

Dredge Sugar Island

Project Name/Location:

Contract Number: W9127N-05-C-0012

Columbia River Channel Improvement - RM 95+00-104+20.

Date: 12/06/2005

Disposal Load Number 1515 Tidal Stage Ebb Dredge State: Split Hull Weather: Foggy Wind: 0-5 kts Seas: 0-1' Disposal location Columbia River RM 101	Sample Point	Depth (ft)	Time	X Coordinate	Y Coordinate	Turbidity (NTU)	DO (Mg/L)
	DSP-1	20.1	8:02:00	7622728.58	735956.31	1.1	
	DSP-2	21.0	8:05:06	7622459.90	736255.67	1.2	13.6
	DSP-3	20.0	8:06:37	7622320.54	736302.14	10.2	
	DSP-3R1	20.1	8:06:41	7622320.54	736302.14	7.6	
	DSP-4	20.7	8:08:08	7622132.14	737182.87	1.4	
	DSP-4R1	21.0	8:08:12	7622132.31	737188.94	1.4	

Remarks:	Action Taken:
DSP-2 taken in the plume.	
DSP-4 exceeded 10% over background, taken in the plume.	Re-test DSP-4R1 was taken.
DSP-3 exceeded 10% over background, taken out of plume.	Re-test DSP-3R1 was taken.
on starboard side.	The disposal ended and the dredge moved away from the area.
Plume was very hard to find. DR-2 taken directly behind the dredge trying to find the best part of the plume available.	

Sample Point Key	All Tests Conducted With YSI 6600	Turbidity Compliance	DO Compliance
DSP-1	Background - 100' Up Current, Within 600-Foot of Channel		
DSP-2	100' Down Current	OR	OR, WA
DSP-3	150' Radially from point of dredge (Port or Starboard)	WA	Not Required
DSP-4	900' Down Current from point of dredging	WA	Not Required
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point		

Dredge Sugar Island

Project Name/Location:

Contract Number: W9127N-05-C-0012

Columbia River Channel Improvement - RM 95+00-104+20.

Date: 12/06/2005

<p>Dredging</p> <p>Load Number 1516</p> <p>Tidal Stage Ebb</p> <p>Dredge State: Overflow through skimmers only</p> <p>Weather: Foggy</p> <p>Wind: 0-5 kts</p> <p>Seas: 0-1'</p> <p>Disposal location Columbia River RM 101</p>	Sample Point	Depth (ft)	Time	X Coordinate	Y Coordinate	Turbidity (NTU)	DO (Mg/L)
	DR-1	20.6	8:51:57	7622675.21	752877.01	5.7	
	DR-2	19.9	8:53:28	7622480.34	753520.84	18.6	14.0
	DR-2R1	20.7	8:53:30	7622480.51	753526.91	18.3	14.0
	DR-4	19.7	8:54:48	7622603.80	754125.32	20.7	
	DR-4R1	20.3	8:54:51	7622603.97	754131.40	20.3	
	DR-3	20.1	8:58:33	7622598.08	752556.96	6.3	
	DR-3R1	20.7	8:58:35	7622602.33	752556.84	6.3	

Remarks:	Action Taken:
DR-2 exceeded 10% over background, taken in the plume.	Re-test DR-2R1 was taken.
DR-4 exceeded 10% over background, taken in the plume.	Re-test DR-4R1 was taken.
DR-3 exceeded 10% over background, taken out of plume	Re-test DR-3R1 was taken.
on port side.	The dredge moved away from the area while continuing dredging to avoid further increasing the turbidity at the location where the exceedence was measured. The dredge coordinates were marked on the GPS screen to insure no further dredging occurred at the location where the exceedence was measured.

Sample Point Key	All Tests Conducted With YSI 6600	Turbidity Compliance	DO Compliance
DR-1	Background - 100' Up Current, Within 600-Foot of Channel	OR WA WA	OR, WA Not Required Not Required
DR-2	100' Down Current		
DR-3	300' Radially from point of dredge (Port or Starboard)		
DR-4	900' Down Current from point of dredging		
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point		

Dredge Sugar Island

Project Name/Location:

Contract Number: W9127N-05-C-0012

Columbia River Channel Improvement - RM 95+00-104+20.

