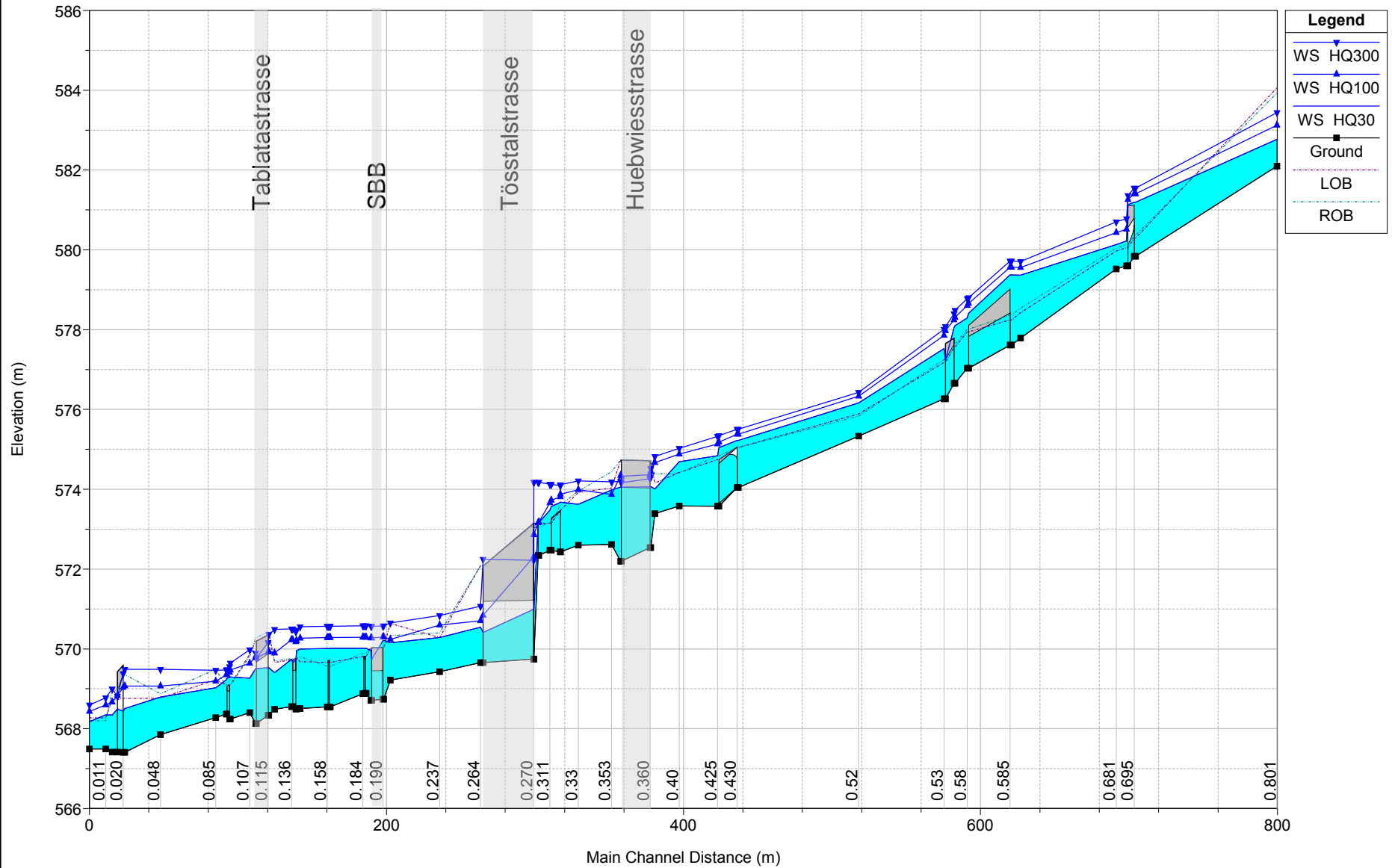


Staukurvenberechnung Huebbach 17.05.2016



HEC-RAS Plan: Plan 43 River: Huebbach Reach: Wila

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Wila	0.801	HQ30	3.50	582.10	582.77	582.77	583.02	0.018569	2.23	1.57	3.13	1.00
Wila	0.801	HQ100	7.50	582.10	583.12	583.12	583.49	0.017397	2.69	2.79	3.85	1.01
Wila	0.801	HQ300	12.50	582.10	583.44	583.44	583.91	0.016622	3.02	4.14	4.52	1.01
Wila	0.7	HQ30	3.50	579.84	581.19	580.45	581.20	0.000295	0.53	9.20	16.44	0.15
Wila	0.7	HQ100	7.50	579.84	581.40	580.76	581.43	0.000586	0.83	13.07	20.31	0.22
Wila	0.7	HQ300	12.50	579.84	581.55	581.01	581.59	0.000964	1.14	16.19	22.88	0.29
Wila	0.695		Culvert									
Wila	0.69	HQ30	3.50	579.60	580.22	580.21	580.43	0.010155	2.04	1.81	4.90	0.90
Wila	0.69	HQ100	7.50	579.60	580.51	580.51	580.79	0.008264	2.46	3.74	8.41	0.87
Wila	0.69	HQ300	12.50	579.60	580.78	580.78	581.06	0.006454	2.63	6.64	13.29	0.81
Wila	0.681	HQ30	3.50	579.52	580.13	580.13	580.35	0.011079	2.09	1.75	4.75	0.93
Wila	0.681	HQ100	7.50	579.52	580.43	580.43	580.71	0.008268	2.46	3.74	8.41	0.87
Wila	0.681	HQ300	12.50	579.52	580.70	580.70	580.98	0.006466	2.63	6.64	13.29	0.81
Wila	0.616	HQ30	3.50	577.79	579.37		579.38	0.000690	0.72	6.68	12.06	0.19
Wila	0.616	HQ100	7.50	577.79	579.56		579.60	0.001539	1.17	9.34	16.49	0.29
Wila	0.616	HQ300	12.50	577.79	579.71		579.78	0.002451	1.56	12.13	21.23	0.37
Wila	0.59	HQ30	3.50	577.61	579.37	578.54	579.38	0.000348	0.55	9.17	16.16	0.14
Wila	0.59	HQ100	7.50	577.61	579.56	578.88	579.59	0.000767	0.88	12.93	22.39	0.21
Wila	0.59	HQ300	12.50	577.61	579.72	579.12	579.76	0.001180	1.16	16.76	27.33	0.26
Wila	0.585		Culvert									
Wila	0.58	HQ30	3.50	577.03	578.29	578.29	578.49	0.015272	2.13	1.97	5.15	0.63
Wila	0.58	HQ100	7.50	577.03	578.60	578.60	578.79	0.013420	2.33	4.46	12.78	0.61
Wila	0.58	HQ300	12.50	577.03	578.78	578.78	578.96	0.011918	2.37	7.24	17.46	0.59
Wila	0.572	HQ30	3.50	576.65	578.10	577.91	578.18	0.005656	1.43	3.15	8.05	0.39
Wila	0.572	HQ100	7.50	576.65	578.31	578.22	578.42	0.008039	1.87	5.64	15.70	0.48
