 9 / 17 /2014 Time: 1155

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-17-14	Boeing PL2	SD-PER 212

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
196821	1274128	13.9	f	t	2	0.2 Grab	1209

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) (Medium) Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose (Medium Dense) Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray Brown Black Other Red-brown

Major Constituent (Circle major & underline modifying)
(Fine) (Medium) Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
attempt 1 sticks in jaws - lot sediment - reject
attempt 2 good
brick fragment

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-17-14	Boeing PL2	SD-PER 212

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196 824	1274131		f t	3	0.2 Grab	1218

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 10 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other Red brown

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
Collected Sample from undistrubed area
loss of water & sediment in middle of gravel
barnacles, shells telephone cord twig
worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-17-14	Boeing PL2	SD-PER213

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
196681	1274381	25.9	f	t	1	0.2 Grab	1236

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSM			Pc cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: TRACE % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
wood, ceramic, shells
wires, glass

AMEC Proj. BP2 Perimeter
SD-PER213-0914
QSC Form
Initials: GSM
Date: 9/17/2014 Time: 1236

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-17-14	Boeing PL2	SD-PER 213

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196675	1274380	25.3	f t	2	0.2 Grab	1252

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GJW			P. cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** TRACE % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments: attempt 1 debris in jaws - leakage - loss sediment
attempt 2 good
Shells, wood, twigs, etc

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-17-14	Boeing PL2	SD-PER 213

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196679	1274377	27.0	f t	3	0.2 Grab	1301

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GM			P. cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) (Medium) Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
worms, shells, twig, gravel

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-22-14	Boeing PL2	SD-PER 230

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197088	1273946	23.2	f t	1	0.2 Grab	1253

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
	c m	GM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
twigs, shells, leaves, worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-22-14	Boeing PL2	SD-PER 230

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
197089	1273950	23.8	f	t	2	0.2 Grab	1305

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	GSM			p cldy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
twigs, Worms

AMEC Proj. BP2 Perimeter
SD-PER230-0914
QSC Form
Initials: GSM
Date: 9/22/2014 Time: 1253

AMEC\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-22-14	Boeing PL2	SD-PER 230

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
197088	1273944	24.2	f t	3	0.2 Grab		1346

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
attempt 1 too far off station - reject
shells, worms, twigs

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-12-14	Boeing PL2	SD-PER 301

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196476	1274637	17.3	f t	1	0.2 Grab	1227

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** None (Trace (<5%)) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Barnacles, leaves, roots, sticks, twigs

AMEC Proj. BP2 Perimeter
SD-PER3 11-0914
QSC Form
Initials: ___
Date: ___/___/2014 Time: ___

AMEC\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-12-14	Boeing PL2	SD-PER 301

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196478	1274639	19.9	f t	2	0.2 Grab	1241

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSM			rainy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
grass, worms, twigs

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-12-14	Boeing PL2	SD-PER 301

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
196478	1274633	22.0	f t	3	0.2 Grab		1252

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet (Moist) Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

leaves, grass, twigs

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-12-14	Boeing PL2	SD-PER 302

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196410	1274773	21.0	f t	1	0.2 Grab	1310

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GSA			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet (Moist) Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt (Clay) _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
shell pieces, grass, twigs

AMEC Proj. BP2 Perimeter
SD-PER302-0914
QSC Form
Initials: _____
Date: 9/12/2014 Time: 1310

AmecField Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-11-14	Boeing PL2	SD-PER 302

9-12-14

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196408	1274774	21.0	f t	2	0.2 Grab	1321

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	GSM			sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Sticks, twigs, leaves, worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-11-14	Boeing PL2	SD-PER 303 302

9-12-14

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196415	1274771	21.0	f t	3	0.2 Grab	1327

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GJD			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
shells, grass, worms, roots

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-11-14	Boeing PL2	SD-PER 303

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196262	1274852	17.8	f t	1	0.2 Grab	820

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
0	c m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
leaves, twigs

AMEC Proj. BP2 Perimeter
SD-PER303-0914
QSC Form
Initials: GSM
Date: 9 / 11 /2014 Time: 820

Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-11-14	Boeing PL2	SD-PER 303

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
196264	1274850	180	f	t	2	0.2 Grab	832

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
18	c	m	GSM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
twigs

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-11-14	Boeing PL2	SD-PER 303

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196259	1274849	16.9	f t	3	0.2 Grab	841

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
11	c m	GM			Sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 6 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Shr. mp roots

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-12-14	Boeing PL2	SD-PER 304

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196188	1275030	18.6	f t	1	0.2 Grab	1346

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GSM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
grass, leaves, twigs

AMEC Proj. BP2 Perimeter
SD-PER304-0914
QSC Form
Initials: GSM
Date: 9 / 12 /2014 Time: 1346

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-12-14	Boeing PL2	SD-PER 304

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196187	1275022	18.0	f t	2	0.2 Grab	1400

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	CJM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments: twigs, grass, leaves, worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-12-14	Boeing PL2	SD-PER 304

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
196192	1275029	18.9	f t	3	0.2 Grab		1412

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSH			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
worms, leaves, grass.

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-11-14	Boeing PL2	SD-PER 305

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
196040	1275099	17.6	f t	1	0.2 Grab		857

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	GSM			sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments: twigs, worms

AMEC Proj. BP2 Perimeter
SD-PER305-0914
QSC Form
Initials: GSM
Date: 9/11/2014 Time: 857

AmInField Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-11-14	Boeing PL2	SD-PER 305

Coordinates		Water Depth		Rep	Gear	Time
North	East	Depth	Unit			
196042	1275101	18.7	f t	2	0.2 Grab	909

Penetration		Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit					
10	c m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
Roots, grass, worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-11-14	Boeing PL2	SD-PER 305

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
196034	1275100	16.8	f t	3	0.2 Grab		920

Penetration			Sulfide	VOA	Weather	Fines (%)
Depth	Unit	Initials				
12	c m	GJM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
leave 2 roots, grass worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-15-14	Boeing PL2	SD-PER 306

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196018	1275278	24.3	f t	1	0.2 Grab	742

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
Shells, twigs roots
lenses of black sand
worms)

AMEC Proj. BP2 Perimeter
SD-PER306-0914
QSC Form
Initials: GSM
Date: 9/14/2014 Time: 742

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-15-14	Boeing PL2	SD-PER 306

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196017	1275276	246	f t	2	0.2 Grab	755

Penetration		Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit					
11	c m	GJM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
twigs, worms, shells, grass
pockets of black sand

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-15-14	Boeing PL2	SD-PER 306

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196012	1275275	25.0	f t	3	0.2 Grab	803

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	CJM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Shells, worms, roots
Pockets of Black Sand

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-15-14	Boeing PL2	SD-PER 307

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195868	1275275	17.1	f t	1	0.2 Grab	817

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 5 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - (Very Soft) Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** 5 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Wood, plastic, grassy bee hive?
2cm, Black silt layer, leaves, worms

AMEC Proj. BP2 Perimeter
SD-PER307-0914
QSC Form
Initials: GSM
Date: 9/15/2014 Time: 817

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QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-15-14	Boeing PL2	SD-PER 307

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195864	1275275	16.9	f t	2	0.2 Grab	831

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
20	c m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** 10 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
twigs, grass, leaves
Black silt layer (worms)

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-15-14	Boeing PL2	SD-PER 307

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
195864	1275273	16.7	f t	3	0.2 Grab		844

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
14	c m	GSM			Sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 10 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
attempt 1 – no sediment
attempt 2
Shells, twigs, grass, wood, leaves

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-15-14	Boeing PL2	SD-PER 308

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195829 195828	1275488	28.2	f t	1	0.2 Grab	949

Penetration		Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit					
11	c m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER308-0914
QSC Form
Initials: GSM
Date: 9 / 15 /2014 Time: _____

twigs, gravel, leaves
shell
worms
Black sand [illegible]

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-15-14	Boeing PL2	SD-PER 308

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195829	1275488	29.0	f t	2	0.2 Grab	1001

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: ~~_____~~ % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Biological: trace % **Debris:** 10 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
shell, twigs, leaves, worms
Distributable in grab from previous grab

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-15-14	Boeing PL2	SD-PER 308

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
195831	1275486	28.1	f	t	3	0.2 Grab	1014

Penetration								
Depth	Unit		Initials	Sulfide	VOA	Weather	Fines (%)	
10	c	m	GSM			sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Worms, shells, twigs, roots

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-16-14	Boeing PL2	SD-PER 309

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195654	1275551	16.3	f t	1	0.2 Grab	735

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	GSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) (Medium) Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose (Medium Dense) Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) (Medium) Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
twigs

AMEC Proj. BP2 Perimeter
SD-PER309-0914
QSC Form
Initials: GSM
Date: 9/16/2014 Time: 735

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-16-14	Boeing PL2	SD-PER 309

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195658	1275550	16.9	f t	2	0.2 Grab	747

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GJD			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) (Medium) Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 10 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
leaves, twigs, shells, roots, grass

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-16-14	Boeing PL2	SD-PER 309

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195654	1275549	17.1	f t	3	0.2 Grab	800

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	SM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) (Medium) Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel -	Very Loose	Loose	(Medium Dense)	Dense	Very Dense
Silt / Clay -	Very Soft	Soft	Medium Stiff	Stiff	Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) (Medium) Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Sample Collected in clean section of grab (sloping material)
trace shell debris

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-16-14	Boeing PL2	SD-PER 310

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195589	1275760	20.1	f t	1	0.2 Grab	819

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
15	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - (Very Soft) Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Shells, rope
wood

AMEC Proj. BP2 Perimeter
SD-PER310-0914
QSC Form
Initials: GM
Date: 9 / 16 /2014 Time: 819

Amm\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-16-14	Boeing PL2	SD-PER 310

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
195591	1275766	19.9	f	t	2	0.2 Grab	834

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
15	c m	GM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - (Very Soft) Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
worms, twigs, roots

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-16-14	Boeing PL2	SD-PER 310

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195590	1275763	21.0	f t	3	0.2 Grab	847

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GDM			Cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - (Very Soft) Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
worms, grass

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-16-14	Boeing PL2	SD-PER 311

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
195399	1275683	19.7	f	t	1	0.2 Grab	912

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
17	c m	GJM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
twigs, leaves, shells
worms

AMEC Proj. BP2 Perimeter
SD-PER311-0914
QSC Form
Initials: GJM
Date: 9/16/2014 Time: 912

Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-16-14	Boeing PL2	SD-PER 311

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195406	1275685	21.0	f t	2	0.2 Grab	931

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
0	c m	GSM			Cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
leaves, twigs, shells worms, grass

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-16-14	Boeing PL2	SD-PER 311

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195403	1275679	21.6	f t	3	0.2 Grab	941

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
12	c m	GSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Shells, leaves, grass, worms, twigs

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-11-14	Boeing PL2	SD-PER 312

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
196225	1274832	15.1	f t	1	0.2 Grab		730

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	GM			sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** / % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
grass, twigs

AMEC Proj. BP2 Perimeter
SD-PER312-0914
QSC Form
Initials: GM
Date: 9 / 11 /2014 Time: 730

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-11-14	Boeing PL2	SD-PER 312

Coordinates		Water Depth		Rep	Gear	Time
North	East	Depth	Unit			
196224	1274835	15.1	f t	2	0.2 Grab	741

Penetration		Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit					
1/2	c m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 1 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 1 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
twigs, grass

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-11-14	Boeing PL2	SD-PER 312

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
196227	1274830	15.0	f t	3	0.2 Grab		752

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
18	c m	GRS			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - (Very Soft) Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 5 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
grass, twigs, roots

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-11-14	Boeing PL2	SD-PER 313

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195990	1275090	11.6	f t	1	0.2 Grab	944

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	ESN			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
twigs, grass roots

AMEC Proj. BP2 Perimeter
SD-PER313-0914
QSC Form
Initials: ____
Date: 9/11/2014 Time: ____

QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-11-14	Boeing PL2	SD-PER 313

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
195987	1275088	11.2	f	t	2	0.2 Grab	955

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	BSM			sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Shrimp, eelgrass

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-11-14	Boeing PL2	SD-PER 313

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
195991	1275091	10.8	f	t	3	0.2 Grab	1008

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
13	c m	GSM			sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 5 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
twigs, grass, worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-15-14	Boeing PL2	SD-PER 327

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195870	1275282	19.0	f t	1	0.2 Grab	858

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	GSM			Sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - (Very Soft) Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
barnacles, shells, leaves, twigs

AMEC Proj. BP2 Perimeter
SD-PER327-0914
QSC Form
Initials: GSM
Date: 9/15/2014 Time: 858

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QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-15-14	Boeing PL2	SD-PER 327

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195865	1275276	18.0	f t	2	0.2 Grab	912

Penetration			Sulfide	VOA	Weather	Fines (%)
Depth	Unit	Initials				
10	c m	[illegible]			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
Shrimp, twig, grass
1cm Black silt layer

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-15-14	Boeing PL2	SD-PER 327

Coordinates		Water Depth				Time
North	East	Depth	Unit (f / t)	Rep	Gear	
195868	1275278	18.6	f / t	3	0.2 Grab	926

Penetration Depth	Penetration Unit (c / m)	Initials	Sulfide	VOA	Weather	Fines (%)
13	c / m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 10 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - (Very Soft) Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 10 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
leaves, twigs, shells, grass

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-19-14	Boeing PL2	SD-PER 401

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
194401	1276137	11.1	f	t	1	0.2 Grab	730

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	GSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
Shrimp, Shells, twigs, worms

AMEC Proj. BP2 Perimeter
SD-PER401-0914
QSC Form
Initials: GSM
Date: 9/19/2014 Time: 730

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QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-19-14	Boeing PL2	SD-PER 401

Coordinates		Water Depth					Time
North	East	Depth	Unit f	Unit t	Rep	Gear	
194401	1276138	10.6			2	0.2 Grab	745

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
leaves, twigs

AminiField Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-19-14	Boeing PL2	SD-PER 401

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
194394	1276140	10.5	f	t	J	0.2 Grab	758

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
11	c m	GM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: C % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
leaves, grass twigs

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-19-14	Boeing PL2	SD-PER 402

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
194313	1275994	15.8	f	t	1	0.2 Grab	902

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GJM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Crab, Shells, Twigs
worms

AMEC Proj. BP2 Perimeter
SD-PER402-0914
QSC Form
Initials: GJM
Date: 9/19/2014 Time: 919

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-19-14	Boeing PL2	SD-PER 402

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
194316	1275996	16.0	f	t	2	0.2 Grab	917

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
17	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
shell, twigs, worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-19-14	Boeing PL2	SD-PER 402

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
194316	1275992	17.5	f t	3	0.2 Grab	929

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GSM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
leaves, twigs, shells, worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-19-14	Boeing PL2	SD-PER 403

Coordinates		Water Depth				Time
North	East	Depth	Unit (f / t)	Rep	Gear	
194316	1276091	17-?	f / t	1	0.2 Grab	951

Penetration Depth	Penetration Unit (c / m)	Initials	Sulfide	VOA	Weather	Fines (%)
18	c / m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
twigs, leaves, worms

AMEC Proj. BP2 Perimeter
SD-PER403-0914
QSC Form
Initials: GSM
Date: 9/19/2014 Time: 951

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-19-14	Boeing PL2	SD-PER 403

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
194311	1276092	16.8	f	t	2	0.2 Grab	1004

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
leaves, twigs, shells, worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-19-14	Boeing PL2	SD-PER 403

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
194312	1276089	17.2	f t	3	0.2 Grab	1016

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GSA			Cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
grass, shell, leaves, twigs, worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-19-14	Boeing PL2	SD-PER 404

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
194227	1275940	7.2	f t	1	0.2 Grab	816

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
11	c m	GSN			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Shrimp, twigs, leaves, grass

AMEC Proj. BP2 Perimeter
SD-PER404-0914
QSC Form
Initials: GSN
Date: 9/19/2014 Time: 816

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QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-19-14	Boeing PL2	SD-PER 404

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
194226	1275944	8.1	f t	2	0.2 Grab	826

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	BJM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt (Clay) _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
twigs, worms,

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-19-14	Boeing PL2	SD-PER 404

Coordinates		Water Depth				Time
North	East	Depth	Unit (f / t)	Rep	Gear	
194225.	1275945	10.5	f	3	0.2 Grab	836

Penetration Depth	Penetration Unit (c / m)	Initials	Sulfide	VOA	Weather	Fines (%)
10	c	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
twigs + NWood

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-22-14	Boeing PL2	SD-PER 405

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
194231	1276042	20.9	f	t	1	0.2 Grab	806

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
10	c	m	CSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
leaves, wood, twigs

AMEC Proj. BP2 Perimeter
SD-PER405-0914
QSC Form
Initials: CSM
Date: 9/22/2014 Time: 806

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-22-19	Boeing PL2	SD-PER 405

Coordinates		Water Depth				
North	East	Depth	Unit	Rep	Gear	Time
194230	1276042	19.9	f / t	2	0.2 Grab	821

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
11	c / m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
shrimp, fish, worms, shells, leaves

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-22-14	Boeing PL2	SD-PER 405

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
194230	1276047	19.9	f t	3	0.2 Grab		830

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	GSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Shells leaves, twigs, worms.

