

COLUMBIA RIVER CHANNEL IMPROVEMENTS - DREDGING

<u>Project Name/Location:</u>		Contract Number: W9127N-06-C-CRCI					
Columbia River Channel Improvement, RM 101+10 to 100+40							
12/3/2005							
Dredge OREGON	Sample Point	Depth (ft)	Time	X-Coordinate	Y-Coordinate	Turbidity (NTU)	DO (Mg/L)
	DRP-1 (21)	20.3	7:19:30	7622843.351	734817.457	3.9	NA
	DRP-2 (22)	19.9	7:25:59	7622815.853	735223.118	4.1	11.5
Tidal Stage	DRP-3 (23)	20.2	7:30:52	7622738.028	735439.419	4.7	NA
Ebb	DRP-4 (24)	20.4	7:38:06	7622994.928	735215.177	5.2	NA
Weather: Overcast	Retest @ point of exceedance						
Wind: 0-5 kts							
Seas: Calm							
Disposal location Gateway (upland)	All coordinates are Oregon State Plane North, 3601; Datum: NAD 83						
Remarks:				Action Taken:			
No exceedances.				None required.			
Sugar Island dumping downriver during sampling event.							
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	<i>Not Required</i>
DRP-2	100' Down Current of the Cutterhead					OR	OR, WA
DRP-3	300' Down Current of the Cutterhead					WA	<i>Not Required</i>
DRP-4	150' lateral of the cutterhead (Port or Starboard)					WA	<i>Not Required</i>
DRPT	Indicates additional testing at the point of exceedance						
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point						

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<u>Project Name/Location:</u> Columbia River Channel Improvement, RM 101+10 to 100+40 12/3/2005		Contract Number: W9127N-06-C-CRCI					
<u>Dredge</u> Oregon <u>Tidal Stage</u> Ebb <u>Weather:</u> Overcast <u>Wind:</u> 0-5 kts <u>Seas:</u> Calm <u>Disposal location</u> Gateway (Upland)	Sample Point	Depth (ft)	Time	X-Coordinate	Y-Coordinate	Turbidity (NTU)	DO (Mg/L)
	DSPP-1 (11)	19.7	7:49:11	7623960.602	735968.714	3.8	NA
	DSPP-2 (12)	20.1	7:52:58	7623797.1	735774.496	NA	11.6
	DSPP-3 (13)	20.3	7:55:47	7623506.316	736186.073	4.0	NA
	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 exceedance						
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point						

COLUMBIA RIVER CHANNEL IMPROVEMENTS - DREDGING

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Dredge Oregon Tidal Stage Ebb Weather: Overcast Wind: 0-5 kts Seas: Calm Disposal location Gateway (Upland)	Sample Point	Depth (ft)	Time	X-Coordinate	Y-Coordinate	Turbidity (NTU)	DO (Mg/L)
	DSPP-1 (11)	20.2	9:18:57	7623859.61	735568.112	3.8	NA
	DSPP-2 (12)	20.4	9:21:51	7623792.797	735757.837	NA	11.6
	DSPP-3 (13)	20.3	9:29:02	7623580.133	736182.545	3.7	NA
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 exceedance						
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point						

COLUMBIA RIVER CHANNEL IMPROVEMENTS - DREDGING

Project Name/Location: Columbia River Channel Improvement, RM 101+10 to 100+40 12/3/2005		Contract Number: W9127N-06-C-CRCI					
Dredge Oregon Tidal Stage Ebb Weather: Overcast Wind: 0-5 kts 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	11:18:21	7623875.159	735566.217	3.7	NA
	DSPP-2 (12)	20.1	11:21:17	7623804.982	735772.816	NA	11.6
	DSPP-3 (13)	20.3	11:25:33	7623530.706	736225.878	3.6	NA
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 exceedance						
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point						

COLUMBIA RIVER CHANNEL IMPROVEMENTS - DREDGING

<u>Project Name/Location:</u> Columbia River Channel Improvement, RM 101+10 to 100+40 12/3/2005		Contract Number: W9127N-06-C-CRCI					
Dredge Oregon Tidal Stage Ebb Weather: Overcast Wind: 0-5 kts Seas: 0-1' Disposal location Gateway (Upland)	Sample Point	Depth (ft)	Time	X-Coordinate	Y-Coordinate	Turbidity (NTU)	DO (Mg/L)
	DSPP-1 (11)	20.0	13:17:23	7623853.538	735561.351	3.7	NA
	DSPP-2 (12)	20.2	13:20:22	7623800.311	735752.155	NA	11.7
	DSPP-3 (13)	20.2	13:23:31	7623486.362	736176.783	3.8	NA
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 exceedance						
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point						