Date: 12/06/2005

<p>Dredging <u>Load Number</u> 1517 <u>Tidal Stage</u> Ebb <u>Dredge State:</u> Overflow through skimmers only <u>Weather:</u> Clear <u>Wind:</u> 0-5 kts <u>Seas:</u> 0-1' <u>Disposal location</u> Columbia River RM 101</p>	Sample Point	Depth (ft)	Time	X Coordinate	Y Coordinate	Turbidity (NTU)	DO (Mg/L)
	DR-1	20.2	10:09:15	7623652.91	754630.88	1.5	
	DR-2	18.1	10:10:54	7623408.32	755172.74	10.3	13.8
	DR-2R1	18.1	10:10:57	7623408.66	755184.89	9.4	13.8
	DR-4	21.1	10:12:42	7623482.21	755833.33	2.5	
	DR-4R1	21.1	10:12:44	7623478.13	755839.53	2.5	
	DR-3	20.1	10:14:39	7623595.03	754237.33	12.2	
	DR-3R1	20.5	10:14:42	7623595.03	754237.33	11.8	

Remarks:	Action Taken:
DR-2 exceeded 10% over background, taken in the plume.	Re-test DR-2R1 was taken.
DR-4 exceeded 10% over background, taken in the plume.	Re-test DR-4R1 was taken.
DR-3 exceeded 10% over background, taken out of plume	Re-test DR-3R1 was taken.
on port side.	The dredge moved away from the area while continuing dredging to avoid further increasing the turbidity at the location where the exceedence was measured. The dredge coordinates were marked on the GPS screen to insure no further dredging occurred at the location where the exceedence was measured.

Sample Point Key	All Tests Conducted With YSI 6600	Turbidity Compliance	DO Compliance
DR-1	Background - 100' Up Current, Within 600-Foot of Channel	OR WA WA	OR, WA Not Required Not Required
DR-2	100' Down Current		
DR-3	300' Radially from point of dredge (Port or Starboard)		
DR-4	900' Down Current from point of dredging		
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point		

Dredge Sugar Island

Project Name/Location:

Contract Number: W9127N-05-C-0012

Columbia River Channel Improvement - RM 95+00-104+20.

Date: 12/06/2005

Dredging	Sample Point	Depth (ft)	Time	X Coordinate	Y Coordinate	Turbidity (NTU)	DO (Mg/L)
<u>Load Number</u>	DR-1	6.0	13:27:43	7623210.86	754965.49	6.0	
1518	DR-2	20.0	13:29:24	7623153.70	755660.16	15.8	14.1
<u>Tidal Stage</u>	DR-2R1	20.0	13:29:26	7623149.61	755666.36	15.5	14.0
Ebb	DR-4	20.8	13:31:07	7623309.98	756373.16	15.9	
<u>Dredge State:</u>	DR-4R1	20.9	13:31:10	7623314.41	756379.12	15.7	
Overflow through skimmers only	DR-3	19.5	13:32:51	7623460.92	755225.98	2.5	
<u>Weather:</u>							
Sunny							
<u>Wind:</u>							
0-5 kts							
<u>Seas:</u>							
0-1'							
<u>Disposal location</u>							
Columbia River RM 101							

Remarks:	Action Taken:
DR-2 exceeded 10% over background, taken in the plume.	Re-test DR-2R1 was taken.
DR-4 exceeded 10% over background, taken in the plume.	Re-test DR-4R1 was taken.
DR-3 taken out of plume on port side.	
	The dredge moved away from the area while continuing dredging to avoid further increasing the turbidity at the location where the exceedence was measured. The dredge coordinates were marked on the GPS screen to insure no further dredging occurred at the location where the exceedence was measured.

Sample Point Key	All Tests Conducted With YSI 6600	Turbidity Compliance	DO Compliance
DR-1	Background - 100' Up Current, Within 600-Foot of Channel	OR WA WA	OR, WA Not Required Not Required
DR-2	100' Down Current		
DR-3	300' Radially from point of dredge (Port or Starboard)		
DR-4	900' Down Current from point of dredging		
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point		

Dredge Sugar Island

Project Name/Location:

Contract Number: W9127N-05-C-0012

Columbia River Channel Improvement - RM 95+00-104+20.