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QUALITATIVE SAMPLE CHARACTERISTICS

Page

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-22-14	Boeing PL2	SD-PER 406

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
194230	1276147	16.0	f t	1	0.2 Grab	854

Penetration			Sulfide	VOA	Weather	Fines (%)
Depth	Unit	Initials				
12	c m	GJM			rain	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
twig, leaves, worms

AMEC Proj. BP2 Perimeter
SD-PER406-0914
QSC Form
Initials: GJM
Date: 9/22/2014 Time: 854

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-22-14	Boeing PL2	SD-PER 406

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
194226	1276147	15.5	f t	2	0.2 Grab	909

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSR			Rain	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
leaves, twigs, shrimp shells, worm

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-22-14	Boeing PL2	SD-PER 406

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
194231	1276151	14.9	f	t	3	0.2 Grab	933

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
10	c	m	GSM			Rain	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments: attempt 1 poor penetration
leaves, twigs, worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-22-14	Boeing PL2	SD-PER426

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
194 226	1276 145	14.7	f	t	1	0.2 Grab	944

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
2	c m	GSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
twigs, grass, leaves, worms

AMEC Proj. BP2 Perimeter
SD-PER426-0914
QSC Form
Initials: GSM
Date: 9/22/2014 Time: 944

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-22-14	Boeing PL2	SD-PER 426

Coordinates		Water Depth				
North	East	Depth	Unit	Rep	Gear	Time
194225	1276141	15.0	f t	2	0.2 Grab	954

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
0	c m	GM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
shells, twigs, leaves

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	4-22-14	Boeing PL2	SD-PER 426

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
194228	1276144	14.9	f t	3	0.2 Grab	1004

Penetration		Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit					
12	c m	GJM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
Shells twigs worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	09/10/14	Boeing PL2	SD-PER 501 R1

Coordinates		Water Depth				
North	East	Depth	Unit	Rep	Gear	Time
			f t			
199209	1273431				0.2 Grab	1057

Penetration			Sulfide	VOA	Weather	Fines (%)
Depth	Unit	Initials				
10	c m	RHS				

Surficial Wood Estimate: 8 in Core

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium (Coarse) (Gravel) Sand Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - (Very Loose) Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium (Coarse) (Gravel) Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand (Silt) Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

Reject - sediment not used in sample

AMEC Proj. BP2 Perimeter
SD-PER501-0914
QSC Form
Initials: ___
Date: ___/___/2014 Time: _____

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	09/10/14	Boeing PL2	SD-PER 501 R2

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199209	1273431	<5ft	f t		~~0.2~~ Grab	1108

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
10	c	m	RHG				

Surficial Wood Estimate: 8 in Core

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments: 2nd core had 10cm of fine silts
Sample taken completely from 2nd core

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9/10/14	Boeing PL2	SD-PER 502

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
190954	1273390	36	f t	1	0.2 ~~Grab~~	12 12

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	RHK					

Surficial Wood Estimate: 8 in Core

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium (Coarse) (Gravel) Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium (Dark) Olive Gray (Brown) Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium (Coarse) (Gravel) Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER502-0914
QSC Form
Initials: RHK
Date: 9 / 10 /2014 Time: _____

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	09/10/14	Boeing PL2	SD-PER 503

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
198899	1273335	~8ft	f t	1	0.2 Grab		1315

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	RHG					

Surficial Wood Estimate: 8 in Core

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** Plant T % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray (Brown) (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium (Coarse) (Gravel) Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER503-0914
QSC Form
Initials: RHG
Date: 9/10/2014 Time: _____

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-10-14	Boeing PL2	SD-PER 504

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198818	1273280	14.1	f t	1	0.2 Grab	1025

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 1 % **Debris:** 1 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
twigs, worm

AMEC Proj. BP2 Perimeter
SD-PER504-0914
QSC Form
Initials: GSM
Date: 9/10/2014 Time: 1025

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-10-14	Boeing PL2	SD-PER 504

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
198820	1273282	12.9	f	t	2	0.2 Grab	1036

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
12	c	m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** / % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
grab did not close on first cast
- Fill 7035

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-10-14	Boeing PL2	SD-PER 504

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
198822	1273284	18.5	f	t	3	0.2 Grab	1047

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
12	c m	GSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

_____

_____

_____

_____

_____

_____

_____

_____

_____

Amm\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-10-14	Boeing PL2	SD-PER 505

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198658	1273132	12.9	f t	1	0.2 Grab	1309

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	BSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
roots leaves

AMEC Proj. BP2 Perimeter
SD-PER505-0914
QSC Form
Initials: BSM
Date: 9 / 10 /2014 Time: 1309

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-10-14	Boeing PL2	SD-PER 505

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198655	1273132	11.9	f t	2	0.2 Grab	1322

Penetration			Sulfide	VOA	Weather	Fines (%)
Depth	Unit	Initials				
12	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 1 % **Debris:** 1 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
grass. roots 1 worms
red. brown lenses in subsurface

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-10-14	Boeing PL2	SD-PER 505

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
198661	1273133	12.0	f	t	3	0.2 Grab	1330

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
12	c m	GSM			Cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 5 % **Debris:** 1 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 1 % **Debris:** 1 % **Oil Sheen:** (None?) Trace (<5%) _____ %

Comments:
Shells, Mussels, barnacles
worms, twigs

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-11-14	Boeing PL2	SD-PER 506

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
198486	1272919	15.3	f	t	1	0.2 Grab	1314

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
11	c m	GSM			Sandy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
TWAS, grass

AMEC Proj. BP2 Perimeter
SD-PER506-0914
QSC Form
Initials: GSM
Date: 9/11/2014 Time: 1314

QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-11-14	Boeing PL2	SD-PER 506

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198485	1272916	15.8	f t	2	0.2 Grab	1326

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
15	c m	CSM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: (0) % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
grass, twigs, roots

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-11-14	Boeing PL2	SD-PER 506

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198489	1272918	15.6	f t	3	0.2 Grab	1339

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
15	c m	GJM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
silt, gravel, worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-11-14	Boeing PL2	SD-PER 507

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
198475	1272782	18.4	f t	1	0.2 Grab		1219

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
22	c m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
grass, leaf, worm

AMEC Proj. BP2 Perimeter
SD-PER507-0914
QSC Form
Initials: GSM
Date: 9 / 11 /2014 Time: 1219

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-11-14	Boeing PL2	SD-PER 527

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
198478	1272778	17.9	f	t	3	0.2 Grab	1236

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
16	c	m	SD			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Shrimp
grass, rocks

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-11-14	Boeing PL2	SD-PER 507

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198479	1272774	17.7	f t	3	0.2 Grab	1252

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
14	c m	GM			rainy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: (0) % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
leaves, twig s.
worms

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-10-14	Boeing PL2	SD-PER 508

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
198871	1273191	18.4	f t	1	0.2 Grab		901

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	[illegible]			clear		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER508-0914
QSC Form
Initials: [illegible]
Date: 9 / 10 /2014 Time: 901

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-10-14	Boeing PL2	SD-PER 508

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198870	1273193	16.7	f t	2	0.2 Grab	916

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	BRN			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

_____

_____

_____

_____

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_____

_____

_____

_____

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-10-14	Boeing PL2	SD-PER 508

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
198869	1273196	16.1	f / t	3	0.2 Grab		930

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
12	c / m	GSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-10-14	Boeing PL2	SD-PER 509

Coordinates		Water Depth				
North	East	Depth	Unit	Rep	Gear	Time
198834	1273227	16.9	f t	1	0.2 Grab	947

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 1 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) Trace %

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other _____

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose | Loose | Medium Dense | Dense | Very Dense

Silt / Clay - Very Soft | Soft | Medium Stiff | Stiff | Very Stiff | Hard

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other _____

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER509-0914
QSC Form
Initials: GSM
Date: 9 / 10 /2014 Time: 947

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QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-10-14	Boeing PL2	SD-PER 509

Coordinates		Water Depth				
North	East	Depth	Unit	Rep	Gear	Time
198834	1273225	17.5	f / t	2	0.2 Grab	959

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
	c / m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 1 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-10-14	Boeing PL2	SD-PER 509

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
198832	1273231	17.0	f	t	3	0.2 Grab	1009

Penetration							
Depth	Unit		Initials	Sulfide	VOA	Weather	Fines (%)
10	c	m	CSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet Wet (Moist) Damp Dry

Color **(Circle major & underline modifying)**
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 1 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
worms

AMEC, 3500 188th St. SW, Suite 601, Lynnwood, WA 98037, (425) 921-4000

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-10-14	Boeing PL2	SD-PER 510

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
198767	1273117	14.9	f	t	1	0.2 Grab	1149

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
13	c m	GSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 1 % **Debris:** 1 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Calm (leaves)

AMEC Proj. BP2 Perimeter
SD-PER510-0914
QSC Form
Initials: GSM
Date: 9 / 10 /2014 Time: 1149

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QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-10-14	Boeing PL2	SD-PER 510

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198768	1273120	14.4	f t	2	0.2 Grab	1200

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** 1 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** 1 (twigs) % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
leaved
Black lenses of silt btw 2cm + 6cm below surface

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-10-14	Boeing PL2	SD-PER 510

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
198766	1273119	14.3	f	t	3	0.2 Grab	1211

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
10	c	m	GSD			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** / % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
roots, leaves

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-10-14	Boeing PL2	SD-PER 511

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
198701	1273146	13.5	f	t	1	0.2 Grab	1231

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
13	c m	GJM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 1 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
leaves, twig, grass

AMEC Proj. BP2 Perimeter
SD-PER511-0914
QSC Form
Initials: GJM
Date: 9 / 10 /2014 Time: 1231

Amm\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-10-14	Boeing PL2	SD-PER 5 11

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198696	1273145	19.5	f t	2	0.2 Grab	1241

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
13	c m	GSD			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel (Sand) Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 1 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments: Shrimp, root), worms

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-10-14	Boeing PL2	SD-PER 511

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198697	1273147	13.6	f t	3	0.2 Grab	1251

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
11	c m	GSM			dusty	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 2 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 1 % **Debris:** 1 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
leaves, root
worms

Amec\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-11-14	Boeing PL2	SD-PER 512

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198649	1272601	8.6	f t	1	0.2 Grab	1138

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose (Medium Dense) Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine (Medium) Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments: twigs

AMEC Proj. BP2 Perimeter
SD-PER512-0914
QSC Form
Initials: GSM
Date: 9/11/2014 Time: 1138

AmecField Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-11-14	Boeing PL2	SD-PER 512

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198649	1272598	9.0	f t	2	0.2 Grab	1147

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
12	c m	ASD			Sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt (Clay) _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
grass, roots

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-11-14	Boeing PL2	SD-PER 512

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
198651	1272599	8.9	f t	3	0.2 Grab		1159

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
15	c m	GJM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments: Shells, leaf, worms

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-10-14	Boeing PL2	SD-PER 513

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198708	1273051	18.3	f t	1	0.2 Grab	1454

Penetration		Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit					
13	c m	GJM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** / % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** / % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
grass, tw 95
worms

AMEC Proj. BP2 Perimeter
SD-PER513-0914
QSC Form
Initials: GJM
Date: 9/10/2014 Time: 1454

AmintField Forms/QSC

QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9/10/14	Boeing PL2	SD-PER 513

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
198707	1273056	18.0	f	t	2	0.2 Grab	1506

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
13	c m	GSN			Sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
twigs, grass

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-10-14	Boeing PL2	SD-PER 513

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
198707	1273053	18.4	f	t	3	0.2 Grab	1516

Penetration							
Depth	Unit		Initials	Sulfide	VOA	Weather	Fines (%)
13	c	m	GSM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - (Very Soft) Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
grass twigs

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-12-14	Boeing PL2	SD-PER 514

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
198632	1273063	21.1	f	t	1	0.2 Grab	1046

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
leaves, grass, ants

AMEC Proj. BP2 Perimeter
SD-PER514-0914
QSC Form
Initials: GSM
Date: 9/12/2014 Time: 1046

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-12-14	Boeing PL2	SD-PER 514

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198636	1273062	21.1	f t	2	0.2 Grab	11:09

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
15	c m	BJR			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
attempt 1 grab did not close
attempt 2 poor penetration
attempt 3 open
Shrimp leaves, grass, rocks

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-12-14	Boeing PL2	SD-PER 514

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
198630	1273064	21.1	f t	3	0.2 Grab		1123

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
14	c m	Gon			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
shiny, worms, leaves, roots, twigs

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-12-14	Boeing PL2	SD-PER 515

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198639	1272974	24.7	f t	1	0.2 Grab	750

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - (Very Soft) Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
worms
loaf

AMEC Proj. BP2 Perimeter
SD-PER515-0914
QSC Form
Initials: GSM
Date: 9 / 12 /2014 Time: 750

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-12-14	Boeing PL2	SD-PER 515

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198643	1272973	24.7	f t	2	0.2 Grab	802

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
15	c m	GID			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** _____ % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - (Very Soft) Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
barnacles / mussel shell / leaves
woody roots

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-12-14	Boeing PL2	SD-PER 515

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
198629	1272978	24.8	f	t	3	0.2 Grab	813

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10.	c m	BSM			Sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other _____

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose | Loose | Medium Dense | Dense | Very Dense

Silt / Clay - Very Soft | Soft | Medium Stiff | Stiff | Very Stiff | Hard

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other _____

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
twigs, leaves, grass
worms

AMEC, 3500 188th St. SW, Suite 601, Lynnwood, WA 98037, (425) 921-4000

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-12-14	Boeing PL2	SD-PER 516

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198571	1272913	26.1	f t	1	0.2 Grab	835

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
0	c m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - (Very Soft) Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Shrimp worms
grass, leaves, twigs

AMEC Proj. BP2 Perimeter
SD-PER516-0914
QSC Form
Initials: GSM
Date: 9/12/2014 Time: 835

Amm\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-12-14	Boeing PL2	SD-PER 515

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198571	1272910	24.6	f t	2	0.2 Grab	848

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GW			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
leaves, roots, grass

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-12-14	Boeing PL2	SD-PER 516

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198567	1272910	25.0	f t	3	0.2 Grab	859

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
7	c m	BJM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - (Very Soft) Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
trash

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-12-17	Boeing PL2	SD-PER 517

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198539	1272880	24.7	f t	1	0.2 Grab	922

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
18	c m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other _____

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose | Loose | Medium Dense | Dense | Very Dense

Silt / Clay - Very Soft | Soft | Medium Stiff | Stiff | Very Stiff | Hard

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other _____

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
twigs, grass

AMEC Proj. BP2 Perimeter
SD-PER517-0914
QSC Form
Initials: GSM
Date: 9/12/2014 Time: 922

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-12-17	Boeing PL2	SD-PER 517

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198541	1272885	25.1	f t	2	0.2 Grab	938

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
18	c m	CSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments: attempt 1 grab did not close
grass, roots, leaves

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-12-17	Boeing PL2	SD-PER 517

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198572	1272880	24.7	f t	3	0.2 Grab	952

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
18	c m	GSM			sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other _____

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose | Loose | Medium Dense | Dense | Very Dense

Silt / Clay - Very Soft | Soft | Medium Stiff | Stiff | Very Stiff | Hard

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other _____

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
grass, roots, leaves

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-11-14	Boeing PL2	SD-PER 518

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198600	1272810	14.7	f t	1	0.2 Grab	1421

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
root, grass

AMEC Proj. BP2 Perimeter
SD-PER518-0914
QSC Form
Initials: GSM
Date: 9 / 11 /2014 Time: _____

AmInField Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-11-14	Boeing PL2	SD-PER 518

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198597	1272812	15.7	f t	2	0.2 Grab	1431

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
15	c	m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Shells, roots

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	9-11-14	Boeing PL2	SD-PER 518

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198601	1272815	16.0	f t	3	0.2 Grab	1442

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
12	c m	GSM			sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
leaves, grass, roots

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-10-14	Boeing PL2	SD-PER 525

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198657	1273129	12.7	f t	1	0.2 Grab	1344

Penetration		Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit					
13	c m	GSM			part cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 1 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 1 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
twig 5

AMEC Proj. BP2 Perimeter
SD-PER525-0914
QSC Form
Initials: GSM
Date: ___/___/2014 Time: 1344

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-10-14	Boeing PL2	SD-PER 525

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
198659	1273127	13.9	f t	2	0.2 Grab		1357

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
15	c m	GSM			part cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** trace % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 1 % **Debris:** 1 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
grass, twigs (worms)

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	9-10-14	Boeing PL2	SD-PER 525

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198653	1273129	13.8	f t	3	0.2 Grab	1411

Penetration		Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit					
12	c m	GSM			part cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: trace % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 1 % **Debris:** trace % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
Oells, twigs, leaves
worms

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POST-CONSTRUCTION PERIMETER MONITORING
QUALITATIVE SAMPLE CHARACTERISTICS FORMS

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-16-15	Boeing PL2	SD-PER 101

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
149791	1271450	24.2	f t	1	0.2 Grab	1333

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
17	c m	GSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium (Dark) Olive (Gray) Brown ~~Black~~ Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER101-0315 Initials: GSM
QSC Form
Date: 3 /16 /2015 Time: 1333

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-16-15	Boeing PL2	SD-PER 101

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199742	1271497	24.3	f t	2	0.2 Grab	1345

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
16	c m	GSA			sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

Amm\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-16-15	Boeing PL2	SD-PER 101

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
199742	1271450	24.1	f t	3	0.2 Grab		1359

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
16	c m	GSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-17-15	Boeing PL2	SD-PER 102

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
149653	1271397	26.3	f t	1	0.2 Grab	1125

Penetration		Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit					
17	c m	GSM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 6 % **Debris:** <1 (sticks) % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Stiff protruding from bottom of grab.

