LDWSF.
12.3.54 v6

EPA Region 10 Laboratory **Analyses Required**

OXYGEN DEMAND, SOLIDS AND NUTRIENTS

Project Name: 86-X-4-4 Project Code: CDE-013D Account Code: CDEXOA

Matrix Codes *(circle one only)*

10 Water-Total
11 Water-Dissolved
40 Sediment/Soil
45 Semi-Solid/Sludge
46 Sediment for EP Toxicity
70 Tissue
80 Oil/Solvent
00 Other

		Sample Numbers																		Analy/Comp Init/Date
		8638001D	8638001I	8638001Z																
Oxygen Demand & Carbon *WG (18)*																				
Bio. Oxygen Demand	BOD/5 day																			
Bio. Oxygen Demand	BOD/20 day																			
Bio. Oxygen Demand	BOD/60 day																			
Bio. Oxygen Demand (5-day) Carbonaceous	BOD/5 day-C																			
Chem. Oxygen Demand	COD																			
Total Organic Carbon	TOC																			
Solids *WG (15)*																				
Total Dissolved	TDS	X	X	X																
Total Sus. Solids	SS	X	X	X																
Total Solids	TS	X	X	X																
Volatile	TVS																			
Volatile Suspended	TVSS																			
Settleable Solids	SetSlds																			
% Total Solids	% Tot																			
% Volatile Solids	% V Slds																			
Grain Size	Grn Siz																			
Nutrients *WG (20)*																				
Ammonia	NH3																			
*Nitrate	NO3																			
*Nitrite	NO2																			
Nitrate + Nitrite	NO3 + NO2																			
Kjeldahl	Kjel-N																			
Total Phosphorous	T-Phos																			
Dissolved Phosphorous	D-Phos																			
*Ortho Phosphorous	O-Phos																			
Dissolved Orth. Phos.	D-O Phos																			

**Parameters may also be analyzed via the Ion Chromatograph workgroup methodology.*

Save samples after analysis? **NONE, SOME** or **ALL.** *(If SOME, circle sample numbers.)*

Special detection limits and comments:

USEPA SF
1316400

Project Officer Signature *Date*

EPA Region 10 Laboratory **Analyses Required**

PHYSICAL & GENERAL INORGANICS AND ION CHROMATOGRAPH

Project Name: 86-X-4-4 Project Code: CDE-013D Account Code: CDE XOA

Matrix Codes *(circle one only)*

10 Water-Total
11 Water-Dissolved
40 Sediment/Soil
45 Semi-Solid/Sludge
46 Sediment for EP Toxicity
70 Tissue
80 Oil/Solvent
00 Other

		Sample Numbers																			Analy/Comp Init/Date
		863800 10	863800 11	863800 12																	
Physical & General Inorganics *WG (10)*																					
Turbidity	TURB	X	X	X																	
pH (Lab)	pH	X	X	X																	
Conductivity	COND	X	X	X																	
Total Alkalinity	T ALK	X	X	X																	
Total Hardness	T HARD																				
Bicarbonate	HCO3																				
Calcium	Ca																				
Carbonate	CO3																				
Chloride	Cl																				
Fluoride	F																				
Sulfate	SO4-TOT																				
Sulfide	S																				
Cyanide	CN																				
Acidity	Acidity																				
Hardness	CaCO3																				
Color	Color																				
Ion Chromatograph *WG (80)*																					
Calcium	Ca																				
Chloride	Cl																				
Cyanide	CN																				
Fluoride	F																				
Magnesium	Mg																				
Potassium	K																				
Sodium	Na																				
Sulfate	SO4																				
Nitrate	NO3																				
Nitrite	NO2																				
Ortho Phosphorous	O-Phos.																				