Date: 12/06/2005

<p>Dredging</p> <p>Load Number 1519</p> <p>Tidal Stage Ebb</p> <p>Dredge State: Overflow through skimmers only</p> <p>Weather: Clear</p> <p>Wind: 0-5 kts</p> <p>Seas: 0-1'</p> <p>Disposal location Columbia River RM 101</p>	Sample Point	Depth (ft)	Time	X Coordinate	Y Coordinate	Turbidity (NTU)	DO (Mg/L)
	DR-1	20.4	15:02:32	7623419.39	755415.61	4.4	
	DR-2	18.2	15:04:21	7623125.27	755557.61	20.4	14.1
	DR-2R1	18.4	15:04:24	7623125.44	755563.68	19.5	14.0
	DR-4	20.3	15:05:37	7623201.21	756139.12	16.4	
	DR-4R1	20.4	15:05:39	7623201.55	756151.26	16.3	
	DR-3	18.9	15:09:01	7623231.44	754484.63	12.2	
	DR-3R1	19.3	15:09:04	7623235.69	754484.51	10.0	

Remarks:	Action Taken:
DR-2 exceeded 10% over background, taken in the plume.	Re-test DR-2R1 was taken.
DR-4 exceeded 10% over background, taken in the plume.	Re-test DR-4R1 was taken.
DR-3 exceeded 10% over background, taken out of plume on port side.	Re-test DR-3R1 was taken.
	The dredge moved away from the area while continuing dredging to avoid further increasing the turbidity at the location where the exceedence was measured. The dredge coordinates were marked on the GPS screen to insure no further dredging occurred at the location where the exceedence was measured.

Sample Point Key	All Tests Conducted With YSI 6600	Turbidity Compliance	DO Compliance
DR-1	Background - 100' Up Current, Within 600-Foot of Channel	OR WA WA	OR, WA Not Required Not Required
DR-2	100' Down Current		
DR-3	300' Radially from point of dredge (Port or Starboard)		
DR-4	900' Down Current from point of dredging		
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point		

COLUMBIA RIVER CHANNEL IMPROVEMENTS - DREDGING

DREDGE OREGON		Contract Number: W9127N-06-C-CRCI					
Project Name/Location: Columbia River Channel Improvement, RM 101+10 to 100+40 12/6/2005							
Dredge OREGON	Sample Point	Depth (ft)	Time	X-Coordinate	Y-Coordinate	Turbidity (NTU)	DO (Mg/L)
	DRP-1 (21)	20.4	7:28:19	7622700.8	735372.3	7.8	NA
	DRP-2 (22)	18.9	7:34:08	7622597.5	735862.5	4.0	11.9
	DRP-3 (23)	19.3	7:40:24	7622583.1	736114.6	3.3	NA
Tidal Stage Ebb	DRP-4 (24)	20.6	7:46:22	7622774.5	735836.4	2.7	NA
	Retest @ point of exceedance						
Weather: Overcast							
Wind: Calm							
Seas: Calm							
Disposal location Gateway (upland)	All coordinates are Oregon State Plane North 3601; Datum: NAD 83						
Remarks:	Action Taken:						
No exceedances.	None required.						
Willamette River plume observed at background station.							
Sample point numbers in parenthesis correspond with YSI 650 MDS logged data.							
Sample Point Key	All Tests Conducted With YSI 6600					Turbidity Compliance	DO Compliance
DRP-1	Background - 100' Up Current, Within 600-Foot of Channel					N/A	Not Required
DRP-2	100' Down Current of the Cutterhead					OR	OR, WA
DRP-3	300' Down Current of the Cutterhead					WA	Not Required
DRP-4	150' lateral of the cutterhead (Port or Starboard)					WA	Not Required
DRPT	Indicates additional testing at the point of exceedence						
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point						