AMEC Proj. BP2 Perimeter
SD-PER102-0315 Initials: GSM
QSC Form
Date: 3 / 17 /2015 Time: 1125

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-17-15	Boeing PL2	SD-PER 102

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199657	1271400	26.3	f t	2	0.2 Grab	1136

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
17	c m	GSM			p cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 (microbes) % **Debris:** <1 (leaves) % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC, 3500 188th St. SW, Suite 601, Lynnwood, WA 98037, (425) 921-4000

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-17-15	Boeing PL2	SD-PER 102

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199653	1271395	26.8	f t	3	0.2 Grab	1145

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
15	c m	GJA			p cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-17-15	Boeing PL2	SD-PER 103

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199657	1271502	21.3	f t	1	0.2 Grab	1042

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
16	c m	GSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (sticks leaves) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Grab affears to have tilted while taking sample. Sample taken from peak.

AMEC Proj. BP2 Perimeter
SD-PER103-0315 Initials: GSM
QSC Form
Date: 3 / 17 /2015 Time: 1042

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-17-15	Boeing PL2	SD-PER 103

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199656	1271499	19.9	f t	2	0.2 Grab	1053

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
16	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (shell stick) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture

Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)

Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)

(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace

Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture

Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)

Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)

(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace

Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-17-15	Boeing PL2	SD-PER 103

Coordinates		Water Depth				Time
North	East	Depth	Unit (f / t)	Rep	Gear	
199660	1271504	20.4	f / t	3	0.2 Grab	1107

Penetration Depth	Penetration Unit (c / m)	Initials	Sulfide	VOA	Weather	Fines (%)
10	c / m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (shell) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
1103 attempt 1 - reject - several hundred pound piece of steel in jaws
attempt 2 success

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-17-15	Boeing PL2	SD-PER 104

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199566	1271353	23.4	f t	1	0.2 Grab	915

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
20	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (sticks) % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 (microbes) % **Debris:** <1 (sticks) % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER104-0315 Initials: GSM
QSC Form
Date: 3/17/2015 Time: 915

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-17-15	Boeing PL2	SD-PER 104

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199568	1271351	23.1	f t	2	0.2 Grab	926

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
28	c m	GSA			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (stick) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 (worms) % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-19-15	Boeing PL2	SD-PER 104

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199568	1271354	23.3	f t	3	0.2 Grab	939

Penetration							
Depth	Unit		Initials	Sulfide	VOA	Weather	Fines (%)
15	c	m	GSV			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (stick) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** <1 (wood) % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-17-15	Boeing PL2	SD-PER 105

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199571	1271450	29.9	f t	1	0.2 Grab	1409

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
15	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (leaf) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 (worms) % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER105-0315 Initials: GSM
QSC Form
Date: 3/17/2015 Time: 1409

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-17-15	Boeing PL2	SD-PER 105

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199571	1271445	30.3	f t	2	0.2 Grab	1422

Penetration			Sulfide	VOA	Weather	Fines (%)
Depth	Unit	Initials				
16	c m	SJD			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (leaf) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 (worms) % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-17-15	Boeing PL2	SD-PER 105

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199567	1271449	30.4	f t	3	0.2 Grab	1431

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
15	c m	SM			P cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 (worms) % **Debris:** <1 (wood) % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

Amen\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-19-15	Boeing PL2	SD-PER 106

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199430	1271461	22.3	f t	1	0.2 Grab	1336

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
17	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet **Wet** Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft **Soft** Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet **Wet** Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium **Dark** Olive **Gray** Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand **Silt** Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER106-0315 Initials: GSM
QSC Form
Date: 3 / 19 /2015 Time: 1336

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-19-15	Boeing PL2	SD-PER 106

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
199433	1271463	23.2	f / t	2	0.2 Grab		1350

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c / m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 (worms) % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-19-15	Boeing PL2	SD-PER 106

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199429	1271458	22.7	f t	3	0.2 Grab	1358

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
16	c m	GM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 (worms) % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

_____

_____

_____

_____

_____

_____

_____

_____

_____

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-19-15	Boeing PL2	SD-PER 126

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199428	1271455	23.2	f t	1	0.2 Grab	1409

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
18	c m	GSM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER126-0315 Initials: GSM
QSC Form
Date: 3/19/2015 Time: 1409

Amm\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-19-15	Boeing PL2	SD-PER 126

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199435	1271461	24.7	f t	2	0.2 Grab	1420

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
20	c m	GSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive Gray Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 (worms) % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

_____

_____

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_____

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	3-19-15	Boeing PL2	SD-PER 126

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199435	1271459	24.7	f t	3	0.2 Grab	1431

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
17	c m	GSR			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 (worms) % **Debris:** <1 (wood) % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
Grab appears to be taken adjacent to previous grabs, sample taken from undisturbed area

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-16-15	Boeing PL2	SD-PER 201

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198393	1272556	27.7	f t	1	0.2 Grab	1245

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
15	c m	GSM			p cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: <1 (Crustacean) % **Debris:** 5 (wood chunk) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 (worms) % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER201-0315 Initials: GSM
QSC Form
Date: 3 /16 /2015 Time: 1245

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-16-15	Boeing PL2	SD-PER 201

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
198391	1272557	27.7	f t	2	0.2 Grab		1256

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
13	c m	GSM			☀ cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark (Olive) Gray Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 5 (wood chunk) % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-16-15	Boeing PL2	SD-PER 201

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198392	1272558	27.8	f t	3	0.2 Grab	1307

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
13	c m	BM			Cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (wood chunk) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark (Olive) Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** <1 (wood stick) % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
grab appears to be taken in same place as previous sample.

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-17-15	Boeing PL2	SD-PER 202

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198119	1272927	24.7	f t	1	0.2 Grab	1237

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
13	c m	SM			partly		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** <1 (leaves) % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER202-0315 Initials: _____
QSC Form
Date: 3 / 17 /2015 Time: 1237

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-17-15	Boeing PL2	SD-PER 202

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
198122	1272928	26.2	f	t	2	0.2 Grab	1252

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
15	c m	GSM			p cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 5 (leaves, twigs) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-17-15	Boeing PL2	SD-PER 202

Coordinates		Water Depth				Time
North	East	Depth	Unit (f / t)	Rep	Gear	
198122	1272925	25.5	f / t	3	0.2 Grab	1301

Penetration Depth	Penetration Unit (c / m)	Initials	Sulfide	VOA	Weather	Fines (%)
15	c / m	GSM			& cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (Sticks, shells) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 5 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

Admin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-16-15	Boeing PL2	SD-PER 203

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198134	1272621	14.3	f t	1	0.2 Grab	1419

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
15	c m	GSM			p cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: (0) % **Debris:** (0) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: (0) % **Debris:** <1 (sticks shells) % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER203-0315 Initials: GSM
QSC Form
Date: 3/16/2015 Time: 1419

Amm\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-16-15	Boeing PL2	SD-PER 293

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
198134	1272623	19.4	f	t	2	0.2 Grab	1428

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
13	c m	GSM			p cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: <1 (tubeworms) % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-16-15	Boeing PL2	SD-PER 203

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198139	1272625	15.6	f t	3	0.2 Grab	1437

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
16	c m	BH			partly		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (shells) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** <1 (pipe) % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
grab has a pipe sticking out of bottom.

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-18-15	Boeing PL2	SD-PER 204

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197915	1273009	20.1	f t	1	0.2 Grab	827

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
14	c m	GJM			p c cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: <1 (flounder) % **Debris:** <1 (leaf) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 (worms) % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER204-0315 Initials: GJM
QSC Form
Date: 3 / 18 /2015 Time: 827

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-18-15	Boeing PL2	SD-PER 204

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
1979 18	1273012	21.8	f	t	2	0.2 Grab	843

Penetration							
Depth	Unit		Initials	Sulfide	VOA	Weather	Fines (%)
15	c	m	CSM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (leaves) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 (worms) % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-18-15	Boeing PL2	SD-PER 204

Coordinates		Water Depth				Time
North	East	Depth	Unit (f / t)	Rep	Gear	
197918	1273009	21.6	f / t	3	0.2 Grab	855

Penetration Depth	Penetration Unit (c / m)	Initials	Sulfide	VOA	Weather	Fines (%)
15	c / m	GM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: <1 (crustacean) % **Debris:** <1 (leaf) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** <1 (sticks) % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-18-15	Boeing PL2	SD-PER 205

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197723	1273389 (1273379)	20.8	f t	1	0.2 Grab	1031

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
13	c m	GJM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other trace orange

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose | Loose | Medium Dense | Dense | Very Dense

Silt / Clay - Very Soft | Soft | Medium Stiff | Stiff | Very Stiff | Hard

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
trace orange flake (possibly metallic) on surface

AMEC Proj. BP2 Perimeter
SD-PER205-0315 Initials: GJM
QSC Form
Date: 3/18/2015 Time: 1031

Amm\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-18-15	Boeing PL2	SD-PER 205

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197717	1273378	21.2	f t	2	0.2 Grab	1040

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
15	c m	GSM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium (Coarse) Gravel (Sand) Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 5 (worms) % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

Amnl\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-18-15	Boeing PL2	SD-PER 205

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197716	1273381	21.1	f t	3	0.2 Grab	1050

Penetration			Sulfide	VOA	Weather	Fines (%)
Depth	Unit	Initials				
14	c m	CSM			P cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive (Gray) (Brown) Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium (Coarse) Gravel (Sand) Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 4 (worms) % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC, 3500 188th St. SW, Suite 601, Lynnwood, WA 98037, (425) 921-4000

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-18-15	Boeing PL2	SD-PER 206

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197708	1273136	8.3	f t	1	0.2 Grab	912

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
15	c m	GSM			p cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose (Loose) Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other trace red

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Biological: 0 % **Debris:** <1 (shells) % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER206-0315 Initials: GSM
QSC Form
Date: 3/18/2015 Time: 912

Amec\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-18-15	Boeing PL2	SD-PER 206

Coordinates		Water Depth				Time
North	East	Depth	Unit (f / t)	Rep	Gear	
197704	1273135	7.7	f	2	0.2 Grab	923

Penetration Depth	Penetration Unit (c / m)	Initials	Sulfide	VOA	Weather	Fines (%)
10	c	GM			Cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: <1 (tube worms) % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Biological: <1 (worms) % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-18-15	Boeing PL2	SD-PER 206

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197709	1273138	8.3	f t	3	0.2 Grab	931

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
20	c m	GJM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (stick) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive Gray (Brown) Black Other trace orange

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel (Sand) Silt Clay

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand (Silt) Clay

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium (Dark) Olive (Gray) Brown Black Other

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

Amnl\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-18-15	Boeing PL2	SD-PER 207

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
197503	1273480	19.7	f	t	1	0.2 Grab	1108

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
15	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (leaf) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 (worms) % **Debris:** <1 (wood) % **Oil Sheen:** None (Trace (<5%)) _____ %

Comments:
Sticks are protruding from bottom of grab

AMEC Proj. BP2 Perimeter
SD-PER207-0315 Initials: GSM
QSC Form
Date: 3 / 18 /2015 Time: 1108

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-18-15	Boeing PL2	SD-PER 207

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197498	1273482	19.6	f t	2	0.2 Grab	1117

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
15	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 (microbes) % **Debris:** <1 (sticks) % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-18-15	Boeing PL2	SD-PER 207

Coordinates		Water Depth				Time
North	East	Depth	Unit (f / t)	Rep	Gear	
197500	1273484	19.9	f / t	3	0.2 Grab	1128

Penetration Depth	Penetration Unit (c / m)	Initials	Sulfide	VOA	Weather	Fines (%)
14	c / m	GSP			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: <1 (tube worms) % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-19-15	Boeing PL2	SD-PER 208

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197349	1273793	23.3	f t	1	0.2 Grab	852

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
15	c m	GJM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 (worms) % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER208-0315 Initials: GJM
QSC Form
Date: 3 / 19 /2015 Time: 852

mm\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-19-15	Boeing PL2	SD-PER 208

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197345	1273795	22.4	f t	2	0.2 Grab	906

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
15	c m	GDM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 (worms) % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-19-15	Boeing PL2	SD-PER 208

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197346	1273790	21.8	f t	3	0.2 Grab	919

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
15	c m	GJM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (shell) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 worms % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-18-15	Boeing PL2	SD-PER 209

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197313	1273588	12.0	f t	1	0.2 Grab	1211

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
11	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 50 (shingle) % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other orange flecks

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose | Loose | Medium Dense | Dense | Very Dense

Silt / Clay - Very Soft | Soft | Medium Stiff | Stiff | Very Stiff | Hard

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other orange flecks

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay

Biological: 0 % **Debris:** 30 (shingle) % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
Sample taken from area Not covered by shingle. Brick is buried subsurface

AMEC Proj. BP2 Perimeter
SD-PER209-0315 Initials: GSM
QSC Form
Date: 3 / 18 /2015 Time: 1211

Amn\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-18-15	Boeing PL2	SD-PER 209

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
197309	1273587	11.9	f	t	2	0.2 Grab	1222

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
15	c m	GJM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other orange flecks

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray (Brown) Black Other orange flecks

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay

Biological: 0 % **Debris:** 5 (brick) % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
subsurface appears to have a brick that is almost completely broken down

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-18-15	Boeing PL2	SD-PER 209

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197312	1273585	12.0	f t	3	0.2 Grab	1232

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (stick) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other red flakes

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other red and dark red flakes

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay

Biological: 0 % **Debris:** 5 (brick) % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Sample taken from peak of grab sample due to blockage of grab.
Sample appears to have bricks breaking down below surface.