COLUMBIA RIVER CHANNEL IMPROVEMENTS - DREDGING

<u>Project Name/Location:</u> Columbia River Channel Improvement, RM 101+10 to 100+40 12/3/2005		Contract Number: W9127N-06-C-CRCI					
<u>Dredge</u> Oregon <u>Tidal Stage</u> Ebb <u>Weather:</u> Overcast <u>Wind:</u> Calm <u>Seas:</u> Calm <u>Disposal location</u> Gateway (Upland)	Sample Point	Depth (ft)	Time	X-Coordinate	Y-Coordinate	Turbidity (NTU)	DO (Mg/L)
	DSPP-1 (11)	20.1	15:17:01	7623873.523	735571.734	3.7	NA
	DSPP-2 (12)	20.1	15:19:36	7623804.042	735739.284	NA	11.8
	DSPP-3 (13)	20.0	15:23:08	7623514.453	736202.624	4.0	NA
	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 exceedance						
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: 12/03/2005

<p>Dredging <u>Load Number</u> 1478 <u>Tidal Stage</u> Ebb <u>Dredge State:</u> Overflow through skimmers only <u>Weather:</u> Overcast <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	20.1	8:27:38	7624963.56	761135.76	2.9	
	DR-2	20.2	8:28:51	7624603.14	761340.39	33.1	13.9
	DR-2R1	20.1	8:28:54	7624603.48	761352.54	25.9	13.9
	DR-4	19.8	8:30:01	7624735.58	761762.39	26.6	
	DR-4R1	20.8	8:30:06	7624735.58	761762.39	18.6	
	DR-3	21.0	8:32:14	7624624.09	759807.76	17.7	
	DR-3R1	21.0	8:32:18	7624624.09	759807.76	13.9	

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: 12/03/2005

Disposal Load Number 1478 Tidal Stage Ebb Dredge State: Split Hull Weather: Overcast 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	9:21:49	7622856.70	735660.91	2.1	
	DSP-2	19.8	9:30:22	7622770.65	735632.92	10.3	14.4
	DSP-2R1	20.0	9:30:26	7622766.40	735633.04	9.9	14.3
	DSP-3	19.7	9:31:12	7622697.90	735470.82	6.8	
	DSP-3R1	20.0	9:31:16	7622698.07	735476.90	6.4	
	DSP-4	20.9	9:33:08	7622448.84	736772.73	24.6	
	DSP-4R1	21.0	9:33:12	7622449.01	736778.80	19.1	

Remarks:	Action Taken:
DSP-2 exceeded 10% over background, taken in the plume.	Re-test DSP-2R1 was taken.
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.

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: 12/03/2005

<p>Dredging <u>Load Number</u> 1479 <u>Tidal Stage</u> Ebb <u>Dredge State:</u> Overflow through skimmers only <u>Weather:</u> Overcast <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	10:13:40	7624799.01	761037.01	2.7	
	DR-2	19.1	10:15:03	7625015.11	761456.53	24.3	13.8
	DR-2R1	19.3	10:15:07	7625019.54	761462.49	19.5	14.0
	DR-4	19.9	10:16:17	7625094.22	762001.48	25.7	
	DR-4R1	19.9	10:16:20	7625094.56	762013.63	24.8	
	DR-3	20.3	10:18:22	7624835.61	760367.23	25.3	
	DR-3R1	20.2	10:18:26	7624844.29	760373.07	18.6	

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 starboard 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		

Dredge Sugar Island

Project Name/Location:

Contract Number: W9127N-05-C-0012

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

Date: 12/03/2005

<p>Dredging</p> <p><u>Load Number</u> 1480</p> <p><u>Tidal Stage</u> Ebb</p> <p><u>Dredge State:</u></p> <p>Overflow through skimmers only</p> <p><u>Weather:</u> Overcast</p> <p><u>Wind:</u> 0-5 kts</p> <p><u>Seas:</u> 0-1'</p> <p><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	19.8	12:05:11	7625200.52	763182.25	3.1	
	DR-2	18.5	12:07:28	7625375.88	763566.80	18.4	13.8
	DR-2R1	19.1	12:07:33	7625375.88	763566.80	14.4	14.0
	DR-4	20.4	12:09:24	7625351.94	764061.32	2.3	
	DR-3	20.9	12:11:41	7625047.76	762470.90	2.9	

Remarks:	Action Taken:
DR-2 exceeded 10% over background, taken in the plume.	Re-test DR-2R1 was taken.
DR-4 taken in the plume.	
DR-3 taken out of plume on starboard 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: 12/03/2005

Dredging	Sample Point	Depth (ft)	Time	X Coordinate	Y Coordinate	Turbidity (NTU)	DO (Mg/L)
Load Number	DR-1	20.1	14:52:18	7624928.33	761398.16	2.8	
1481	DR-2	21.1	14:53:31	7625087.93	761928.70	20.6	14.0
Tidal Stage	DR-2R1	21.1	14:53:33	7625083.68	761928.82	19.9	14.0
Ebb	DR-4	20.5	14:54:53	7625322.39	762396.34	18.1	
Dredge State:	DR-4R1	20.6	14:54:56	7625322.56	762402.42	14.0	
Overflow through skimmers only	DR-3	20.5	14:57:10	7625113.11	760963.76	2.0	
Weather:							
Light Rain							
Wind:							
0-5 kts							
Seas:							
0-1'							
Disposal location							
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 starboard 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		