COLUMBIA RIVER CHANNEL IMPROVEMENTS - DREDGING

DREDGE OREGON		Contract Number: W9127N-06-C-CRCI					
Project Name/Location: Columbia River Channel Improvement, RM 101+10 to 100+40							
12/6/2005							
Dredge Oregon Tidal Stage Ebb	Sample Point	Depth (ft)	Time	X-Coordinate	Y-Coordinate	Turbidity (NTU)	DO (Mg/L)
	DSPP-1 (11)	20.0	7:52:43	7623869.4	735571.8	2.6	NA
	DSPP-2 (12)	19.9	7:56:56	7623818.0	735753.1	NA	11.7
	DSPP-3 (13)	20.1	8:01:56	7623525.6	736180.1	2.7	NA
Weather: Overcast Wind: Calm Seas: Calm Disposal location Gateway (Upland)	Retest @ point of exceedance						
Remarks: No exceedances.		Action Taken: None required.					
Sample point numbers in parenthesis correspond with YSI 650 MDS logged data.							
Sample Point Key	All Tests Conducted With YSI 6600					Turbidity Compliance	DO Compliance
DSPP-1	100' up current (background) within 600' channel					N/A	N/A
DSPP-2	100' down current from the discharge					Not Required	WA
DSPP-3	600' down current, 150' lateral to the discharge					WA	Not Required
DSPPT	Indicates additional testing at the point of exceedence						
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point						

COLUMBIA RIVER CHANNEL IMPROVEMENTS - DREDGING

DREDGE OREGON		Contract Number: W9127N-06-C-CRCI					
Project Name/Location: Columbia River Channel Improvement, RM 101+10 to 100+40							
12/6/2005							
Dredge Oregon Tidal Stage Ebb Weather: Partly cloudy Wind: Calm Seas: Calm Disposal location Gateway (Upland)	Sample Point	Depth (ft)	Time	X-Coordinate	Y-Coordinate	Turbidity (NTU)	DO (Mg/L)
	DSPP-1 (11)	20.1	9:30:05	7623877.4	735573.1	2.7	NA
	DSPP-2 (12)	20.0	9:33:11	0.0	0.0	NA	11.9
	DSPP-3 (13)	20.4	9:41:06	7623482.6	736179.8	3.3	NA
		Retest @ point of exceedance					
		All coordinates are Oregon State Plane North 3601; Datum: NAD 83					
Remarks:				Action Taken:			
No exceedances.				None required			
GPS error on Sample Point DSPP-2 (12), sample was taken at correct location; Latitude: 45 39.710 N							
Sample point numbers in parenthesis correspond with YSI 650 MDS logged data.							
Sample Point Key	All Tests Conducted With YSI 6600					Turbidity Compliance	DO Compliance
DSPP-1	100' up current (background) within 600' channel					N/A	N/A
DSPP-2	100' down current from the discharge					Not Required	WA
DSPP-3	600' down current, 150' lateral to the discharge					WA	Not Required
DSPPT	Indicates additional testing at the point of exceedance						
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point						

COLUMBIA RIVER CHANNEL IMPROVEMENTS - DREDGING

DREDGE OREGON		Contract Number: W9127N-06-C-CRCI					
Project Name/Location: Columbia River Channel Improvement, RM 101+10 to 100+40							
12/6/2005							
Dredge <i>Oregon</i> Tidal Stage Ebb	Sample Point	Depth (ft)	Time	X-Coordinate	Y-Coordinate	Turbidity (NTU)	DO (Mg/L)
	DSPP-1 (11)	20.3	11:27:26	7623862.1	735583.4	2.7	NA
	DSPP-2 (12)	19.6	11:32:15	7623792.1	735734.1	NA	11.9
	DSPP-3 (13)	20.2	11:36:35	7623523.2	736168.8	3.0	NA
Weather: Partly cloudy Wind: Calm Seas: Calm Disposal location Gateway (Upland)	Retest @ point of exceedance						
	All coordinates are Oregon State Plane North 3601; Datum: NAD 83						
	Remarks: No exceedances.				Action Taken: None required.		
Sample point numbers in parenthesis correspond with YSI 650 MDS logged data.							
Sample Point Key	All Tests Conducted With YSI 6600					Turbidity Compliance	DO Compliance
DSPP-1	100' up current (background) within 600' channel					N/A	N/A
DSPP-2	100' down current from the discharge					Not Required	WA
DSPP-3	600' down current, 150' lateral to the discharge					WA	Not Required
DSPPT	Indicates additional testing at the point of exceedence						
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point						