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-18-15	Boeing PL2	SD-PER 210

Coordinates		Water Depth				Time
North	East	Depth	Unit (f / t)	Rep	Gear	
197084	1273948	24.6	f / t	1	0.2 Grab	1317

Penetration Depth	Penetration Unit (c / m)	Initials	Sulfide	VOA	Weather	Fines (%)
15	c / m	GSM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 4 (worms) % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER210-0315 Initials: GSM
QSC Form
Date: 3 / 18 /2015 Time: 1317

Amm\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-18-15	Boeing PL2	SD-PER 210

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197088	1273945	24.8	f t	2	0.2 Grab	1332

Penetration			Sulfide	VOA	Weather	Fines (%)
Depth	Unit	Initials				
15	c m	GSM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (stick) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-18-15	Boeing PL2	SD-PER 210

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197087	1273942	25.9	f t	3	0.2 Grab	1342

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
15	c m	GSM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-18-15	Boeing PL2	SD-PER 230

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197086	1273949	26.3	f t	1	0.2 Grab	1354

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
16	c m	GSM			p cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (shell) % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER230-0315 Initials: GSM
QSC Form
Date: 3/12/2015 Time: 1354

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QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-18-15	Boeing PL2	SD-PER 230

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197090	1273943	26.9	f t	2	0.2 Grab	1403

Penetration			Sulfide	VOA	Weather	Fines (%)
Depth	Unit	Initials				
15	c m	GSM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium (Dark) Olive Gray Brown (Black) Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 (worms) % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-18-15	Boeing PL2	SD-PER 230

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
197087	1273943	26.3	f / t	3	0.2 Grab	1413

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
15	c / m	GJK			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-19-15	Boeing PL2	SD-PER 211

Coordinates		Water Depth				Time
North	East	Depth	Unit (f / t)	Rep	Gear	
196841	1274300	23.9	f / t	1	0.2 Grab	1248

Penetration Depth	Penetration Unit (c / m)	Initials	Sulfide	VOA	Weather	Fines (%)
13	c / m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (stick) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER211-0315 Initials: GSM
QSC Form
Date: 3 / 19 /2015 Time: 1248

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QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-19-15	Boeing PL2	SD-PER 211

Coordinates		Water Depth				Time
North	East	Depth	Unit (f / t)	Rep	Gear	
196840	1274301	23.7	f	2	0.2 Grab	1259

Penetration Depth	Penetration Unit (c / m)	Initials	Sulfide	VOA	Weather	Fines (%)
12	c	GJM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (shell / twig) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium (Coarse) (Gravel) Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-19-15	Boeing PL2	SD-PER 2-11

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196842	1274298	24.0	f t	3	0.2 Grab	1313

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
15	c m	SM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (sticks) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 (worms) % **Debris:** <1 (sticks shells) % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

_____

_____

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-19-15	Boeing PL2	SD-PER 212

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196822	1274130	7.3	f t	1	0.2 Grab	1042

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (brick) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other trace red flecks

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay

Biological: <1 (worms) % **Debris:** <1 (shells) % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
brick and concrete chunks below surface

AMEC Proj. BP2 Perimeter
SD-PER212-0315 Initials: GSM
QSC Form
Date: 3 / 19 /2015 Time: 1042

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QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-19-15	Boeing PL2	SD-PER 212

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
196820	1274128	6.8	f	t	2	0.2 Grab	1053

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
12	c m	GLM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (metal ring) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other trace red flakes

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other trace red

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay

Biological: 0 % **Debris:** <1 (brick wood) % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
brick is deteriorating at subsurface level. Sample taken from area not affected by washout

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QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-19-15	Boeing PL2	SD-PER 212

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196821	1274127	7.2	f t	3	0.2 Grab	1101

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GW			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other trace red flakes

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other trace red flakes

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay

Biological: 0 % **Debris:** <1 (brick) % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-19-15	Boeing PL2	SD-PER 213

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196681	1274377	18.3	f t	1	0.2 Grab	1118

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
15	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 (worms) % **Debris:** <1 (leaf) % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER213-0315 Initials: GSM
QSC Form
Date: 3/19/2015 Time: 1118

Amm\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-19-15	Boeing PL2	SD-PER 213

Coordinates		Water Depth				Time
196679 North	1274379 East	Depth	Unit	Rep	Gear	
196681	1274377	18.2	f t	2	0.2 Grab	1128

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
18	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (sticks) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** <1 (wood) % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-19-15	Boeing PL2	SD-PER 213

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196677	1274382	18.2	f t	3	0.2 Grab	1138

Penetration			Sulfide	VOA	Weather	Fines (%)
Depth	Unit	Initials				
21	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (stick) % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-9-15	Boeing PL2	SD-PER 301

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196477	1274640	16.2	f t	1	0.2 Grab	1452

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
15	c m	GSM			sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** <1 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
leaves on top layer and throughout

AMEC Proj. BP2 Perimeter
SD-PER301-0315 Initials: GSM
QSC Form
Date: 3 / 9 /2015 Time: 1452

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-9-15	Boeing PL2	SD-PER 301

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196774	1274641	15.6	f t	3	0.2 Grab	1501

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
14	c m	GSM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: <1 crustacean % **Debris:** <1 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 10 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Sample appears to be taken from same spot as previous, leaves present throughout sample. H_2S smell from decomposing debris

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-9-15	Boeing PL2	SD-PER 301

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196473	1274639	16.1	f t	3	0.2 Grab	1524

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
16	c m	GM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** <1 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
leaves throughout sample.

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-9-15	Boeing PL2	SD-PER 302

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196413	1274775	19.8	f t	1	0.2 Grab	1554

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
13	c m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other _____

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose | Loose | Medium Dense | Dense | Very Dense

Silt / Clay - Very Soft | Soft | Medium Stiff | Stiff | Very Stiff | Hard

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other _____

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Biological: <1 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
leaves and shell debris on top layer.
worms in subsurface.
Oily smell, no sheen

AMEC Proj. BP2 Perimeter
SD-PER302-0315 Initials: GSM
QSC Form
Date: 3 / 9 /2015 Time: 1554

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QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-9-15	Boeing PL2	SD-PER 302

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
196416	1274770	20.4	f	t	2	0.2 Grab	1609

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
11	c m	GSM			sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: <1 (crustacean) % **Debris:** <1 (twig) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose (Medium Dense) Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium (Dark) Olive Gray Brown (Black) Other _____

Major Constituent **(Circle major & underline modifying)**
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 5 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-9-15	Boeing PL2	SD-PER 302

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196409	1274772	20.1	f t	3	0.2 Grab	1620

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	CSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** <1 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments: leafy debris on top layer. decaying leaves in subsurface

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-26-15	Boeing PL2	SD-PER 303

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196265	1274848	NR	f t	1	0.2 Grab	1423

Penetration		Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit					
12	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 1 worm % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other trace orange flecks

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER303-0315 Initials: GSM
QSC Form
Date: 2/25/2015 Time: 1423

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QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-26-15	Boeing PL2	SD-PER 303

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
196264	1274851	12.8	f	t	2	0.2 Grab	1435

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
15	c m	GM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-26-15	Boeing PL2	SD-PER 303

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
146261	1274851	11.8	f t	3	0.2 Grab		1449

Penetration			Sulfide	VOA	Weather	Fines (%)
Depth	Unit	Initials				
15	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 2 wooden sticks % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark (Olive) Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown (Black) Other trace orange flecks

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-27-15	Boeing PL2	SD-PER 304

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196191	1275028	24.3	f t	1	0.2 Grab	1037

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	SM			rain		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** leaves 10 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium Dark Olive Gray Brown Black Other trace orange

Major Constituent **(Circle major & underline modifying)**
Fine Medium Coarse Gravel Sand Silt Clay

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel -	Very Loose	Loose	Medium Dense	Dense	Very Dense	
Silt / Clay -	Very Soft	Soft	Medium Stiff	Stiff	Very Stiff	Hard

Moisture
Very Wet Wet Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
Fine Medium Coarse Gravel Sand Silt Clay

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay

Biological: 1 worm % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER304-0315 Initials: SM
QSC Form
Date: 2/27/2015 Time: 1037

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-27-15	Boeing PL2	SD-PER 304

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
196190	1275026	24.5	f t	2	0.2 Grab		1049

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	GM					

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** Wooden chunks 5 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other Trace Orange

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-27-15	Boeing PL2	SD-PER 304

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196193	1275025	25.7	f t	3	0.2 Grab	1151

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
12	c m	GSM			rain		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** wood chunks 5 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other black clumps

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel -	Very Loose	Loose	Medium Dense	Dense	Very Dense
Silt / Clay -	Very Soft	Soft	Medium Stiff	Stiff	Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 5 % **Debris:** 5 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-27-15	Boeing PL2	SD-PER 305

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196035	1275096	15.7	f t	1	0.2 Grab	937

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
13	c m	GJH			rain		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics: leaves

Biological: 0 % **Debris:** 3% % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other trace orange

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER305-0315 Initials: GJH
QSC Form

QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-27-18	Boeing PL2	SD-PER 325

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196036	1275094	16.7	f t	2	0.2 Grab	954

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
14	c m	GSM			Y a.m		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

wooden sticks

Biological: 0 % **Debris:** 2 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other trace orange

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-27-15	Boeing PL2	SD-PER 305

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196035	1275100	15.9	f t	3	0.2 Grab	1017

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
11	c m	GSM			rainy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	2-27-15	Boeing PL2	SD-PER 306

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
196016	1275274	27.6	f	t	1	0.2 Grab	1224

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
15	c m	SM			rain		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 1 crustacean % **Debris:** wood chunks 5 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other trace orange

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay

Biological: 0 % **Debris:** shell & wood 5 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
Wood debris hanging out of the bottom of grab

AMEC Proj. BP2 Perimeter
SD-PER306-0315 Initials: SM
QSC Form
Date: 2/27/2015 Time: 1224

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	2-27-15	Boeing PL2	SD-PER 306

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
196 012	1275276	28.4	f	t	2	0.2 Grab	1236

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
11	c	m	GSM			rain	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 1 crustacean % **Debris:** wooden bits 2 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture

Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)

Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)

Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace

Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture

Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)

Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)

Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace

Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 1 worm % **Debris:** 2 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	2-27-15	Boeing PL2	SD-PER 306

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
196012	1275278	27.3	f	t	3	0.2 Grab	1248

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
15	c	m	BJM			rain	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics: leaf + wood stick

Biological: 0 % **Debris:** 1 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying) 1 red fleck
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-9-15	Boeing PL2	SD-PER 307

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195869	1275273	13.1	f t	1	0.2 Grab	1125

Penetration		Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit					
12	c m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: <1 % **Debris:** <1 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet **Wet** Moist Damp Dry

Color **(Circle major & underline modifying)**
Light **Medium** Dark Olive Gray **Brown** Black Other _____

Major Constituent **(Circle major & underline modifying)**
Fine Medium Coarse Gravel Sand **Silt** Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft **Soft** Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet **Wet** Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium **Dark** Olive **Gray** Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
Fine Medium Coarse Gravel Sand **Silt** Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** <1 % **Oil Sheen:** **None** Trace (<5%) _____ %

Comments:
2 crustaceans & leaves on top layer
twigs sticking out of bottom of grab

AMEC Proj. BP2 Perimeter
SD-PER307-0315 Initials: GSM
QSC Form
Date: 3/9/2015 Time: 1125

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-9-15	Boeing PL2	SD-PER 307

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
195870	1275279	14.2	f	t	2	0.2 Grab	1138

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
14	c	m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 5 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 10 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
leaves throughout grab and sticking out of bottom

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-9-15	Boeing PL2	SD-PER 307

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195865	1275281	12.4	f t	3	0.2 Grab	1151

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
19	c	m	SM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 20 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other trace orange

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay

Biological: 0 % **Debris:** 20 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
Seal leaves and twigs throughout sample and protruding from bottom of sample

AmniField Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-9-15	Boeing PL2	SD-PER 327

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195867	1275280	12.4	f t	1	0.2 Grab	1236

Penetration			Sulfide	VOA	Weather	Fines (%)
Depth	Unit	Initials				
15	c m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 20 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 20 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
1229 attempt 1 - poor penetration - reject
attempt 2 - good
leaves and twigs throughout grab and sticking out of bottom.
Sample smells like rotting debris

AMEC Proj. BP2 Perimeter
SD-PER327-0315 Initials: GSM
QSC Form
Date: 3 / 9 /2015 Time: 1236

AmniField Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-9-15	Boeing PL2	SD-PER 327

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195871	1275276	11.9	f t	2	0.2 Grab	1247

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
16	c m	GM			sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** <1 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
leaves, twigs, and 2 barnacles on top layer
leaves in subsurface as well.

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-9-15	Boeing PL2	SD-PER 327

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195865	1275279	11.8	f t	3	0.2 Grab	1258

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
5	c m	SM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 10 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 10 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
leaves and twigs throughout sample and sticking out of bottom.

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-9-15	Boeing PL2	SD-PER 398

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195830	1275486	28.0	f t	1	0.2 Grab	1003

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	BSM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt (trace) Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 (worms) % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
1/2" layer of sand on top

AMEC Proj. BP2 Perimeter
SD-PER308-0315 Initials: BSM
QSC Form
Date: 3/9/2015 Time: 1003

Amn\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-9-15	Boeing PL2	SD-PER 308

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195830	1275484	27.3	f t	2	0.2 Grab	1018

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
12	c m	JSM			sunny		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 1 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 1 (wood) % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
tube worms on top layer, wood debris caught in jaws of grab
1/2" layer of fine sand on top

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-9-15	Boeing PL2	SD-PER 308

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
145835	1275487	28.0	f t	3	0.2 Grab	1030

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit						
13	c	m	GM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
1" layer of fine sand on top
clam and worms in subsurface

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-9-15	Boeing PL2	SD-PER 309

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195653	1275549	14.0	f t	1	0.2 Grab	1317

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
17	c m	GTM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: <1 % **Debris:** <1 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** <1 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
twigs & tube worms on surface,
twigs and leaves subsurface.

AMEC Proj. BP2 Perimeter
SD-PER309-0315 Initials: GTM
QSC Form
Date: 3/9/2015 Time: 1317

Amec\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-9-15	Boeing PL2	SD-PER 309

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195657	1275547	13.9	f t	2	0.2 Grab	1328

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
13	c m	GSH			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other _____

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose | Loose | Medium Dense | Dense | Very Dense

Silt / Clay - Very Soft | Soft | Medium Stiff | Stiff | Very Stiff | Hard

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other _____

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay

Biological: 0 % **Debris:** <1 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
leaves on top layer,
1" layer of brown silt and fine sand on top

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-9-15	Boeing PL2	SD-PER 309

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195656	1275545	13.6	f t	3	0.2 Grab	1342

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GJM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 2 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
1/2" layer of sand on top. decaying leaves at subsurface with strong odor (H_2S)

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-27-15	Boeing PL2	SD-PER 310

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195588	1275760	23.2	f t	1	0.2 Grab	1327

Penetration			Sulfide	VOA	Weather	Fines (%)
Depth	Unit	Initials				
10	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other trace orange

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER310-0315 Initials: GSM
QSC Form
Date: 2/27/2015 Time: 1327

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-27-15	Boeing PL2	SD-PER 310

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195593	1275760	22.7	f t	2	0.2 Grab	1340

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
17	c m	GSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC, 3500 188th St. SW, Suite 601, Lynnwood, WA 98037, (425) 921-4000

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-27-15	Boeing PL2	SD-PER 310

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195587	1275764	23.3	f t	3	0.2 Grab	1350

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
15	c m	GM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 2 % **Debris:** 1 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** N % **Oil Sheen:** None Trace (<5%) _____ %

Comments: barnacles growing on gravel

Amec\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-27-15	Boeing PL2	SD-PER 311

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195401	1275681	21.)	f t		0.2 Grab	1406

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
15	c m	GSM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 1 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark (Olive) Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER311-0315 Initials: GSM
QSC Form
Date: 2/27/2015 Time: 1406

Anim\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-27-15	Boeing PL2	SD-PER 311

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195403	1275687	20.8	f t	2	0.2 Grab	1417

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
13	c m	GM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 1 crustacean % **Debris:** 2 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture

Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)

Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)

Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace

Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture

Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)

Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)

Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace

Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 5 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC, 3500 188th St. SW, Suite 601, Lynnwood, WA 98037, (425) 921-4000

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-27-15	Boeing PL2	SD-PER 311

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195401	1275685	20.2	f t	3	0.2 Grab	1424

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
13	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 15 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 15 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
Wood chunks and leaves in sample. Appears that grab was taken in same spot as previous one to empty part of grab

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-26-15	Boeing PL2	SD-PER 312

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196224	1274835	11.2	f t	1	0.2 Grab	1305

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
16	c m	GSM			Cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER312-0315 Initials: GSM
QSC Form
Date: 2 / 26 /2015 Time: 1305

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-26-15	Boeing PL2	SD-PER 312

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196221	1274835	11.0	f t	2	0.2 Grab	1314

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
17	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other _____

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose | Loose | Medium Dense | Dense | Very Dense

Silt / Clay - Very Soft | Soft | Medium Stiff | Stiff | Very Stiff | Hard

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other trace orange flecks

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-26-15	Boeing PL2	SD-PER 312

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196226	1274836	10.7	f t	3	0.2 Grab	1323

Penetration		Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit					
15	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 5 (algae, waterbugs) % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark (Olive) Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other trace orange flecks

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-27-15	Boeing PL2	SD-PER 313

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195984	1275095	12.9	f t	1	0.2 Grab	850

Penetration			Sulfide	VOA		Fines (%)
Depth	Unit	Initials			Weather	
15	c m	GSM			rain	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** wooden bits 10% % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium Dark Olive Gray Brown Black Other trace orange flecks

Major Constituent **(Circle major & underline modifying)**
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER313-0315 Initials: GSM
QSC Form
Date: 2/27/2015 Time: 8:50

Amm\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-27-15	Boeing PL2	SD-PER 313

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195986	1275092	11.0	f t	2	0.2 Grab	902

Penetration							
Depth	Unit c m	Initials	Sulfide	VOA	Weather	Fines (%)	
		GSM			rain		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics: wooden bits & leaves

Biological: 0 % **Debris:** 10 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel -	Very Loose	Loose	Medium Dense	Dense	Very Dense
Silt / Clay -	Very Soft	Soft	Medium Stiff	Stiff	Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** < 5 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-27-15	Boeing PL2	SD-PER 313

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
195986	1275090	11.1	f t	3	0.2 Grab	913

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
15	c m	GJV			rain		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics: twigs, wood bits

Biological: _____ % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other trace orange

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** 0% wooden chunks % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-25-15	Boeing PL2	SD-PER 401

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
194399	1276138	19.1	f	t	1	0.2 Grab	1111

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
12	c m	CLM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 2 (one crustacean) % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture

Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**

Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**

(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace

Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture

Very Wet (Wet) Moist Damp Dry

Color **(Circle major & underline modifying)**

Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**

(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace

Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter

SD-PER401-0315 Initials: GSM

QSC Form

Date: 2 / 25 /2015 Time: 1111

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-25-15	Boeing PL2	SD-PER 401

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
194402	1276140	14.9	f / t	2	0.2 Grab	1133

Penetration						
Depth	Unit (c / m)	Initials	Sulfide	VOA	Weather	Fines (%)
14	c	GSN			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	2-25-15	Boeing PL2	SD-PER 401

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
194397	1276137	15.8	f t	3	0.2 Grab	1148

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
14	c m	GM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 2 (wood) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark (Olive) Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC, 3500 188th St. SW, Suite 601, Lynnwood, WA 98037, (425) 921-4000

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	5-25-15	Boeing PL2	SD-PER 402

Coordinates		Water Depth				Time
North	1275994 East	Depth	Unit	Rep	Gear	
194317	1275934	19.5	f t	1	0.2 Grab	1325

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
15	c m	GSM			sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 2 (leaves) % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse (Gravel) Sand Silt Clay _____

Biological: C % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER402-0315 Initials: GSM
QSC Form
Date: 2/25/2015 Time: 1325

Amec\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	2-25-15	Boeing PL2	SD-PER 402

Coordinates		Water Depth				
North	East	Depth	Unit	Rep	Gear	Time
194312	1275990	18.4	f t	2	0.2 Grab	1340

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
14	c m	GSM			rain		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium (Coarse) Gravel Sand Silt Clay _____

Biological: 2 (shells) % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
	2-25-15	Boeing PL2	SD-PER 402

Coordinates		Water Depth		Rep	Gear	Time
North	East	Depth	Unit			
194312	1275994	17.9	f t	3	0.2 Grab	1354

Penetration		Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit					
13	c m	GSM			rain	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 2 (clear) % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color **(Circle major & underline modifying)**
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent **(Circle major & underline modifying)**
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-25-15	Boeing PL2	SD-PER 403

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
194315	1276091	17.1	f t	1	0.2 Grab	1414

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
15	c m	GSM			Cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER403-0315 Initials: GSM
QSC Form
Date: 2 / 25 /2015 Time: 1414

Amec\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-25-15	Boeing PL2	SD-PER 403

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
194 313	1276089	16.3	f t	2	0.2 Grab	1429

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
15	c m	GSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC, 3500 188th St. SW, Suite 601, Lynnwood, WA 98037, (425) 921-4000

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-25-15	Boeing PL2	SD-PER 403

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
194317	1276087	15.0	f t	3	0.2 Grab	1441

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
15	c m	GBM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 2 (leaf) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC, 3500 188th St. SW, Suite 601, Lynnwood, WA 98037, (425) 921-4000

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-26-15	Boeing PL2	SD-PER 404

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
194223	1275940	14.7	f t	1	0.2 Grab	853

Penetration			Sulfide	VOA	Weather	Fines (%)
Depth	Unit	Initials				
12	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark (Olive) Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER404-0315 Initials: GSM
QSC Form
Date: 2/26/2015 Time: 853

Amm\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-26-15	Boeing PL2	SD-PER 404

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
194222	1275947	16.5	f t	2	0.2 Grab	906

Penetration		Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit					
13	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-26-15	Boeing PL2	SD-PER 404

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
194224	1275944	17.1	f t	3	0.2 Grab	921

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
14	c m	GSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 5 (wood chunk) % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-26-15	Boeing PL2	SD-PER 405

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
194229	1276047	23.2	f t	1	0.2 Grab	941

Penetration							Fines (%)
Depth	Unit	Initials	Sulfide	VOA	Weather		
15	c m	GSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 1 crustacean % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark (Olive) Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine (Medium) Coarse Gravel Sand Silt Clay _____

Biological: _____ % **Debris:** _____ % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER405-0315 Initials: GSM
QSC Form
Date: 2 /26 /2015 Time: 941

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-26-15	Boeing PL2	SD-PER 405

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
194230	1276049	23.5	f t	2	0.2 Grab	956

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
14	c m	[illegible]			[illegible]		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC, 3500 188th St. SW, Suite 601, Lynnwood, WA 98037, (425) 921-4000

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-26-15	Boeing PL2	SD-PER 405

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
194234	1276044	23.5	f t	3	0.2 Grab	1008

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
13	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 5 (leaves) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark (Olive) Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC, 3500 188th St. SW, Suite 601, Lynnwood, WA 98037, (425) 921-4000

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-25-15	Boeing PL2	SD-PER 406

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
194227	1276145	20.5	f t	1	0.2 Grab	1129

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
16	c m	GSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark (Olive) Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER406-0315 Initials: GSM
QSC Form
Date: 2/26/2015 Time: 1129

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-25-15	Boeing PL2	SD-PER 406

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
194233	1276146	19.8	f t	2	0.2 Grab	1140

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
16	c m	ESN			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 1 wooden stick % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC, 3500 188th St. SW, Suite 601, Lynnwood, WA 98037, (425) 921-4000

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-26-15	Boeing PL2	SD-PER 406

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
194230	1276145	20.3	f t	3	0.2 Grab	1151

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
12	c m	GSM			Cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 2 leaves % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture

Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)

Light (Medium) Dark (Olive) Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)

(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace

Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture

Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)

Light Medium (Dark) Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)

(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace

Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

grab sample was partially missing due to previous grab sample in same location

AMEC, 3500 188th St. SW, Suite 601, Lynnwood, WA 98037, (425) 921-4000

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-26-15	Boeing PL2	SD-PER 426

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
194224	1276148	19.7	f t	1	0.2 Grab		1204

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
17	c m	GSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 1 crustacean % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark (Olive) Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER426-0315 Initials: GSM
QSC Form
Date: 2/26/2015 Time: 1204

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2-26-15	Boeing PL2	SD-PER 426

Coordinates		Water Depth				
North	East	Depth	Unit	Rep	Gear	Time
194227	1276142	20.1	f t	2	0.2 Grab	1217

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
16	c m	GM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark (Olive) Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	2/26/15 4-26-15	Boeing PL2	SD-PER 426

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
194221	1276146	19.4	f t	3	0.2 Grab	1230

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
16	c m	GSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** leaf % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark (Olive) Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WAN NAD83 Survey ft	03/20/15	Boeing PL2	SD-PER 501

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199193.8	1273437.2	10	f t		0.2 Grab	1000

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	RHS				

Surficial Wood Estimate: Hand Core

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: N % **Debris:** N % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - (Very Loose) Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium (Coarse) (Gravel) Sand Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Biological: N % **Debris:** N % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
Thick surface layer of silt over silty gravel very loose

AMEC Proj. BP2 Perimeter
SD-PER501-0315 Initials: ___
QSC Form
Date: 3/20/2015 Time: 1000

Amec\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	03/20/15	Boeing PL2	SD-PER 502

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
199044.2	1273402	7.0	f t		~~0.2 Grab~~	1025

Penetration			Sulfide	VOA	Weather	Fines (%)
Depth	Unit	Initials				
10	c m	RG				

Surficial Wood Estimate: Hand Core

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
(Very Wet) Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - (Very Soft) Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
4in of silt overlying sand gravel

AMEC Proj. BP2 Perimeter
SD-PER502-0315 Initials: ___
QSC Form
Date: 3 / 20 /2015 Time: 1025

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3/20/15	Boeing PL2	SD-PER 503

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198899 198299	1278335	8	f t		0.2 Grab	1035

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	RG					

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
4 inches of silt over sand gravel

AMEC Proj. BP2 Perimeter
SD-PER503-0315 Initials: RG
QSC Form
Date: 2 / 20 /2015 Time: 1035

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-16-15	Boeing PL2	SD-PER 504

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198817 198816	1273284	17.0	f t	1	0.2 Grab	1059

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
17	c m	BJM			P cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine (Medium) Coarse Gravel (Sand) Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose (Loose) Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine (Medium) Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
1/4" layer of silt on surface

AMEC Proj. BP2 Perimeter
SD-PER504-0315 Initials: BJM
QSC Form
Date: 3/16/2015 Time: 1059

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QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-16-15	Boeing PL2	SD-PER 504

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198817	1273283	17.5	f t	2	0.2 Grab	1108

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
11	c m	GSM			P cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (est) % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
Fine (Medium) Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose (Loose) Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine (Medium) Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel (Sand) Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
trace silt on surface

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-16-15	Boeing PL2	SD-PER 504

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198820	1273280	17.4	f t	3	0.2 Grab	1117

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSM			P cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose (Loose) Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
Fine (Medium) Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
1" layer of silt on surface

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QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-16-15	Boeing PL2	SD-PER 505

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198654	1273128	14.7	f t	1	0.2 Grab	924

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
14	c m	GSM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other _____

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose | Loose | Medium Dense | Dense | Very Dense

Silt / Clay - Very Soft | Soft | Medium Stiff | Stiff | Very Stiff | Hard

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other _____

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
920 attempt one - poor penetration - reject
attempt 2 success
1/4" layer of silt on top

AMEC Proj. BP2 Perimeter
SD-PER505-0315 Initials: GSM
QSC Form
Date: 3 / 16 /2015 Time: 924

QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-16-15	Boeing PL2	SD-PER 505

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198657	1273131	19.4	f t	2	0.2 Grab	932

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
2.1	c m	GSM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
Fine (Medium) Coarse Gravel (Sand) Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose (Loose) Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
Fine (Medium) Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
1/8" layer of silt on surface

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-16-15	Boeing PL2	SD-PER 505

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198653	1273132	15.4	f t	3	0.2 Grab	942

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
20	c m	GSM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine (Medium) Coarse Gravel (Sand) Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose (Loose) Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
Fine (Medium) Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
1/8" layer of silt on top

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-16-15	Boeing PL2	SD-PER 525

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198660	1273129	16.2	f t	1	0.2 Grab	955

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSM			Cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other _____

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose | Loose | Medium Dense | Dense | Very Dense

Silt / Clay - Very Soft | Soft | Medium Stiff | Stiff | Very Stiff | Hard

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other _____

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
925 reject – poor penetration
attempt 2 success
trace silt on top layer

AMEC Proj. BP2 Perimeter
SD-PER525-0315 Initials: GSM
QSC Form
Date: 3/16/2015 Time: 955

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-16-15	Boeing PL2	SD-PER S25

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198657	1273132	16.0	f t	2	0.2 Grab	1007

Penetration		Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit					
14	c m	GSM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
1003 attempt 1 reject poor penetration
attempt 2 success
trace silt on top layer

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-16-15	Boeing PL2	SD-PER 525

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198655	1273129	15.5	f t	3	0.2 Grab	1017

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
21	c m	GSM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
Fine (Medium) Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose (Loose) Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine (Medium) Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments: 1/8" layer of silt on top

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-13-15	Boeing PL2	SD-PER 506

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198489	1272919	20.6	f t	1	0.2 Grab	1252

Penetration			Sulfide	VOA	Weather	Fines (%)
Depth	Unit	Initials				
11	c m	GSM			partly cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
Fine (Medium) Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose (Loose) Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine (Medium) Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER506-0315 Initials: GSM
QSC Form
Date: 3 / 13 /2015 Time: 1252

Amnl/Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-13-15	Boeing PL2	SD-PER 506

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198490	1272917	20.6	f t	2	0.2 Grab	1300

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	GSM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: (0) % **Debris:** (0) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
Fine (Medium) Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose (Loose) Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine (Medium) Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Biological: (0) % **Debris:** (0) % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC, 3500 188th St. SW, Suite 601, Lynnwood, WA 98037, (425) 921-4000

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-13-15	Boeing PL2	SD-PER 506

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198491	1272921	20.8	f t	3	0.2 Grab	1309

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
11	c m	GSN			8 cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
Fine Medium (Coarse) Gravel (Sand) Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose (Loose) Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine (Medium) Coarse Gravel (Sand) Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-13-15	Boeing PL2	SD-PER 507

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
198476	1272782	25.0	f	t	1	0.2 Grab	1105

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
22	c m	GSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (leaves) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark (Olive) Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** <1 (matting) % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER507-0315 Initials: GSM
QSC Form
Date: 3/13/2015 Time: 1105

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-13-15	Boeing PL2	SD-PER 507

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198475	1272775	24.9	f t	2	0.2 Grab	1119

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
19	c m	GSH			clear		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-12-15	Boeing PL2	SD-PER 507

Coordinates		Water Depth					Time
North	East	Depth	Unit	Rep	Gear		
198479	1272781	24.8	f / t	3	0.2 Grab		1134

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
25	c / m	CM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (leaves) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark (Olive) Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments: plastic bag hanging out of bottom of grab

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-11-15	Boeing PL2	SD-PER 508

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198872	1273194	12.3	f t	1	0.2 Grab	1435

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
10	c m	ZJH			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 (worms) % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER508-0315 Initials: SJH
QSC Form
Date: 3 /11 /2015 Time: 1435

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-11-15	Boeing PL2	SD-PER 508

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198869	1273192	12.3	f t	2	0.2 Grab	1445

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
17	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) 10 %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark (Olive) Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None (Trace (<5%)) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-11-15	Boeing PL2	SD-PER 508

Coordinates		Water Depth				Time
North	East	Depth	Unit (f / t)	Rep	Gear	
198870	1273196	12.2	f / t	3	0.2 Grab	1457

Penetration Depth	Penetration Unit (c / m)	Initials	Sulfide	VOA	Weather	Fines (%)
16	c / m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (leaves) % **Oil Sheen:** None (Trace (<5%)) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None (Trace (<5%)) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-12-15	Boeing PL2	SD-PER 509

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198831	1273227	20.1	f t	1	0.2 Grab	1115

Penetration			Sulfide	VOA		Fines (%)
Depth	Unit	Initials			Weather	
15	c m	GM			p. cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: <1 (crustacean) % **Debris:** <1 (shell) % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 (worm) % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER509-0315 Initials: _____
QSC Form
Date: 3/12/2015 Time: 1115

Amn\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-12-15	Boeing PL2	SD-PER 509

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198835	1273228	20.0	f t	2	0.2 Grab	1130

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
20	c m	GM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-12-15	Boeing PL2	SD-PER 509

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198836	1273230	19.8	f t	3	0.2 Grab	1142

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
19	c m	GM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (leaf) % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet **Wet** Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray **Brown** Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand **Silt** Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft **Soft** Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet **Wet** Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium **Dark** Olive Gray Brown **Black** Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand **Silt** Clay _____

Minor Constituent with trace
Fine Medium **Coarse** **Gravel** Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

_____

_____

_____

_____

_____

_____

_____

_____

_____

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-11-15	Boeing PL2	SD-PER 510

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198768	1273123	17.9	f t	1	0.2 Grab	1255

Penetration						
Depth	Unit c m	Initials	Sulfide	VOA	Weather	Fines (%)
17		CSM			Windy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark (Olive) Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
1249 attempt 1 reject poor penetration - bark chips
1255 attempt 2 success

AMEC Proj. BP2 Perimeter
SD-PER510-0315 Initials: CSM
QSC Form
Date: 3 / 11 /2015 Time: 1255

Admin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-11-15	Boeing PL2	SD-PER 519

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198769	1273117	17.5	f t	2	0.2 Grab	1305

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
15	c m	CDM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-11-15	Boeing PL2	SD-PER 510

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
196769	1273121	17.0	f t	3	0.2 Grab	1317

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
17	c m	CSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (barnacle) % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-16-15	Boeing PL2	SD-PER S11

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198694	1273144	17.5	f t	1	0.2 Grab	845

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
12	c m	GSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (wood sticks) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Biological: 0 % **Debris:** <1 (wood) % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
debris sticking out of grab.

