

Project Name/Location:

Contract Number: W9127N-05-C-0012

**Columbia River Channel Improvement - RM 20+10 to 21+20.**

Date: 11/12/2005

<p><b>Dredging</b>  <u>Load Number</u>                  1250  <u>Tidal Stage</u>                  Flood  <u>Dredge State:</u>                  Overflow through skimmers only    <u>Weather:</u>                  Clear  <u>Wind:</u>                  10-15 kts  <u>Seas:</u>                  0-1'    <u>Disposal location</u>                  Columbia River RM 17.5 &amp; 18.8</p>	Sample Point	Depth (ft)	Time	X Coordinate	Y Coordinate	Turbidity (NTU)	DO (Mg/L)
	DR-1	20.6	7:24:03	7387044.14	952819.55	4.1	
	DR-2	18.3	7:26:13	7387702.01	952908.90	10.7	12.3
	DR-2R1	18.8	7:26:16	7387702.01	952908.90	9.6	12.3
	DR-4	20.8	7:28:02	7388169.29	953194.44	5.5	
	DR-4R1	20.8	7:28:05	7388169.53	953200.52	5.5	
	DR-3	20.1	7:29:43	7387104.84	952859.71	3.7	

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		

Project Name/Location:

Contract Number: W9127N-05-C-0012

**Columbia River Channel Improvement - RM 20+10 to 21+20.**

Date: 11/12/2005

Disposal Load Number 1250 Tidal Stage Flood Dredge State: Split Hull Weather: Clear Wind: 10-15 kts Seas: 0-1' Disposal location Columbia River RM 17.5 & 18.8	Sample Point	Depth (ft)	Time	X Coordinate	Y Coordinate	Turbidity (NTU)	DO (Mg/L)
	DSP-1	20.3	8:26:43	7380149.14	947851.91	4.8	
	DSP-2	21.0	8:33:13	7377711.16	947080.19	19.9	12.1
	DSP-2R1	20.8	8:33:17	7377715.38	947080.02	15.7	12.7
	DSP-3	19.8	8:34:25	7377117.07	946903.41	7.7	
	DSP-3R1	19.5	8:34:32	7377117.07	946903.41	7.6	
	DSP-4	19.8	8:35:39	7377846.61	946983.48	19.7	
	DSP-4R1	20.7	8:35:44	7377855.29	946989.21	15.7	

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 port 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	OR WA WA	OR, WA Not Required Not Required
DSP-2	100' Down Current		
DSP-3	150' Radially from point of dredge (Port or Starboard)		
DSP-4	900' Down Current from point of dredging		
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point		

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**Columbia River Channel Improvement - RM 20+10 to 21+20.**

Date: 11/12/2005

<b>Dredging</b> <u>Load Number</u> 1251 <u>Tidal Stage</u> Flood <u>Dredge State:</u> Overflow through skimmers only  <u>Weather:</u> Cloudy <u>Wind:</u> 10-15 kts <u>Seas:</u> 1-2'  <u>Disposal location</u> Columbia River RM 17.5 & 18.8	Sample Point	Depth (ft)	Time	X Coordinate	Y Coordinate	Turbidity (NTU)	DO (Mg/L)
	DR-1	20.2	9:14:22	7388324.47	952957.10	4.2	
	DR-2	19.7	9:16:24	7388803.24	952895.45	5.7	12.5
	DR-2R1	19.6	9:16:28	7388807.46	952895.28	5.7	12.6
	DR-4	20.2	9:18:08	7389317.73	953306.89	8.0	
	DR-4R1	20.4	9:18:11	7389321.94	953306.72	8.4	
	DR-3	20.2	9:20:21	7388191.82	953230.05	17.8	
	DR-3R1	20.4	9:20:25	7388196.27	953235.95	13.7	
<b>Remarks:</b>				<b>Action Taken:</b>			
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						

Project Name/Location:

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**Columbia River Channel Improvement - RM 20+10 to 21+20.**

Date: 11/12/2005

<b>Dredging</b> <u>Load Number</u> 1252 <u>Tidal Stage</u> Slack <u>Dredge State:</u> Overflow through skimmers only  <u>Weather:</u> Cloudy <u>Wind:</u> 10-15 kts <u>Seas:</u> 1-3'  <u>Disposal location</u> Columbia River RM 17.5 & 18.8	Sample Point	Depth (ft)	Time	X Coordinate	Y Coordinate	Turbidity (NTU)	DO (Mg/L)
	DR-1	21.1	11:02:14	7388473.44	953729.83	3.6	
	DR-2	20.0	11:03:37	7388090.04	953112.44	6.5	12.6
	DR-2R1	19.9	11:03:41	7388089.80	953106.36	6.6	12.5
	DR-4	19.7	11:06:28	7387797.48	952966.06	17.6	
	DR-4R1	19.5	11:06:34	7387797.48	952966.06	12.3	
	DR-3	20.8	11:09:38	7389112.55	954197.13	17.6	
	DR-3R1	21.0	11:09:42	7389108.57	954203.38	14.0	
<b>Remarks:</b>				<b>Action Taken:</b>			
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.			
Dredge digging with Starboard Draghead only for DR-2 and DR-4. Began digging with both dragheads for DR-3.							
<b>Sample Point Key</b>		<b>All Tests Conducted With YSI 6600</b>				<b>Turbidity Compliance</b>	<b>DO Compliance</b>
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					

