

**B&L Woodwaste Site
Pierce County, Washington**

Engineering Design Report (EDR)

Attachment C2 Phase 1 Hydrogeologic Study Report Discharge Calculation Worksheets

FINAL

B&L Trust RIM

Stream: Hylebos Station: #210 Staff gage: 0.98 Piezo: _____ Date/Time: 10/3/2008 1040

Total Distance: 10.7 Flow: 5.85875 Flow Crew: TG/EM

Station	Depth	Velocity			Angle	Flow Calculations			Notes	Angle	Cosine
		0.2	0.6	0.8		Area	Avg Vel	Flow			
2	2.15		0.13			1.075	0.130	0.14	LWE	0	1.000
3	2.45		0.32			2.45	0.320	0.784		15	0.966
4	2.6		0.43			2.6	0.430	1.118		30	0.866
5	2.5		0.44			2.5	0.440	1.1		45	0.707
6	2.4		0.38			2.4	0.380	0.912		60	0.500
7	2.25		0.39			2.25	0.390	0.878		75	0.259
8	2.3		0.23			2.3	0.230	0.529		90	0.000
9	2.3		0.11			2.3	0.110	0.253		105	-0.259
10	2.45		0.03			2.45	0.030	0.074	Behind Vegetation	120	-0.500
11	2.4		0.03			2.4	0.030	0.072	Behind Vegetation	135	-0.707
12	1.3		0			1.105	0.000	0		150	-0.866
12.7	0.7		0			0.245	0.000	0	RWE	165	-0.966
12.7						0	0.000	0		180	-1.000
						0	0.000	0			
						0	0.000	0			
						0	0.000	0			
						0	0.000	0			
						0	0.000	0			
						0	0.000	0			
						0	0.000	0			
						0	0.000	0			
						0	0.000	0			
						0	0.000	0			
						0	0.000	0			
						0	0.000	0			
						0	0.000	0			
						0	0.000	0			
						0	0.000	0	RWE (9/26)		

Calc. Flow: 5.859 Computed by: _____

Notes: _____

B&L Trust RIM

Stream: Ag ditch b/l LF & Pumpkins

Station: #215 Staff gage: 0.9

Piezo: 4.22

Date/Time: 2/25/2009

Total Distance: 8.5

Flow: 0.19 Flow Crew: TG/LM

Station	Depth	Velocity			Angle	Flow Calculations			Notes
		0.2	0.6	0.8		Area	Avg Vel	Flow	
7	0		0			0	0.000	0	LWE at 7.04
8	0.4		0.02			0.4	0.020	0.008	Reading on top of sed at 0.9
9	0.6		0.02			0.6	0.020	0.012	Reading on top of sed at 0.7
10	1.6		0.07			1.6	0.070	0.112	Reading on top of sed at 3.1
11	1.5		0.01			1.5	0.010	0.015	Reading on top of veg at 2.8
12	0.65		0.02			0.65	0.020	0.013	Reading on top of veg at 1.4
13	0.9		0.03			0.9	0.030	0.027	Reading on top of veg at 0.4
14	0.3		0.01			0.3	0.010	0.003	Reading on top of veg
15	0		0			0	0.000	0	
15.5			0			0	0.000	0	RWE, on top of veg
						0	0.000	0	
						0	0.000	0	
						0	0.000	0	
						0	0.000	0	LBHP = 0
						0	0.000	0	RBHP = 17
						0	0.000	0	
						0	0.000	0	
						0	0.000	0	
						0	0.000	0	
						0	0.000	0	
						0	0.000	0	
						0	0.000	0	
						0	0.000	0	
						0	0.000	0	
						0	0.000	0	
						0	0.000	0	
						0	0.000	0	
						0	0.000	0	
						0	0.000	0	
						0	0.000	0	
						0	0.000	0	RWE (9/26)

Angle	Cosine
0	1.000
15	0.966
30	0.866
45	0.707
60	0.500
75	0.259
90	0.000
105	-0.259
120	-0.500
135	-0.707
150	-0.866
165	-0.966
180	-1.000

Calc. Flow: 0.19 Computed by: _____

Notes: _____