AMEC Proj. BP2 Perimeter
SD-PER511-0315 Initials: GSM
QSC Form
Date: ___/___/2015 Time: 845

Amn\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-16-15	Boeing PL2	SD-PER S 11

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198698	1273143	18.0	f t	2	0.2 Grab	856

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
17	c m	GM			Cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC, 3500 188th St. SW, Suite 601, Lynnwood, WA 98037, (425) 921-4000

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-16-15	Boeing PL2	SD-PER 511

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198698	1273147	17.5	f t	3	0.2 Grab	906

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
13	c m	GJM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Biological: <1 (worms) % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC, 3500 188th St. SW, Suite 601, Lynnwood, WA 98037, (425) 921-4000

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-12-15	Boeing PL2	SD-PER 512

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198649	1272600	13.0	f t	1	0.2 Grab	1003

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
13	c m	GSM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (shell) % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER512-0315 Initials: GSM
QSC Form
Date: 3/12/2015 Time: 1003

Am\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-12-15	Boeing PL2	SD-PER 512

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198652	1272598	13.7	f t	2	0.2 Grab	1012

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
15	c m	GM			& cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-12-15	Boeing PL2	SD-PER 512

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
198653	1272602	13.1	f	t	3	0.2 Grab	1022

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
15	c | m	GSM			y cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
(Fine) Medium Coarse Gravel (Sand) Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
barnacle and twigs on surface

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-11-15	Boeing PL2	SD-PER 513

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198706	1273051	16.6	f t	1	0.2 Grab	1333

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
18	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 % (wood chunks) **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark (Olive) Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER513-0315 Initials: GSM
QSC Form
Date: 3 / 11 /2015 Time: 1333

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-11-15	Boeing PL2	SD-PER 513

Coordinates		Water Depth				Time
North	East	Depth	Unit (f / t)	Rep	Gear	
198706	1273055	16.3	f / t	2	0.2 Grab	1343

Penetration Depth	Penetration Unit (c / m)	Initials	Sulfide	VOA	Weather	Fines (%)
12	c / m	CSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (leaves, twigs) % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other _____

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose | Loose | Medium Dense | Dense | Very Dense

Silt / Clay - Very Soft | Soft | Medium Stiff | Stiff | Very Stiff | Hard

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other _____

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-11-15	Boeing PL2	SD-PER 513

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
148703	1273052	16.1	f t	3	0.2 Grab	1352

Penetration Depth	Penetration Unit	Initials	Sulfide	VOA	Weather	Fines (%)
16	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (shells) % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

Amin\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft		Boeing PL2	SD-PER 514

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198633	1273065	19.7	f t	1	0.2 Grab	1320

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
13	c m	GJM			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (shell) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium (Coarse) (Gravel) Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER514-0315 Initials: GJM
QSC Form
Date: 3 / 3 /2015 Time: 1320

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QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-13-15	Boeing PL2	SD-PER 514

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198631	1273065	19.2	f t	2	0.2 Grab	1330

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
14	c m	GSA			p cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark (Olive) Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft (Medium Stiff) Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-13-15	Boeing PL2	SD-PER 514

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198631	1273066	18.9	f t	3	0.2 Grab	1341

Penetration							Fines (%)
Depth	Unit	Initials	Sulfide	VOA	Weather		
13	c m	GSM			Cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-13-15	Boeing PL2	SD-PER 515

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198643	1272980	22.0	f t	1	0.2 Grab	829

Penetration							Fines (%)
Depth	Unit	Initials	Sulfide	VOA	Weather		
16	c m	GSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: <1 (crustacean) % **Debris:** <1 (barnacles, shell) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture

Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)

Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)

(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace

Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture

Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)

Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)

(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace

Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** <1 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter

SD-PER515-0315 Initials: GSM

QSC Form

Date: 3/13/2015 Time: 829

Amm\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-13-15	Boeing PL2	SD-PER 515

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198642	1272978	22.6	f t	2	0.2 Grab	841

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
19	c m	GSR			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 % (debris) **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None (Trace (<5%)) _____ %

Comments:

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QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-13-15	Boeing PL2	SD-PER 515

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198640	1272973	22.9	f t	3	0.2 Grab	854

Penetration Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
14	c m	GJM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 shell % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC, 3500 188th St. SW, Suite 601, Lynnwood, WA 98037, (425) 921-4000

QUALITATIVE SAMPLE CHARACTERISTICS

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Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-13-15	Boeing PL2	SD-PER 516

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198572	1272917	24.0	f t	1	0.2 Grab	910

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
10	c m	BJN			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (stick, shell) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium (Coarse) Gravel (Sand) Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** <1 (shells) % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC Proj. BP2 Perimeter
SD-PER516-0315 Initials: BJN
QSC Form
Date: 3 /13 /2015 Time: 910

Amec\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-13-15	Boeing PL2	SD-PER 516

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
	1272912		f	t			
198570	1272913	24.2			2	0.2 Grab	923

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
16	c m	BSM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics: (shells)

Biological: 0 % **Debris:** <1 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

Amec\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-13-15	Boeing PL2	SD-PER 516

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198573	1272915	24.3	f t	3	0.2 Grab	933

Penetration						
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
13	c m	GM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium (Coarse) Gravel (Sand) Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive Gray Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** <1 stick % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

Amini\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-13-15	Boeing PL2	SD-PER 517

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198539	1272881	24.8	f t	1	0.2 Grab	1027

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
18	c m	GM			cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other _____

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose | Loose | Medium Dense | Dense | Very Dense

Silt / Clay - Very Soft | Soft | Medium Stiff | Stiff | Very Stiff | Hard

Moisture
Very Wet | Wet | Moist | Damp | Dry

Color (Circle major & underline modifying)
Light | Medium | Dark | Olive | Gray | Brown | Black | Other _____

Major Constituent (Circle major & underline modifying)
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Minor Constituent with trace
Fine | Medium | Coarse | Gravel | Sand | Silt | Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) _____ %

Comments:
1020 attempt 1 - reject - poor penetration
attempt 2 success

AMEC Proj. BP2 Perimeter
SD-PER517-0315 Initials: SM
QSC Form
Date: 3 / 13 /2015 Time: 1027

Amm\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-13-15	Boeing PL2	SD-PER 517

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198542	1272883	23.5	f t	2	0.2 Grab	1038

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
20	c m	GSM			Sunny	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark (Olive) Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 (worms) % **Debris:** <1 (stick) % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:
stick protruding from bottom of grab

Amm\Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ___ of ___

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-12-15	Boeing PL2	SD-PER 517

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198541	1272878	24.9	f t	3	0.2 Grab	1049

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)
19	c m	GSM			cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (twigs) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark (Olive) Gray Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 (worms) % **Debris:** 0 % **Oil Sheen:** (None) Trace (<5%) _____ %

Comments:

AMEC, 3500 188th St. SW, Suite 601, Lynnwood, WA 98037, (425) 921-4000

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-12-15	Boeing PL2	SD-PER 518

Coordinates		Water Depth					Time
North	East	Depth	Unit		Rep	Gear	
198597	1272811	21.8	f	t	1	0.2 Grab	922

Penetration							
Depth	Unit	Initials	Sulfide	VOA	Weather	Fines (%)	
17	c m	GSM			p cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 (shell) % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 (worms) % **Debris:** 0 % **Oil Sheen:** None (Trace (<5%)) _____ %

Comments:

AMEC Proj. BP2 Perimeter

SD-PER518-0315 Initials: GSM

QSC Form

Date: 3 / 12 /2015 Time: 922

Amnl/Field Forms\QSC

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-12-15	Boeing PL2	SD-PER 516

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198602	1272812	21.1	f t	2	0.2 Grab	934

Penetration			Initials	Sulfide	VOA	Weather	Fines (%)
Depth	Unit c	Unit m					
17			CSM			P cloudy	

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: 0 % **Debris:** <1 % **Oil Sheen:** (None) Trace (<5%) _____ %

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light (Medium) Dark Olive Gray (Brown) Black Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft (Soft) Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet (Wet) Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium (Dark) Olive (Gray) Brown (Black) Other _____

Major Constituent (Circle major & underline modifying)
(Fine) Medium Coarse Gravel Sand (Silt) Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: <1 % **Debris:** <1 % **Oil Sheen:** None (Trace (<5%)) _____ %

Comments:
barnacle and wood chips on top layer.
worms and twigs subsurface

AMEC, 3500 188th St. SW, Suite 601, Lynnwood, WA 98037, (425) 921-4000

QUALITATIVE SAMPLE CHARACTERISTICS

Page ____ of ____

Coordinate Datum	Date (mm/dd/yy)	Project Location	Sample Identification Number
WA State Plane, N Zone, NAD 83, Survey Ft	3-12-15	Boeing PL2	SD-PER 518

Coordinates		Water Depth				Time
North	East	Depth	Unit	Rep	Gear	
198604	1272813	21.0	f t	3	0.2 Grab	945

Penetration							Fines (%)
Depth	Unit	Initials	Sulfide	VOA	Weather		
12	c m	GSM			p cloudy		

Surficial Wood Estimate:

Contact Points _____ X 5 = _____ %

Surficial sediment characteristics:

Biological: <1 (tubeworm) % **Debris:** <1 (woodchunks) % **Oil Sheen:** None Trace (<5%) _____ %

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Subsurface sediment characteristics:

Density / Consistency

Sand / Gravel - Very Loose Loose Medium Dense Dense Very Dense

Silt / Clay - Very Soft Soft Medium Stiff Stiff Very Stiff Hard

Moisture
Very Wet Wet Moist Damp Dry

Color (Circle major & underline modifying)
Light Medium Dark Olive Gray Brown Black Other _____

Major Constituent (Circle major & underline modifying)
Fine Medium Coarse Gravel Sand Silt Clay _____

Minor Constituent with trace
Fine Medium Coarse Gravel Sand Silt Clay _____

Biological: 0 % **Debris:** 0 % **Oil Sheen:** None Trace (<5%) 10 %

Comments:
grab appears to have been taken directly adjacent to previous grab

Admin\Field Forms\QSC

PRE- AND POST-CONSTRUCTION PERIMETER MONITORING
CHAIN-OF-CUSTODY FORMS

AMEC
3500 188th St. SW, Suite 601
Lynnwood,WA 98037
(425) 921-4000

CHAIN OF CUSTODY

YR74

AMEC Proj. BP2 Perimeter
COC Number 063

Recorded by: GSM
Checked by: _____

		Analysis Containers: SMS Metals (As, Cd, Cr, Cu, Pb, Hg, Ag, Zn) TOC, and PCBs (by Aroclor)	Archive		Number of containers
AMEC Proj. BP2 Perimeter SD-PER301-0714 Initials: GSM COC Form Date: 7/14/2014 Time: 846	Date: Time:	1			1
AMEC Proj. BP2 Perimeter SD-PER302-0714 Initials: GSM COC Form Date: 7/14/2014 Time: 937	Date: Time:	1			1
AMEC Proj. BP2 Perimeter SD-PER303-0714 Initials: GSM COC Form Date: 7/14/2014 Time: 1022	Date: Time:	1			1
AMEC Proj. BP2 Perimeter SD-PER312-0714 Initials: GSM COC Form Date: 7/14/2012 Time: 1105	Date: Time:	1			1
AMEC Proj. BP2 Perimeter SD-PER304-0714 Initials: GSM COC Form Date: 7/14/2014 Time: 1256	Date: Time:	1			1
AMEC Proj. BP2 Perimeter SD-PER305-0714 Initials: GSM COC Form Date: 7/14/2014 Time: 1329	Date: Time:	1			1
AMEC Proj. BP2 Perimeter SD-PER313-0714 Initials: GSM COC Form Date: 7/14/2012 Time: 1408	Date: Time:	1			1

Laboratory Sample Receipt

ARI Project Manager—Kelly Bottem
AMEC Project Manager—Cliff Whitmus (cliff.whitmus@amec.com ph 425-921-4023)
AMEC Laboratory Coordinator—Crystal Neirby (crystal.neirby@amec.com ph. 206-838-8469)

Sediment samples are unhomogenized. Samples must be thoroughly homogenized before analysis.

Relinquished By	Transported By	Received By
Name: [signature] Date: 7/15/14 Time: 1600	NM	Name: [signature] Date: 7/15/14 Time: 1600
Name: Date: Time:		Name: Date: Time:
Name: Date: Time:		Name: Date: Time:

Admin\Field Forms\COC

AMEC
3500 188th St. SW, Suite 601
Lynnwood,WA 98037
(425) 921-4000

CHAIN OF CUSTODY

AMEC Proj. BP2 Perimeter

COC Number 064

Recorded by: GSM

Checked by: _____

		Analysis Containers			
		SMS Metals (As, Cd, Cr, Cu, Pb, Hg, Ag, Zn) TOC, and PCBs (by Aroclor)	Archive		
AMEC Proj. BP2 Perimeter SD-PER306-0714 Initials: GSM COC Form Date: 7/15/2014 Time: 1600	Date: Time:	1			Number of containers: 1
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers

Laboratory Sample Receipt

ARI Project Manager—Kelly Bottem
AMEC Project Manager—Cliff Whitmus (cliff.whitmus@amec.com ph 425-921-4023)
AMEC Laboratory Coordinator—Crystal Neirby (crystal.neirby@amec.com ph. 206-838-8469)

Sediment samples are unhomogenized. Samples must be thoroughly homogenized before analysis.

Relinquished By	Transported By	Received By
Name: [signature] Date: 7/15/14 Time: 1600	NM	Name: [signature] Date: 7/15/14 Time: 1600
Name: Date: Time:		Name: Date: Time:
Name: Date: Time:		Name: Date: Time:

Y0714 : 000085

AMEC
3500 188th St. SW, Suite 601
Lynnwood,WA 98037
(425) 921-4000

CHAIN OF CUSTODY

AMEC Proj. BP2 Perimeter
COC Number 065

Recorded by: GSM
Checked by: _____

	Date / Time	Analysis Containers: SMS Metals (As, Cd, Cr, Cu, Pb, Hg, Ag, Zn) and TOC, and PCBs (by Aroclor)	Analysis Containers: Archive	Analysis Containers:	Number of containers
AMEC Proj. BP2 Perimeter SD-PER307-0714 Initials: GSM COC Form Date: 7/15/2014 Time: 852	Date: Time:	1			1
AMEC Proj. BP2 Perimeter SD-PER327-0714 Initials: GSM COC Form Date: 7/15/2014 Time: 935	Date: Time:	1			1
AMEC Proj. BP2 Perimeter SD-PER308-0714 Initials: GSM COC Form Date: 7/15/2014 Time: 1024	Date: Time:	1			1
AMEC Proj. BP2 Perimeter SD-PER309-0714 Initials: GSM COC Form Date: 7/15/2014 Time: 1057	Date: Time:	1			1
AMEC Proj. BP2 Perimeter SD-PER311-0714 Initials: GSM COC Form Date: 7/15/2014 Time: 1226	Date: Time:	1			1
AMEC Proj. BP2 Perimeter SD-PER401-0714 Initials: GSM COC Form Date: 7/15/2014 Time: 1306	Date: Time:	1			1
AMEC Proj. BP2 Perimeter SD-PER402-0714 Initials: GSM COC Form 7/15/2014 Date: 7/14/2014 Time: 1348	Date: Time:	1			1

ARI Project Manager—Kelly Bottem
AMEC Project Manager—Cliff Whitmus (cliff.whitmus@amec.com ph 425-921-4023)
AMEC Laboratory Coordinator—Crystal Neirby (crystal.neirby@amec.com ph. 206-838-8469)

Sediment samples are unhomogenized. Samples must be thoroughly homogenized before analysis.

Relinquished By	Transported By	Received By
Name: GSM Date: 7/15/14 Time: 1600	NM	Name: Date: 7/15/14 Time: 1600
Name: Date: Time:		Name: Date: Time:
Name: Date: Time:		Name: Date: Time:

YR74 : 000004

AMEC
3500 188th St. SW, Suite 601
Lynnwood,WA 98037
(425) 921-4000

CHAIN OF CUSTODY

AMEC Proj. BP2 Perimeter

COC Number 067

Recorded by: GSM

Checked by: _____

	Date/Time	Analysis Containers: SMS Metals (As, Cd, Cr, Cu, Pb, Hg, Ag, Zn) and TOC, and PCBs (by Aroclor)	Analysis Containers: Archive	Analysis Containers:	Number of containers
AMEC Proj. BP2 Perimeter SD-PER404-0714 Initials: _____ COC Form Date: 7/16/2014 7 / 14 / 2014 Time: 828	Date: _____ Time: _____	1			1
AMEC Proj. BP2 Perimeter SD-PER405-0714 Initials: _____ COC Form Date: 7/16/2014 7 / 14 / 2014 Time: 905	Date: _____ Time: _____	1			1
AMEC Proj. BP2 Perimeter SD-PER406-0714 Initials: _____ COC Form Date: 7/16/2014 7 / 14 / 2014 Time: 944	Date: _____ Time: _____	1			1
AMEC Proj. BP2 Perimeter SD-PER426-0714 Initials: _____ COC Form Date: 7/16/2014 7 / 14 / 2014 Time: 1015	Date: _____ Time: _____	1			1
Place Sample ID Label Here or Write ID Number Here	Date: _____ Time: _____				Number of containers
Place Sample ID Label Here or Write ID Number Here	Date: _____ Time: _____				Number of containers
Place Sample ID Label Here or Write ID Number Here	Date: _____ Time: _____				Number of containers

Laboratory Sample Receipt

ARI Project Manager—Kelly Bottem
AMEC Project Manager—Cliff Whitmus (cliff.whitmus@amec.com ph 425-921-4023)
AMEC Laboratory Coordinator—Crystal Neirby (crystal.neirby@amec.com ph. 206-838-8469)

Sediment samples are unhomogenized. Samples must be thoroughly homogenized before analysis.