COLUMBIA RIVER CHANNEL IMPROVEMENTS - DREDGING

DREDGE OREGON		Contract Number: W9127N-06-C-CRCI					
Project Name/Location:		Columbia River Channel Improvement, RM 101+10 to 100+40					
12/6/2005							
Dredge <i>Oregon</i> Tidal Stage Ebb	Sample Point	Depth (ft)	Time	X-Coordinate	Y-Coordinate	Turbidity (NTU)	DO (Mg/L)
	DSPP-1 (11)	19.8	13:24:51	7623846.9	735597.6	2.7	NA
	DSPP-2 (12)	20.2	13:27:30	7623800.5	735759.1	NA	11.8
	DSPP-3 (13)	20.0	13:32:09	7623517.7	736181.7	11.8	NA
	DSPP-3R ₁ (13)	19.9	13:42:59	7623529.6	736186.9	2.9	NA
Weather: Partly cloudy	Retest @ point of exceedance						
Wind: Calm	DSPP-1R ₁ (11)	19.8	13:48:44	7623854.2	735586.5	2.6	NA
Seas: Calm	DSPP-2R ₁ (12)	19.8	13:52:10	7623811.0	735776.7	NA	11.9
Disposal location Gateway (Upland)	DSPP-3R ₂ (13)	20.2	13:58:04	7623538.5	736219.8	2.8	NA
All coordinates are Oregon State Plane North 3601; Datum: NAD 83							
Remarks:				Action Taken:			
Exceedance noted at station DSPP-3 caused by operator/instrument error. Sensor was not run through clean cycle prior to sampling.				None required. DSPP-3 verified to be an erroneous reading.			
A complete retest was performed to verify this error.							
Sample point numbers in parenthesis correspond with YSI 650 MDS logged data.							
Sample Point Key	All Tests Conducted With YSI 6600					Turbidity Compliance	DO Compliance
DSPP-1	100' up current (background) within 600' channel					N/A	N/A
DSPP-2	100' down current from the discharge					Not Required	WA
DSPP-3	600' down current, 150' lateral to the discharge					WA	Not Required
DSPPT	Indicates additional testing at the point of exceedance						
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point						

COLUMBIA RIVER CHANNEL IMPROVEMENTS - DREDGING

DREDGE OREGON		Contract Number: W9127N-06-C-CRCI					
Project Name/Location: Columbia River Channel Improvement, RM 101+10 to 100+40							
12/6/2005							
Dredge Oregon Tidal Stage Ebb Weather: Overcast Wind: Calm Seas: Calm Disposal location Gateway (Upland)	Sample Point	Depth (ft)	Time	X-Coordinate	Y-Coordinate	Turbidity (NTU)	DO (Mg/L)
	DSPP-1 (11)	20.0	15:27:30	7623846.1	735569.9	2.6	NA
	DSPP-2 (12)	20.1	15:30:01	7623781.0	735758.2	NA	11.7
	DSPP-3 (13)	20.1	15:37:26	7623490.8	736189.4	2.8	NA
Retest @ point of exceedance							
All coordinates are Oregon State Plane North 3601; Datum: NAD 83							
Remarks:				Action Taken:			
No exceedances.				None required.			
Sample point numbers in parenthesis correspond with YSI 650 MDS logged data.							
Sample Point Key	All Tests Conducted With YSI 6600					Turbidity Compliance	DO Compliance
DSPP-1	100' up current (background) within 600' channel					N/A	N/A
DSPP-2	100' down current from the discharge					Not Required	WA
DSPP-3	600' down current, 150' lateral to the discharge					WA	Not Required
DSPPT	Indicates additional testing at the point of exceedence						
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point						