Wila	0.572	HQ300	12.50	576.65	578.48	578.40	578.60	0.007027	1.88	8.67	17.61	0.45
Wila	0.54		Bridge									
Wila	0.53	HQ30	3.50	576.27	577.53	577.53	577.73	0.015270	2.13	1.97	5.14	0.63
Wila	0.53	HQ100	7.50	576.27	577.86	577.86	578.03	0.012039	2.23	4.69	13.39	0.58
Wila	0.53	HQ300	12.50	576.27	578.01	578.01	578.20	0.012145	2.39	7.19	17.45	0.59
Wila	0.52	HQ30	3.50	575.33	576.17	576.17	576.30	0.009359	1.82	2.56	9.20	0.72
Wila	0.52	HQ100	7.50	575.33	576.33	576.33	576.44	0.007835	1.93	6.22	23.21	0.68
Wila	0.52	HQ300	12.50	575.33	576.43	576.43	576.58	0.009357	2.28	8.59	25.40	0.76
Wila	0.44	HQ30	3.50	574.04	575.23	574.90	575.23	0.000491	0.38	9.49	22.39	0.17
Wila	0.44	HQ100	7.50	574.04	575.38	575.00	575.39	0.000840	0.59	13.62	29.09	0.24
Wila	0.44	HQ300	12.50	574.04	575.51	575.10	575.53	0.001145	0.78	17.43	29.94	0.29
Wila	0.430		Culvert									
Wila	0.425	HQ30	3.50	573.57	574.84	574.68	575.04	0.014609	1.97	1.78	2.78	0.76
Wila	0.425	HQ100	7.50	573.57	575.13	575.13	575.29	0.008952	1.96	4.58	13.42	0.63
Wila	0.425	HQ300	12.50	573.57	575.32	575.26	575.48	0.006383	1.86	7.40	18.48	0.55
Wila	0.40	HQ30	3.50	573.58	574.69	574.69	574.83	0.004470	1.82	2.50	9.24	0.60
Wila	0.40	HQ100	7.50	573.58	574.88	574.88	575.07	0.005351	2.26	4.36	9.70	0.68
Wila	0.40	HQ300	12.50	573.58	575.02	575.02	575.30	0.006820	2.76	5.74	9.93	0.78
Wila	0.383	HQ30	3.50	573.39	574.01	574.01	574.30	0.011678	2.40	1.46	2.50	1.01
Wila	0.383	HQ100	7.50	573.39	574.67	574.67	574.84	0.003426	1.98	5.05	15.93	0.57
Wila	0.383	HQ300	12.50	573.39	574.82	574.82	575.02	0.003870	2.28	7.61	16.40	0.62
Wila	0.379	HQ30	3.50	572.54	574.07	573.22	574.10	0.000577	0.81	4.31	3.31	0.23
Wila	0.379	HQ100	7.50	572.54	574.45	573.55	574.54	0.001326	1.34	5.59	3.42	0.33
Wila	0.379	HQ300	12.50	572.54	574.52	573.89	574.75	0.003288	2.14	5.84	3.44	0.52
Wila	0.360		Bridge									
Wila	0.359	HQ30	3.50	572.20	574.06		574.08	0.000356	0.68	5.16	3.26	0.17
Wila	0.359	HQ100	7.50	572.20	574.35		574.43	0.001042	1.22	6.13	3.34	0.29