Save samples after analysis? **NONE, SOME** or **ALL.** *(If SOME, circle sample numbers.)*

Special detection limits and comments:

Project Officer Signature *Date*

EPA Region 10 Laboratory **Analyses Required**

OXYGEN DEMAND, SOLIDS AND NUTRIENTS

Project Name: 86-X-4-4 Project Code: CDE-013 B Account Code: CDEXOA

Matrix Codes *(circle one only)*

10 Water-Total
11 Water-Dissolved
40 Sediment/Soil
45 Semi-Solid/Sludge
46 Sediment for EP Toxicity
70 Tissue
80 Oil/Solvent
00 Other

Sample Numbers

	863445500	1	2	3	4													Analy/Comp Init/Date
Oxygen Demand & Carbon *WG (18)*																		
Bio. Oxygen Demand BOD/5 day																		
Bio. Oxygen Demand BOD/20 day																		
Bio. Oxygen Demand BOD/60 day																		
Bio. Oxygen Demand (5-day) Carbonaceous BOD/5 day-C																		
Chem. Oxygen Demand COD																		
Total Organic Carbon TOC																		
Solids *WG (15)*																		
Total Dissolved TDS	X	X	X	X	X													
Total Sus. Solids SS	X	X	X	X	X													
Total Solids TS	X	X	X	X	X													
Volatile TVS																		
Volatile Suspended TVSS																		
Settleable Solids SetSlds																		
% Total Solids % Tot																		
% Volatile Solids % V Slds																		
Grain Size Grn Siz																		
Nutrients *WG (20)*																		
Ammonia NH3																		
*Nitrate NO3																		
*Nitrite NO2																		
Nitrate + Nitrite NO3 + NO2																		
Kjeldahl Kjel-N																		
Total Phosphorous T-Phos																		
Dissolved Phosphorous D-Phos																		
*Ortho Phosphorous O-Phos																		
Dissolved Orth. Phos. D-O Phos																		

** Parameters may also be analyzed via the Ion Chromatograph workgroup methodology.*

Save samples after analysis? **NONE, SOME** or **ALL.** *(If SOME, circle sample numbers.)*

Special detection limits and comments:

Project Officer Signature G.R. Hetting *Date*

EPA X-94 Project Officer Copy

EPA Region 10 Laboratory **Analyses Required**

PHYSICAL & GENERAL INORGANICS AND ION CHROMATOGRAPH

86-X-4-4

Project Name: CDE-013B Project Code: CDE-013B Account Code: CDE X.OA

Matrix Codes *(circle one only)*

10 Water-Total
11 Water-Dissolved
40 Sediment/Soil
45 Semi-Solid/Sludge
46 Sediment for EP Toxicity
70 Tissue
80 Oil/Solvent
00 Other

		Sample Numbers: 86344550	1	2	3	4													Analy/Comp Init/Date
Physical & General Inorganics *WG (10)*																			
Turbidity	TURB	X	X	X	X	X													
pH (Lab)	pH	X	X	X	X	X													
Conductivity	COND	X	X	X	X	X													
Total Alkalinity	T ALK	X	X	X	X	X													
Total Hardness	T HARD																		
Bicarbonate	HCO3																		
Calcium	Ca																		
Carbonate	CO3																		
Chloride	Cl																		
Fluoride	F																		
Sulfate	SO4-TOT																		
Sulfide	S																		
Cyanide	CN																		
Acidity	Acidity																		
Hardness	CaCO3																		
Color	Color																		
Ion Chromatograph *WG (80)*																			
Calcium	Ca																		
Chloride	Cl																		
Cyanide	CN																		
Fluoride	F																		
Magnesium	Mg																		
Potassium	K																		
Sodium	Na																		
Sulfate	SO4																		
Nitrate	NO3																		
Nitrite	NO2																		
Ortho Phosphorous	O-Phos.																		