Relinquished By	Received By
Name: 7/16/14 @ 1245	Name:
Date:	Date: 7/16/14
Time:	Time: 12:45

Admin\Field Forms\COC

YR 7 - 2 2015

(2 of 2)

AMEC
3500 188th St. SW, Suite 601
Lynnwood,WA 98037
(425) 921-4000

CHAIN OF CUSTODY

AMEC Proj. BP2 Perimeter
COC Number 071

Recorded by: GSM

Checked by. _____

		Analysis Containers			
		SMS Metals (As, Cd, Cr, Cu, Pb, Hg, Ag, Zn) TOC, and PCBs (by Aroclor)	Archive		
AMEC Proj. BP2 Perimeter SD-PER312-0914 COC Form Initials: GSM Date: 9/11/2014 Time: 730	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER303-0914 COC Form Initials: GSM Date: 9/11/2014 Time: 820	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER305-0914 COC Form Initials: GSM Date: 9/11/2014 Time: 855	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER313-0914 COC Form Initials: GS Date: 9/11/2014 Time:	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER512-0914 COC Form Initials: [illegible] Date: 9/11/2014 Time: 1135	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER507-0914 COC Form Initials: GSM Date: 9/11/2014 Time: 1219	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER506-0914 COC Form Initials: GSM Date: 9/11/2014 Time: 1310	Date: Time:	1			Number of containers: 1

Laboratory Sample Receipt
ARI Project Manager—Kelly Bottem AMEC Project Manager—Cliff Whitmus (cliff whitmus@amec com ph 425-921-4023) AMEC Laboratory Coordinator—Crystal Neirby (crystal.neirby@amec com ph. 206-838-8469) Sediment samples are unhomogenized Samples must be thoroughly homogenized before analysis

Relinquished By	Received By
Name: [signature]	Name: [signature]
Date: 9/11/14	Date: 9/11/14
Time: 1550	Time: 1550

AMEC
3500 188th St. SW, Suite 601
Lynnwood,WA 98037
(425) 921-4000

CHAIN OF CUSTODY

AMEC Proj. BP2 Perimeter
COC Number 072

Recorded by: GSM

Checked by: _____

AMEC Proj. BP2 Perimeter
SD-PER518-0914
COC Form
Initials: GSM
Date: 9 / 11 /2014 Time: _____

		Analysis Containers			
		SMS Metals (As, Cd, Cr, Cu, Pb, Hg, Ag, Zn) TOC, and PCBs (by Aroclor)	Archive		
	Date: / Time:	1			Number of containers: 1
Place Sample ID Label Here or Write ID Number Here	Date: / Time:				Number of containers
Place Sample ID Label Here or Write ID Number Here	Date: / Time:				Number of containers
Place Sample ID Label Here or Write ID Number Here	Date: / Time:				Number of containers
Place Sample ID Label Here or Write ID Number Here	Date: / Time.				Number of containers
Place Sample ID Label Here or Write ID Number Here	Date: / Time:				Number of containers
Place Sample ID Label Here or Write ID Number Here	Date: / Time:				Number of containers

Laboratory Sample Receipt

ARI Project Manager—Kelly Bottem
AMEC Project Manager—Cliff Whitmus (cliff whitmus@amec.com ph 425-921-4023)
AMEC Laboratory Coordinator—Crystal Neirby (crystal neirby@amec com ph 206-838-8469)

Sediment samples are unhomogenized Samples must be thoroughly homogenized before analysis.

Relinquished By	Received By
Name:	Name:
Date: 9/11/14	Date: 9/11/14
Time: 1550	Time: 1556

AMEC
3500 188th St. SW, Suite 601
Lynnwood,WA 98037
(425) 921-4000

CHAIN OF CUSTODY

	Analysis Containers			
	SMS Metals (As, Cd, Cr, Cu, Pb, Hg, Ag, Zn) TOC, and PCBs (by Aroclor)	Archive		
AMEC Proj. BP2 Perimeter COC Number 074				Recorded by: GSM Checked by:
AMEC Proj. BP2 Perimeter SD-PER306-0914 COC Form Initials: GSM Date: 9/14/2014 Time: 742	Date: Time: 1			Number of containers 1
AMEC Proj. BP2 Perimeter SD-PER307-0914 COC Form Initials: GSM Date: 9/15/2014 Time: 817	Date: Time: 1			Number of containers 1
AMEC Proj. BP2 Perimeter SD-PER327-0914 COC Form Initials: GSM Date: 9/15/2014 Time: 255	Date: Time: 1			Number of containers 1
AMEC Proj. BP2 Perimeter SD-PER308-0914 COC Form Initials: GSM Date: 9/15/2014 Time:	Date: Time: 1			Number of containers 1
AMEC Proj. BP2 Perimeter SD-PER106-0914 COC Form Initials: GSM Date: /2014 Time:	Date: Time: 1			Number of containers 1
AMEC Proj. BP2 Perimeter SD-PER126-0914 COC Form Initials: GSM Date: /2014 Time: 738	Date: Time: 1			Number of containers 1
AMEC Proj. BP2 Perimeter SD-PER101-0914 COC Form Initials: GSM Date: /2014 Time:	Date: Time: 1			Number of containers 1

ARI Project Manager—Kelly Bottem
AMEC Project Manager—Cliff Whitmus (cliff.whitmus@amec com ph 425-921-4023)
AMEC Laboratory Coordinator—Crystal Neirby
(crystal neirby@amec com ph. 206-838-8469)

Sediment samples are unhomogenized. Samples must be thoroughly homogenized before analysis

Relinquished By	Transported By	Received By
Name Greg Myhr		Name Kelly Hutton
Date 9.15.14		Date 9/15/14
Time 1604		Time 1600
Name		Name
Date		Date
Time		Time
Name		Name
Date		Date
Time		Time

AMEC
3500 188th St. SW, Suite 601
Lynnwood,WA 98037
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ZA46

CHAIN OF CUSTODY

AMEC Proj. BP2 Perimeter
COC Number 075

Recorded by: GSM

Checked by: _____

		Analysis Containers			
		SMS Metals (As, Cd, Cr, Cu, Pb, Hg, Ag, Zn) TOC, and PCBs (by Aroclor)	Archive		
AMEC Proj. BP2 Perimeter SD-PER309-0914 COC Form Initials: GSM Date: 9/16/2014 Time: 735	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER310-0914 COC Form Initials: GSM Date: 9/16/2014 Time: 819	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER311-0914 COC Form Initials: GSM Date: 9/16/2014 Time: 912	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER201-0914 COC Form Initials: GSM Date: 9/16/2014 Time: 1010	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER102-0914 COC Form Initials: GSM Date: 9/16/2014 Time: 1055	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER104-0914 COC Form Initials: GSM Date: 9/16/2014 Time: 1120	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER105-0914 COC Form Initials: GSM Date: 9/16/2014 Time: 1217	Date: Time:				Number of containers:

ARI Proj[illegible] Kelly Bottem
AMEC Project Manager—Cliff Whitmus (cliff.whitmus@amec com ph 425-921-4023)
AMEC Laboratory Coordinator—Crystal Neirby (crystal.neirby@amec com ph 206-838-8469)

Sediment samples are unhomogenized Samples must be thoroughly homogenized before analysis

Relinquished By	Received By
Name: [signature]	Name: [signature]
Date: 9/16/14	Date: 9/16/14
Time: 1550	Time: 1550

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CHAIN OF CUSTODY

ZA66

Recorded by: GSM

Checked by: _____

		Analysis Containers			
		SMS Metals (As, Cd, Cr, Cu, Pb, Hg, Ag, Zn) TOC, and PCBs (by Aroclor)	Archive		
AMEC Proj. BP2 Perimeter COC Number 076					
AMEC Proj. BP2 Perimeter SD-PER103-0914 COC Form Initials: GSM Date: 9/17/2014 Time: 748	Date: Time:	1			Number of containers 1
AMEC Proj. BP2 Perimeter SD-PER206-0914 COC Form Initials: GSM Date: 9/17/2014 Time: 848	ate: me:	1			Number of containers 1
AMEC Proj. BP2 Perimeter SD-PER203-0914 COC Form Initials: GSM Date: 9/17/2014 Time: [illegible]	Date: Time:	1			Number of containers 1
AMEC Proj. BP2 Perimeter SD-PER209-0914 COC Form Initials: GSM Date: 9/17/2014 Time: 1053	Date: Time:	X			Number of containers 1
AMEC Proj. BP2 Perimeter SD-PER212-0914 COC Form Initials: GSM Date: 9/17/2014 Time: 1155	Date: ne:	X			Number of containers 1
AMEC Proj. BP2 Perimeter SD-PER213-0914 COC Form Initials: GSM Date: 9/17/2014 Time: [illegible]	te: Time:	X			Number of containers 1
AMEC Proj. BP2 Perimeter SD-PER204-0914 COC Form Initials: GSM Date: 9/17/2014 Time: 1342	Date: Time:	X			Number of containers 1

ARI Project Manager—Kelly Bottem
AMEC Project Manager—Cliff Whitmus (cliff.whitmus@amec com ph 425-921-4023)
AMEC Laboratory Coordinator—Crystal Neirby (crystal.neirby@amec.com ph. 206-838-8469)

Sediment samples are unhomogenized Samples must be thoroughly homogenized before analysis.

Relinquished By	Received By
Name: [signature]	Name: [signature]
Date: 9/17/14	Date: 9.17.14
Time: 1520	Time: 1520

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Z807

CHAIN OF CUSTODY

AMEC Proj. BP2 Perimeter
COC Number 077

Recorded by: GSM

Checked by: _____

		Analysis Containers			
		SMS Metals (As, Cd, Cr, Cu, Pb, Hg, Ag, Zn) TOC, and PCBs (by Aroclor)	Archive		
AMEC Proj. BP2 Perimeter SD-PER401-0914 COC Form Initials: GSM Date: 9/19/2014 Time: 730	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER404-0914 COC Form Initials: GSM Date: 9/19/2014 Time: 816	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER402-0914 COC Form Initials: GSM Date: 9/19/2014 Time: 919	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER403-0914 COC Form Initials: GSM Date: 9/19/2014 Time: 951	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER202-0914 COC Form Initials: GSM Date: 9/19/2014 Time: 1153	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER205-0914 COC Form Initials: GSM Date: 9/19/2014 Time: 1245	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER207-0914 COC Form Initials: GSM Date: 9/19/2014 Time: 1330	Date: Time:	1			Number of containers: 1

Laboratory Sample Receipt

ARI Project Manager—Kelly Bottem
AMEC Project Manager—Cliff Whitmus (cliff whitmus@amec.com ph 425-921-4023)
AMEC Laboratory Coordinator—Crystal Neirby (crystal neirby@amec com ph 206-838-8469)

Sediment samples are unhomogenized Samples must be thoroughly homogenized before analysis.

Relinquished By	Transported By	Received By
Name: [signature] Date: 9/19/14 Time: 1515		Name: [signature] Date: 9/19/14 Time: 1615
Name Date Time		Name Date Time
Name Date Time		Name Date Time.

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CHAIN OF CUSTODY

AMEC Proj. BP2 Perimeter
COC Number 078

Recorded by: GSM

Checked by: _____

		Analysis Containers			
		SMS Metals (As, Cd, Cr, Cu, Pb, Hg, Ag, Zn) TOC, and PCBs (by Aroclor)	Archive		
AMEC Proj. BP2 Perimeter SD-PER405-0914 COC Form Initials: GSM Date: 9/22/2014 Time: 806	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER406-0914 COC Form Initials: GSM Date: 9/22/2014 Time: 854	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER426-0914 COC Form Initials: GSM Date: 9/22/2014 Time: 944	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER211-0914 COC Form Initials: GSM Date: 9/22/2014 Time: 1026	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER210-0914 COC Form Initials: GSM Date: 9/22/2014 Time: 1220	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER230-0914 COC Form Initials: GSM Date: 9/22/2014 Time: 1253	Date: Time:	1			Number of containers: 1
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers:

Laboratory Sample Receipt
ARI Project Manager—Kelly Bottem AMEC Project Manager—Cliff Whitmus (cliff.whitmus@amec com ph 425-921-4023) AMEC Laboratory Coordinator—Crystal Neirby (crystal.neirby@amec.com ph 206-838-8469) Sediment samples are unhomogenized Samples must be thoroughly homogenized before analysis

Relinquished By	Received By
Name: [redacted]	Name: [redacted]
Date: 9/22/14	Date: 9/22/14
Time: 1515	Time: 1515

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Lynnwood,WA 98037
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CHAIN OF CUSTODY

AMEC Proj. BP2 Perimeter
COC Number 079

Recorded by: GSN

Checked by:

		Analysis Containers: SMS Metals (As, Cd, Cr, Cu, Pb, Hg, Ag, Zn) TOC, and PCBs (by Aroclor)	Archive		
AMEC Proj. BP2 Perimeter SD-PER208-0914 COC Form Initials: GSN Date: 9/25/2014 Time: 15:52	Date: Time:	1			Number of containers 1
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers

Laboratory Sample Receipt

ARI Project Manager—Kelly Bottem
AMEC Project Manager—Cliff Whitmus (cliff.whitmus@amec com ph 425-921-4023)
AMEC Laboratory Coordinator—Crystal Neirby (crystal neirby@amec.com ph 206-838-8469)

Sediment samples are unhomogenized Samples must be thoroughly homogenized before analysis.

Relinquished By	Received By
Name: Rob Gilman	Name:
Date: 9/26/14 1008	Date: 9-26-14
Time: 1008	Time: 1007

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Lynnwood,WA 98037
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CHAIN OF CUSTODY

AMEC Proj. BP2 Perimeter
COC Number 081

Recorded by: GSM

Checked by: _____

		Analysis Containers			
		SMS Metals (As, Cd, Cr, Cu, Pb, Hg, Ag, Zn) TOC, and PCBs (by Aroclor)	Archive		
AMEC Proj. BP2 Perimeter SD-PER401-0315 Initials: GSM COC Form Date: 2 /25 /2015 Time: 1111	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER402-0315 Initials: GSM COC Form Date: 2 /25 /2015 Time: 1325	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER403-0315 Initials: GSM COC Form Date: 2 /25 /2015 Time: 1417	Date: Time:	1			Number of containers: 1
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers:
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers:
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers:
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers:

Laboratory Sample Receipt

ARI Project Manager—Kelly Bottem
AMEC Project Manager—Cliff Whitmus (cliff whitmus@amec com ph 425-921-4023)
AMEC Laboratory Coordinator—Crystal Neirby (c.neirby@amec com ph 206-838-8469)

Samples are unhomogenized Samples must be thoroughly homogenized before analysis

Relinquished By	Received By
Name: Gary Maxwell	Name:
Date: 2-25-15	Date: 2/25/15
Time: 1601	Time: 1601

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Lynnwood,WA 98037
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ZX96

CHAIN OF CUSTODY

AMEC Proj. BP2 Perimeter
COC Number 082

Recorded by: CJM

Checked by: _____

		Analysis Containers			
		SMS Metals (As, Cd, Cr, Cu, Pb, Hg, Ag, Zn) TOC, and PCBs (by Aroclor)	Archive		
AMEC Proj. BP2 Perimeter SD-PER404-0315 Initials: GSM COC Form Date: 2 /26 /2015 Time: 853	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER405-0315 Initials: GSM COC Form Date: 2 /26 /2015 Time: 911	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER406-0315 Initials: GSM COC Form Date: 2 /26 /2015 Time: 1129	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER426-0315 Initials: GSM COC Form Date: 2 /26 /2015 Time: 1054	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER312-0315 Initials: GSM COC Form Date: 2 /26 /2015 Time: 1305	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER303-0315 Initials: _____ COC Form Date: 2 /26 /2015 Time: 1423	Date: Time:	1			Number of containers: 1
or Write ID Number Here	Date: Time:				Number of containers

Laboratory Sample Receipt
ARI Project Manager—Kelly Bottem AMEC Project Manager—Cliff Whitmus (cliff whitmus@amec com ph 425-921-4023) AMEC Laboratory Coordinator—Crystal Neirby (crystal neirby@amec.com ph 206-838-8469) Sediment samples are unhomogenized. Samples must be thoroughly homogenized before analysis.