Wila	0.359	HQ300	12.50	572.20	574.20		574.45	0.003621	2.22	5.62	3.30	0.54
Wila	0.353	HQ30	3.50	572.61	573.98	573.43	574.07	0.002113	1.31	2.67	2.45	0.40
Wila	0.353	HQ100	7.50	572.61	573.87	573.87	574.37	0.013002	3.14	2.39	2.40	1.00
Wila	0.353	HQ300	12.50	572.61	574.18	574.18	574.41	0.006156	2.42	6.38	11.76	0.69
Wila	0.33	HQ30	3.50	572.60	573.62	573.50	573.95	0.012791	2.52	1.39	1.44	0.82
Wila	0.33	HQ100	7.50	572.60	573.99	573.92	574.02	0.000568	0.58	9.28	6.67	0.16
Wila	0.33	HQ300	12.50	572.60	574.18	573.92	574.25	0.001074	0.87	10.71	9.32	0.23
Wila	0.318	HQ30	3.50	572.43	573.68	573.68	573.79	0.005527	1.67	2.75	11.20	0.51

HEC-RAS Plan: Plan 43 River: Huebbach Reach: Wila (Continued)

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Wila	0.318	HQ100	7.50	572.43	573.87	573.82	574.00	0.005232	1.81	4.96	11.20	0.51
Wila	0.318	HQ300	12.50	572.43	574.04	573.95	574.22	0.005347	1.99	6.86	11.20	0.53
Wila	0.314		Bridge									
Wila	0.311	HQ30	3.50	572.47	573.48	573.48	573.61	0.005162	1.84	2.60	9.88	0.60
Wila	0.311	HQ100	7.50	572.47	573.66	573.66	573.82	0.005716	2.18	4.63	11.50	0.65
Wila	0.311	HQ300	12.50	572.47	574.05		574.15	0.002073	1.59	9.10	11.50	0.41
Wila	0.304	HQ30	3.50	572.34	573.17	573.16	573.18	0.000177	0.29	8.76	22.07	0.10
Wila	0.304	HQ100	7.50	572.34	573.18	573.16	573.22	0.000766	0.60	9.07	22.07	0.21
Wila	0.304	HQ300	12.50	572.34	574.11	573.16	574.12	0.000096	0.35	29.51	22.07	0.08
Wila	0.302		Bridge									
Wila	0.30	HQ30	3.50	569.75	570.99	570.59	571.18	0.006377	1.91	1.83	1.49	0.55
Wila	0.30	HQ100	7.50	569.75	572.87	571.13	573.01	0.003157	1.61	4.66	1.53	0.29
Wila	0.30	HQ300	12.50	569.75	574.11	571.69	574.12	0.000134	0.40	29.48	25.00	0.06
Wila	0.270		Bridge									
Wila	0.264	HQ30	4.00	569.66	570.54		570.69	0.005887	1.70	2.35	3.55	0.67
Wila	0.264	HQ100	8.00	569.66	570.71	570.71	571.07	0.012865	2.68	2.98	4.12	1.01
Wila	0.264	HQ300	13.00	569.66	571.11	571.11	571.30	0.005433	2.11	7.58	18.64	0.69
Wila	0.237	HQ30	4.00	569.43	570.29	570.21	570.48	0.009427	1.96	2.04	3.70	0.84