Save samples after analysis? **NONE, SOME** or **ALL.** *(If SOME, circle sample numbers.)*

Special detection limits and comments:

Project Officer Signature G.R. Matheny *Date*

EPA Region 10 Laboratory **Analyses Required**

PHYSICAL & GENERAL INORGANICS AND ION CHROMATOGRAPH

Project Name: Pioneer Construction Lake Union Project Code: TEC330A Account Code: CDE0A

Matrix Codes *(circle one only)*

10 Water-Total
11 Water-Dissolved
40 Sediment/Soil
45 Semi-Solid/Sludge
46 Sediment for EP Toxicity
70 Tissue
80 Oil/Solvent
00 Other

		Sample Numbers																		Analy/Comp Init/Date
		86410100	01	02	04	05	06	09	11	16										
Physical & General Inorganics *WG (10)*																				
Turbidity	TURB	X	X	X	X	X	X	X	X											
pH (Lab)	pH	X	X	X	X	X	X	X	X	X										
Conductivity	COND	X	X	X	X	X	X	X	X	X										
Total Alkalinity	T ALK	X	X	X	X	X	X	X	X	X										
Total Hardness	T HARD																			
Bicarbonate	HCO3																			
Calcium	Ca																			
Carbonate	CO3																			
Chloride	Cl																			
Fluoride	F																			
Sulfate	SO4-TOT																			
Sulfide	S																			
Cyanide	CN																			
Acidity	Acidity																			
Hardness	CaCO3																			
Color	Color																			
Ion Chromatograph *WG (80)*																				
Calcium	Ca																			
Chloride	Cl																			
Cyanide	CN																			
Fluoride	F																			
Magnesium	Mg																			
Potassium	K																			
Sodium	Na																			
Sulfate	SO4																			
Nitrate	NO3																			
Nitrite	NO2																			
Ortho Phosphorous	O-Phos.																			

Save samples after analysis? **NONE, SOME** or **ALL**. *(If SOME, circle sample numbers.)*

Special detection limits and comments:

Lisa Wilcox

Project Officer Signature *Date*

EPA X-93 **Project Officer Copy**

EPA Region 10 Laboratory **Analyses Required**

OXYGEN DEMAND, SOLIDS AND NUTRIENTS

Project Name: Pioneer Construction Project Code: CDE-013C Account Code: CDE-X0A

Matrix Codes *(circle one only)*

10 Water-Total
11 Water-Dissolved
40 Sediment/Soil
45 Semi-Solid/Sludge
46 Sediment for EP Toxicity
70 Tissue
80 Oil/Solvent
00 Other

		Sample Numbers																			Analy/Comp Init/Date
		86360103	86360104	86360105	86360106	86360107	86360108	86360109													
Oxygen Demand & Carbon *WG (18)*																					
Bio. Oxygen Demand	BOD/5 day																				
Bio. Oxygen Demand	BOD/20 day																				
Bio. Oxygen Demand	BOD/60 day																				
Bio. Oxygen Demand (5-day) Carbonaceous	BOD/5 day-C																				
Chem. Oxygen Demand	COD																				
Total Organic Carbon	TOC																				
Solids *WG (15)*																					
Total Dissolved	TDS	X	X	X	X	X	X	X													
Total Sus. Solids	SS	X	X	X	X	X	X	X													
Total Solids	TS	X	X	X	X	X	X	X													
Volatile	TVS																				
Volatile Suspended	TVSS																				
Settleable Solids	SetSlds																				
% Total Solids	% Tot																				
% Volatile Solids	% V Slds																				
Grain Size	Grn Siz																				
Nutrients *WG (20)*																					
Ammonia	NH3																				
*Nitrate	NO3																				
*Nitrite	NO2																				
Nitrate + Nitrite	NO3 + NO2																				
Kjeldahl	Kjel-N																				
Total Phosphorous	T-Phos																				
Dissolved Phosphorous	D-Phos																				
*Ortho Phosphorous	O-Phos																				
Dissolved Orth. Phos.	D-O Phos																				

** Parameters may also be analyzed via the Ion Chromatograph workgroup methodology.*

Save samples after analysis? **NONE, SOME** or **ALL.** *(If SOME, circle sample numbers.)*

Special detection limits and comments:

Project Officer Signature *Date*

9-3-86

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EPA Region 10 Laboratory **Analyses Required**