Relinquished By	Received By
Name: Gary Maxwell	Name: Chris Atwell
Date: 2-26-15	Date: 2-26-15
Time: 1549	Time: 1549

IEC
0 188th St. SW, Suite 601
nwood,WA 98037
5) 921-4000

2725

CHAIN OF CUSTODY

AMEC Proj. BP2 Perimeter
CO Number 083

Recorded by: GSM

Checked by: _____

	Analysis Containers			
	SMS Metals (As, Cd, Cr, Cu, Pb, Hg, Ag, Zn) TOC, and PCBs (by Aroclor)	Archive		
AMEC Proj. BP2 Perimeter SD-PER313-0315 Initials: GSM COC Form Date: 2/27/2015 Time: 850	Date: Time: 1			Number of containers 1
AMEC Proj. BP2 Perimeter SD-PER305-0315 Initials: GSM COC Form Date: 2/27/2015 Time: 937	Date. Time: 1			Number of containers 1
AMEC Proj. BP2 Perimeter SD-PER304-0315 Initials: GSM COC Form Date: 2/27/2015 Time: 1037	Date. Time. 1			Number of containers 1
AMEC Proj. BP2 Perimeter SD-PER306-0315 Initials: GSM COC Form Date: 2/27/2015 Time: 1224	Date Time: 1			Number of containers 1
AMEC Proj. BP2 Perimeter SD-PER310-0315 Initials: GSM COC Form Date: 2/27/2015 Time: 1327	Date: Time: 1			Number of containers 1
AMEC Proj. BP2 Perimeter SD-PER311-0315 Initials: GSM COC Form Date: 2/27/2015 Time: 1406	Date: Time: 1			Number of containers 1
Place Sample ID Label Here or Write ID Number Here	Date Time.			Number of containers

Laboratory Sample Receipt

Project Manager—Kelly Bottem
C Project Manager—Cliff Whitmus (cliff whitmus@amec com ph 921-4023)
C Laboratory Coordinator—Crystal Nerby (tal.nerby@amec com ph 206-838-8469)

liment samples are unhomogenized Samples must be thoroughly homogenized before analysis

Relinquished By	Received By
Name: Gary Maxwell	Name:
Date: 2-27-15	Date: 2-27-15
Time: 1554	Time: 1554

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3500 188th St. SW, Suite 601
Lynnwood,WA 98037
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2256

CHAIN OF CUSTODY

AMEC Proj. BP2 Perimeter
COC Number 084

Recorded by: GSM

Checked by: _____

		Analysis Containers				
		SMS Metals (As, Cd, Cr, Cu, Pb, Hg, Ag, Zn) TOC, and PCBs (by Aroclor)	Archive		
AMEC Proj. BP2 Perimeter SD-PER308-0315 Initials: GSM COC Form Date: 3/9/2015 Time: 1003	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER307-0315 Initials: GSM COC Form Date: 3/9/2015 Time: 1125	Date. Time.	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER327-0315 Initials: GSM COC Form Date: 3/9/2015 Time: 1236	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER309-0315 Initials: GSM COC Form Date: 3/9/2015 Time: 1317	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER301-0315 Initials: GSM COC Form Date: 3/9/2015 Time: 1452	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER302-0315 Initials: GSM COC Form Date: 3/9/2015 Time: 1554	Date: Time:	1			Number of containers: 1
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers:

Laboratory Sample Receipt

ARI Project Manager—Kelly Bottem
AMEC Project Manager—Cliff Whitmus (cliff whitmus@amec com ph 425-921-4023)
AMEC Laboratory Coordinator—Crystal Neirby (crystal neirby@amec.com ph 206-838-8469)

Sediment samples are unhomogenized Samples must be thoroughly homogenized before analysis

Relinquished By	Received By
Name: Gary Maxwell	Name:
Date: 3-10-15	Date: 3/10/15
Time: 15 24	Time: 1524

Admin\Field Forms\COC

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CHAIN OF CUSTODY

AMEC Proj. BP2 Perimeter
COC Number 085

Recorded by: CSM

Checked by. _____

	Date/Time	Analysis Containers: SMS Metals (As, Cd, Cr, Cu, Pb, Hg, Ag, Zn) TOC, and PCBs (by Aroclor)	Analysis Containers: Archive	Analysis Containers:	Number of containers
AMEC Proj. BP2 Perimeter SD-PER510-0315 Initials: CSM COC Form Date: 3/11/2015 Time: 1255	Date: Time:	1			1
AMEC Proj. BP2 Perimeter SD-PER513-0315 Initials: CSM COC Form Date: 3/11/2015 Time: 1333	Date: Time:	1			1
AMEC Proj. BP2 Perimeter SD-PER508-0315 Initials: CSM COC Form Date: 3/11/2015 Time: 1435	Date: Time:	1			1
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers

Laboratory Sample Receipt

ARI Project Manager—Kelly Bottem
AMEC Project Manager—Cliff Whitmus (cliff whitmus@amec com ph 425-921-4023)
AMEC Laboratory Coordinator—Crystal Neirby (crystal neirby@amec com ph. 206-838-8469)

Sediment samples are unhomogenized. Samples must be thoroughly homogenized before analysis.

Relinquished By	Received By
Name: Gary Maxwell	Name:
Date: 3-11-15	Date: 3/11/15
Time: 1550	Time: 1552

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3500 188th St. SW, Suite 601
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CHAIN OF CUSTODY

AMEC Proj. BP2 Perimeter
COC Number 086

Recorded by: GSM

Checked by: _____

		Analysis Containers			
		SMS Metals (As, Cd, Cr, Cu, Pb, Hg, Ag, Zn) TOC, and PCBs (by Aroclor)	Archive		
AMEC Proj. BP2 Perimeter SD-PER518-0315 Initials: GSM COC Form Date: 3 /12 /2015 Time: 1122	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER512-0315 Initials: GSM COC Form Date: 3 /12 /2015 Time: 1125	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER509-0315 Initials: _____ COC Form Date: / /2015 Time: 1115	Date: Time:	1			Number of containers: 1
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers:
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers:
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers:
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers:

Laboratory Sample Receipt

ARI Project Manager—Kelly Bottem
AMEC Project Manager—Cliff Whitmus (cliff whitmus@amec com ph 425-921-4023)
AMEC Laboratory Coordinator—Crystal Neirby (crystal neirby@amec.com ph 206-838-8469)

Sediment samples are unhomogenized Samples must be thoroughly homogenized before analysis

Relinquished By	Received By
Name: Gary Maxwell	Name:
Date: 3-12-15	Date: 3/12/15
Time: 1619	Time: 1619

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AAU6

CHAIN OF CUSTODY

AMEC Proj. BP2 Perimeter
COC Number 087

Recorded by: GSM

Checked by: _____

	Date/Time	Analysis Containers: SMS Metals (As, Cd, Cr, Cu, Pb, Hg, Ag, Zn) TOC, and PCBs (by Aroclor)	Analysis Containers: Archive	Analysis Containers:	Number of containers
AMEC Proj. BP2 Perimeter SD-PER515-0315 Initials: GSM COC Form Date: 3/13/2015 Time: 829	Date: Time:	1			1
AMEC Proj. BP2 Perimeter SD-PER516-0315 Initials: GSM COC Form Date: 3/13/2015 Time: 910	Date: Time:	1			1
AMEC Proj. BP2 Perimeter SD-PER517-0315 Initials: GSM COC Form Date: 3/13/2015 Time:	Date: Time:	1			1
AMEC Proj. BP2 Perimeter SD-PER507-0315 Initials: GSM COC Form Date: 3/13/2015 Time: 1105	Date: Time:	1			1
AMEC Proj. BP2 Perimeter SD-PER506-0315 Initials: GSM COC Form Date: 3/13/2015 Time:	Date: Time:	1			1
AMEC Proj. BP2 Perimeter SD-PER514-0315 Initials: GSM COC Form Date: 3/13/2015 Time:	Date: Time:	1			1
Place Sample ID Label Here or Write ID Number Here	Date: Time:				

Laboratory Sample Receipt

ARI Project Manager---Kelly Bottem
AMEC Project Manager---Cliff Whitmus (cliff.whitmus@amec.com ph 425-921-4023)
AMEC Laboratory Coordinator---Crystal Neirby (crystal neirby@amec com ph 206-838-8469)

Sediment samples are unhomogenized Samples must be thoroughly homogenized before analysis.

Relinquished By	Received By
Name: Gary Maxwell	Name:
Date: 3-13-15	Date: 3/13/15
Time: 1457	Time: 1457

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3500 188th St. SW, Suite 601
Lynnwood,WA 98037
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CHAIN OF CUSTODY

AMEC Proj. BP2 Perimeter
COC Number 088

Recorded by: GSM

Checked by: _____

		Analysis Containers			
		SMS Metals (As, Cd, Cr, Cu, Pb, Hg, Ag, Zn) TOC, and PCBs (by Aroclor)	Archive		
AMEC Proj. BP2 Perimeter SD-PER511-0315 Initials: GSM COC Form Date: 3 / 16 /2015 Time: 845	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER505-0315 Initials: GSM COC Form Date: 3 / 16 /2015 Time: 924	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER525-0315 Initials: GSM COC Form Date: 3 / 16 /2015 Time:	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER504-0315 Initials: GSM COC Form Date: 3 / 16 /2015 Time: 1059	Date: Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER201-0315 Initials: GSM COC Form Date: 3 / 15 /2015 Time: 1245	Date Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER101-0315 Initials: GSM COC Form Date: 3 / 16 /2015 Time: 1333	Date. Time:	1			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER203-0315 Initials: GSM COC Form Date: 3 / 16 /2015 Time:	Date: Time:	1			Number of containers: 1

ARI Project Manager—Kelly Bottem
AMEC Project Manager—Cliff Whitmus (cliff.whitmus@amec.com ph 425-921-4023)
AMEC Laboratory Coordinator—Crystal Neirby (crystal neirby@amec.com ph 206-838-8469)

Sediment samples are unhomogenized Samples must be thoroughly homogenized before analysis.

Relinquished By	Received By
Name: Kyle Korbines	Name:
Date: 3/16/15	Date: 3/16/15
Time: 1545	Time: 1545

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3500 188th St. SW, Suite 601
Lynnwood,WA 98037
(425) 921-4000

AB02

CHAIN OF CUSTODY

AMEC Proj. BP2 Perimeter
COC Number 089

Recorded by: GSM

Checked by: _____

	Date/Time	Analysis Containers: SMS Metals (As, Cd, Cr, Cu, Pb, Hg, Ag, Zn) and TOC, and PCBs (by Aroclor)	Analysis Containers: Archive	Analysis Containers:	Number of containers
AMEC Proj. BP2 Perimeter SD-PER104-0315 Initials: GSM COC Form Date: 3/17/2015 Time: 915	Date: Time:	1			1
AMEC Proj. BP2 Perimeter SD-PER103-0315 Initials: GSM COC Form Date: 3/17/2015 Time: 042	Date: Time:	1			1
AMEC Proj. BP2 Perimeter SD-PER102-0315 Initials: GSM COC Form Date: 3/17/2015 Time: 1125	Date: Time:	1			1
AMEC Proj. BP2 Perimeter SD-PER202-0315 Initials: [illegible] COC Form Date: [illegible]/2015 Time: [illegible]	Date: Time:	1			1
AMEC Proj. BP2 Perimeter SD-PER105-0315 Initials: GSM COC Form Date: 3/17/2015 Time: 1059	Date: Time:	1			1
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers

Laboratory Sample Receipt

ARI Project Manager—Kelly Bottem
AMEC Project Manager—Cliff Whitmus (cliff whitmus@amec com ph 425-921-4023)
AMEC Laboratory Coordinator—Crystal Neirby (crystal.neirby@amec com ph. 206-838-8469)

Sediment samples are unhomogenized. Samples must be thoroughly homogenized before analysis

Relinquished By	Received By
Name: Kyle Kerbines	Name:
Date: 3/17/15	Date: 3/17/15
Time: 1523	Time: 1523

AMEC
3500 188th St. SW, Suite 601
Lynnwood,WA 98037
(425) 921-4000

AB35

CHAIN OF CUSTODY

AMEC Proj. BP2 Perimeter
COC Number 090

Recorded by: GSM

Checked by: _____

	Analysis Containers				
	SMS Metals (As, Cd, Cr, Cu, Pb, Hg, Ag, Zn) TOC, and PCBs (by Aroclor)	Archive		Number of containers
AMEC Proj. BP2 Perimeter SD-PER204-0315 Initials: GSM COC Form Date: 3/18/2015 Time: 8:27	1			1
AMEC Proj. BP2 Perimeter SD-PER206-0315 Initials: GSM COC Form Date: 3/18/2015 Time: 9:12	1			1
AMEC Proj. BP2 Perimeter SD-PER205-0315 Initials: GSM COC Form Date: 3/18/2015 Time:	1			1
AMEC Proj. BP2 Perimeter SD-PER207-0315 Initials: GSM COC Form Date: 3/18/2015 Time: 11:08	1			1
AMEC Proj. BP2 Perimeter SD-PER209-0315 Initials: GSM COC Form Date: 3/18/2015 Time: 12:11	1			1
AMEC Proj. BP2 Perimeter SD-PER210-0315 Initials: COC Form Date: 3/18/2015 Time: 13:17	1			1
AMEC Proj. BP2 Perimeter SD-PER230-0315 Initials: COC Form Date: 3/18/2015 Time: 13:54	1			1

ARI Project Manager—Kelly Bottem
AMEC Project Manager---Cliff Whitmus (cliff whitmus@amec com ph 425-921-4023)
AMEC Laboratory Coordinator—Crystal Neirby (crystal.neirby@amec com ph. 206-838-8469)

Sediment samples are unhomogenized. Samples must be thoroughly homogenized before analysis

Relinquished By	Received By
Name: Gary Maxwell	Name:
Date: 3-18-15	Date: 3/18/15
Time: 1520	Time: 1520

AMEC
3500 188th St. SW, Suite 601
Lynnwood,WA 98037
(425) 921-4000

ABS1 ~~ABSH~~

CHAIN OF CUSTODY

AMEC Proj. BP2 Perimeter
COC Number 091

Recorded by: GSM

Checked by: _____

	Date/Time	Analysis Containers: SMS Metals (As, Cd, Cr, Cu, Pb, Hg, Ag, Zn) TOC, and PCBs (by Aroclor)	Archive		Number of containers
AMEC Proj. BP2 Perimeter SD-PER208-0315 Initials: GSM COC Form Date: 3/19/2015 Time: 852	Time:	1			1
AMEC Proj. BP2 Perimeter SD-PER212-0315 Initials: GSM COC Form Date: 3/19/2015 Time: 1042	ime:	1			1
AMEC Proj. BP2 Perimeter SD-PER213-0315 Initials: GSM COC Form Date: 3/19/2015 Time: 1118	me:	1			1
AMEC Proj. BP2 Perimeter SD-PER211-0315 Initials: GSM COC Form Date: 3/19/2015 Time:	me:	1			1
AMEC Proj. BP2 Perimeter SD-PER106-0315 Initials: GSM COC Form Date: 3/19/2015 Time: 336		1			1
AMEC Proj. BP2 Perimeter SD-PER126-0315 Initials: GSM COC Form Date: 3/19/2015 Time: 1209	me:	1			1
Place Sample ID Label or Write ID Number Here	Time:				

Laboratory Sample Receipt
ARI Project Manager—Kelly Bottem AMEC Project Manager—Cliff Whitmus (cliff.whitmus@amec.com ph 425-921-4023) AMEC Laboratory Coordinator—Crystal Neirby (crystal neirby@amec com ph 206-838-8469) Sediment samples are unhomogenized Samples must be thoroughly homogenized before analysis

Relinquished By	Received By
Name: Gary Maxwell	Name:
Date: 3-19-15	Date: 3/19/15
Time: 1600	Time: 1600

Admin\Field Forms\COC

AMEC
3500 188th St. SW, Suite 601
Lynnwood,WA 98037
(425) 921-4000

AB63

CHAIN OF CUSTODY

AMEC Proj. BP2 Perimeter
COC Number 092

Recorded by: _____

Checked by. _____

		Analysis Containers			
		SMS Metals (As, Cd, Cr, Cu, Pb, Hg, Ag, Zn) TOC, and PCBs (by Aroclor)	Archive		
AMEC Proj. BP2 Perimeter SD-PER501-0315 Initials: RG COC Form Date: 3/20/2015 Time: 1000	Date: Time:	X			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER502-0315 Initials: RG COC Form Date: 3/20/2015 Time: 1025	Date: Time:	X			Number of containers: 1
AMEC Proj. BP2 Perimeter SD-PER503-0315 Initials: RG COC Form Date: 3/20/2015 Time: 1035	Date Time.	X			Number of containers: 1
Place Sample ID Label Here or Write ID Number Here	Date Time:				Number of containers
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers
Place Sample ID Label Here or Write ID Number Here	Date: Time:				Number of containers

Laboratory Sample Receipt

ARI Project Manager—Kelly Bottem
AMEC Project Manager—Cliff Whitmus (cliff whitmus@amec com ph 425-921-4023)
AMEC Laboratory Coordinator—Crystal Neirby (crystal.neirby@amec.com ph 206-838-8469)

Sediment samples are unhomogenized Samples must be thoroughly homogenized before analysis

Relinquished By	Received By
Name: C Whitmus	Name: [signature]
Date: 3/20/15	Date: 3/20/15
Time: 1133	Time: 1133