Wila	0.237	HQ100	8.00	569.43	570.60	570.44	570.63	0.000706	0.70	11.17	19.93	0.25
Wila	0.237	HQ300	13.00	569.43	570.84	570.44	570.87	0.000666	0.80	15.88	19.93	0.25
Wila	0.202	HQ30	4.00	569.22	570.16		570.26	0.004110	1.40	2.86	4.90	0.58
Wila	0.202	HQ100	8.00	569.22	570.23	570.23	570.54	0.011912	2.45	3.27	5.39	1.00
Wila	0.202	HQ300	13.00	569.22	570.65	570.65	570.81	0.004297	1.91	8.62	35.31	0.64
Wila	0.2	HQ30	4.00	568.74	570.21	569.56	570.22	0.000506	0.57	9.73	35.00	0.20
Wila	0.2	HQ100	8.00	568.74	570.30	570.14	570.33	0.000910	0.82	12.95	35.00	0.27
Wila	0.2	HQ300	13.00	568.74	570.58	570.22	570.60	0.000430	0.67	22.58	35.00	0.19
Wila	0.190		Bridge									
Wila	0.188	HQ30	4.00	568.71	569.96		570.04	0.003475	1.25	3.20	4.74	0.48
Wila	0.188	HQ100	8.00	568.71	570.27		570.30	0.001093	0.88	12.16	35.00	0.29
Wila	0.188	HQ300	13.00	568.71	570.57		570.59	0.000437	0.67	22.50	35.00	0.19
Wila	0.185	HQ30	4.00	568.89	570.02	569.64	570.02	0.000006	0.06	41.96	46.34	0.02
Wila	0.185	HQ100	8.00	568.89	570.29	569.81	570.29	0.000011	0.10	54.69	46.34	0.03
Wila	0.185	HQ300	13.00	568.89	570.58	569.81	570.58	0.000015	0.14	68.06	46.34	0.04
Wila	0.1845		Bridge									
Wila	0.184	HQ30	4.00	568.88	570.02	569.63	570.02	0.000006	0.06	42.42	46.34	0.02
Wila	0.184	HQ100	8.00	568.88	570.29	569.80	570.29	0.000011	0.10	55.15	46.34	0.03
Wila	0.184	HQ300	13.00	568.88	570.58	569.80	570.58	0.000014	0.14	68.51	46.34	0.04
Wila	0.162	HQ30	4.00	568.55	570.01	569.42	570.02	0.000113	0.31	14.34	22.78	0.09
Wila	0.162	HQ100	8.00	568.55	570.28	569.72	570.29	0.000143	0.40	20.51	22.78	0.11
Wila	0.162	HQ300	13.00	568.55	570.57	569.74	570.58	0.000155	0.47	27.00	22.78	0.11
Wila	0.160		Bridge									
Wila	0.158	HQ30	4.00	568.55	570.01	569.42	570.02	0.000114	0.31	14.31	22.78	0.09
Wila	0.158	HQ100	8.00	568.55	570.28	569.72	570.29	0.000144	0.40	20.48	22.78	0.11
Wila	0.158	HQ300	13.00	568.55	570.57	569.74	570.58	0.000156	0.47	26.96	22.78	0.11
Wila	0.14	HQ30	4.00	568.51	570.00	569.39	570.01	0.000529	0.60	8.30	21.68	0.21
Wila	0.14	HQ100	8.00	568.51	570.27	569.87	570.29	0.000410	0.63	14.51	23.12	0.19