PHYSICAL & GENERAL INORGANICS AND ION CHROMATOGRAPH

Project Name: PIONEER CONSTRUCTION Project Code: CDE-013C Account Code: CDE-X0A

Matrix Codes *(circle one only)*

10 Water-Total
11 Water-Dissolved
40 Sediment/Soil
45 Semi-Solid/Sludge
46 Sediment for EP Toxicity
70 Tissue
80 Oil/Solvent
00 Other

		Sample Numbers																		Analy/Comp Init/Date
		86360103	86360104	86360105	86360106	86360107	86360108	86360111												
Physical & General Inorganics *WG (10)*																				
Turbidity	TURB	X	X	X	X	X	X	X												
pH (Lab)	pH	X	X	X	X	X	X	X												
Conductivity	COND	X	X	X	X	X	X	X												
Total Alkalinity	T ALK	X	X	X	X	X	X	X												
Total Hardness	T HARD																			
Bicarbonate	HCO3																			
Calcium	Ca																			
Carbonate	CO3																			
Chloride	Cl																			
Fluoride	F																			
Sulfate	SO4-TOT																			
Sulfide	S																			
Cyanide	CN																			
Acidity	Acidity																			
Hardness	CaCO3																			
Color	Color																			
Ion Chromatograph *WG (80)*																				
Calcium	Ca																			
Chloride	Cl																			
Cyanide	CN																			
Fluoride	F																			
Magnesium	Mg																			
Potassium	K																			
Sodium	Na																			
Sulfate	SO4																			
Nitrate	NO3																			
Nitrite	NO2																			
Ortho Phosphorous	O-Phos.																			

Save samples after analysis? **NONE, SOME** or **ALL**. *(If SOME, circle sample numbers.)*

Special detection limits and comments:

Project Officer Signature *Date*

9-3-86

EPA X-93 **Project Officer Copy**

EPA Region 10 Laboratory **Analyses Required**

OXYGEN DEMAND, SOLIDS AND NUTRIENTS

Project Name: Pioneer Construction Lake Union Project Code: TEC330A Account Code: CDEOA

Matrix Codes *(circle one only)*

10 Water-Total
11 Water-Dissolved
40 Sediment/Soil
45 Semi-Solid/Sludge
46 Sediment for EP Toxicity
70 Tissue
80 Oil/Solvent
00 Other

	Sample Numbers																		Analy/Comp Init/Date
	86410100	01	02	04	05	06	09	11											
Oxygen Demand & Carbon *WG (18)*																			
Bio. Oxygen Demand BOD/5 day																			
Bio. Oxygen Demand BOD/20 day																			
Bio. Oxygen Demand BOD/60 day																			
Bio. Oxygen Demand (5-day) Carbonaceous BOD/5 day-C																			
Chem. Oxygen Demand COD																			
Total Organic Carbon TOC																			
Solids *WG (15)*																			
Total Dissolved X TDS	X	X	X	X	X	X	X	X	X										
Total Sus. Solids X SS	X	X	X	X	X	X	X	X	X										
Total Solids X TS	X	X	X	X	X	X	X	X	X										
Volatile TVS																			
Volatile Suspended TVSS																			
Settleable Solids SetSlds																			
% Total Solids % Tot																			
% Volatile Solids % V Slds																			
Grain Size Grn Siz																			
Nutrients *WG (20)*																			
Ammonia NH3																			
*Nitrate NO3																			
*Nitrite NO2																			
Nitrate + Nitrite NO3 + NO2																			
Kjeldahl Kjel-N																			
Total Phosphorous T-Phos																			
Dissolved Phosphorous D-Phos																			
*Ortho Phosphorous O-Phos																			
Dissolved Orth. Phos. D-O Phos																			

** Parameters may also be analyzed via the Ion Chromatograph workgroup methodology.*

Save samples after analysis? **NONE, SOME** or **ALL**. *(If SOME, circle sample numbers.)*

Special detection limits and comments:

Tim Ahlenen

Project Officer Signature *Date*

EPA X-94 **Project Officer Copy**