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**Columbia River Channel Improvement - RM 20+10 to 21+20.**

Date: 11/12/2005

Disposal Load Number	Sample Point	Depth (ft)	Time	X Coordinate	Y Coordinate	Turbidity (NTU)	DO (Mg/L)
1252	DSP-1	20.3	12:00:18	7378436.37	947367.29	4.0	
<u>Tidal Stage</u> Ebb	DSP-2	20.4	12:08:09	7374969.88	945810.02	6.2	12.5
<u>Dredge State:</u> Split Hull	DSP-2R1	20.1	12:08:13	7374965.66	945810.20	6.3	12.7
<u>Weather:</u> Cloudy	DSP-3	19.5	12:09:15	7375039.40	946275.63	7.5	
<u>Wind:</u> 5-10 kts	DSP-3R1	19.4	12:09:19	7375026.75	946276.14	7.2	
<u>Seas:</u> 1-2'	DSP-4	20.0	12:11:01	7374379.66	945730.50	17.8	
<u>Disposal location</u> Columbia River RM 17.5 & 18.8	DSP-4R1	19.6	12:11:07	7374379.66	945730.50	13.4	

**Remarks:**

DSP-2 exceeded 10% over background, taken in the plume.

DSP-4 exceeded 10% over background, taken in the plume.

DSP-3 exceeded 10% over background, taken out of plume

on port side.

**Action Taken:**

Re-test DSP-2R1 was taken.

Re-test DSP-4R1 was taken.

Re-test DSP-3R1 was taken.

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		

Project Name/Location:

Contract Number: W9127N-05-C-0012

**Columbia River Channel Improvement - RM 20+10 to 21+20.**

Date: 11/12/2005

<p><b>Dredging</b>  <u>Load Number</u>                      1253  <u>Tidal Stage</u>                      Ebb  <u>Dredge State:</u>                      Overflow through skimmers only    <u>Weather:</u>                      Clear  <u>Wind:</u>                      5-10 kts  <u>Seas:</u>                      0-1'    <u>Disposal location</u>                      Columbia River RM 17.5 &amp; 18.8</p>	Sample Point	Depth (ft)	Time	X Coordinate	Y Coordinate	Turbidity (NTU)	DO (Mg/L)
	DR-1	20.8	12:48:01	7388168.32	953170.15	4.6	
	DR-2	19.8	12:50:50	7387351.28	952582.22	27.2	12.5
	DR-2R1	21.0	12:50:55	7387342.60	952576.48	19.6	12.5
	DR-3	20.2	12:49:38	7387414.59	953005.53	16.8	
	DR-3R1	20.3	12:49:42	7387405.92	952999.79	13.1	
	DR-4	21.3	12:52:19	7386436.90	952095.54	18.2	
	DR-4R1	21.2	12:52:22	7386428.23	952089.80	15.4	

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		

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**Columbia River Channel Improvement - RM 20+10 to 21+20.**

Date: 11/12/2005

<b>Dredging</b> <u>Load Number</u> 1254 <u>Tidal Stage</u> Ebb <u>Dredge State:</u> Overflow through skimmers only  <u>Weather:</u> Overcast <u>Wind:</u> 5-10 kts <u>Seas:</u> 1-2'  <u>Disposal location</u> Columbia River RM 17.5 & 18.8	Sample Point	Depth (ft)	Time	X Coordinate	Y Coordinate	Turbidity (NTU)	DO (Mg/L)
	DR-1	20.6	14:47:31	7387420.80	952208.36	6.5	
	DR-2	18.9	14:48:52	7386712.99	951926.35	20.1	12.4
	DR-2R1	19.2	14:48:55	7386695.65	951914.88	18.3	12.4
	DR-4	19.4	14:50:07	7386050.90	951520.87	9.9	
	DR-4R1	19.9	14:50:09	7386038.01	951515.30	10.3	
	DR-3	18.8	14:51:46	7387201.53	951791.28	19.0	
	DR-3R1	18.1	14:51:50	7387201.77	951797.35	15.3	

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 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.
Testing was delayed approxiamately 10 minutes in order to allow dredge to begin digging before testing began.	

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		

Project Name/Location:

Contract Number: W9127N-05-C-0012

**Columbia River Channel Improvement - RM 20+10 to 21+20.**

Date: 11/12/2005

Dredging Load Number 1255 Tidal Stage Ebb Dredge State: Overflow through skimmers only Weather: Overcast Wind: 5-10 kts Seas: 1-2' Disposal location Columbia River RM 17.5 & 18.8	Sample Point	Depth (ft)	Time	X Coordinate	Y Coordinate	Turbidity (NTU)	DO (Mg/L)
	DR-1	20.9	16:17:05	7387802.68	952892.72	6.7	
	DR-3	19.2	16:18:35	7387067.05	952970.72	20.1	
	DR-3R1	19.3	16:18:40	7387054.41	952971.23	15.5	
	DR-2	19.1	16:20:05	7387195.52	952381.60	17.9	12.4
	DR-2R1	19.3	16:20:09	7387190.82	952369.62	18.3	12.3
	DR-4	20.4	16:21:53	7386042.68	951843.61	12.4	
	DR-4R1	20.3	16:21:56	7386029.79	951838.04	11.4	

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		