Wila	0.14	HQ300	13.00	568.51	570.56	569.98	570.57	0.000330	0.66	21.11	23.12	0.18
Wila	0.139	HQ30	4.00	568.49	569.96	569.33	570.01	0.001818	1.06	4.44	10.00	0.33
Wila	0.139	HQ100	8.00	568.49	570.21	569.96	570.28	0.002046	1.30	6.95	10.00	0.36
Wila	0.139	HQ300	13.00	568.49	570.47	570.11	570.57	0.002013	1.45	9.58	10.00	0.37
Wila	0.137		Bridge									
Wila	0.136	HQ30	4.00	568.55	569.74	569.33	569.89	0.006006	1.69	2.52	12.53	0.56
Wila	0.136	HQ100	8.00	568.55	570.23		570.25	0.000554	0.68	13.38	22.50	0.18
Wila	0.136	HQ300	13.00	568.55	570.50		570.52	0.000433	0.68	19.53	22.50	0.17
Wila	0.124	HQ30	4.00	568.49	569.40	569.40	569.75	0.016916	2.63	1.52	2.16	1.00
Wila	0.124	HQ100	8.00	568.49	569.90	569.90	570.20	0.010085	2.49	3.43	6.37	0.82
Wila	0.124	HQ300	13.00	568.49	570.49	570.06	570.52	0.000661	0.88	17.84	27.43	0.23
Wila	0.120	HQ30	4.00	568.34	569.53	568.92	569.58	0.001466	1.02	3.90	3.72	0.32
Wila	0.120	HQ100	8.00	568.34	569.94	569.24	570.05	0.002417	1.42	5.63	4.85	0.42

HEC-RAS Plan: Plan 43 River: Huebbach Reach: Wila (Continued)

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Wila	0.120	HQ300	13.00	568.34	570.36	569.56	570.50	0.002626	1.64	7.98	11.04	0.46
Wila	0.115		Bridge									
Wila	0.111	HQ30	4.00	568.13	569.51	569.57	569.57	0.001713	1.10	3.63	3.20	0.33
Wila	0.111	HQ100	8.00	568.13	569.81	569.96	569.96	0.003689	1.72	4.64	3.66	0.49
Wila	0.111	HQ300	13.00	568.13	569.89	570.24	570.24	0.008281	2.62	4.96	3.87	0.74
Wila	0.107	HQ30	4.00	568.40	569.27	569.27	569.53	0.013375	2.28	1.75	3.34	1.01
Wila	0.107	HQ100	8.00	568.40	569.64	569.64	569.92	0.012339	2.36	3.39	6.03	1.00
Wila	0.107	HQ300	13.00	568.40	569.98	569.98	570.17	0.005950	2.00	7.42	19.54	0.74
Wila	0.095	HQ30	4.00	568.24	569.29	569.24	569.36	0.003408	1.30	3.87	12.60	0.50
Wila	0.095	HQ100	8.00	568.24	569.47	569.36	569.56	0.003567	1.54	6.05	12.60	0.53
Wila	0.095	HQ300	13.00	568.24	569.64	569.48	569.77	0.003563	1.74	8.24	12.60	0.54
Wila	0.093		Bridge									
Wila	0.092	HQ30	4.00	568.37	569.23	569.23	569.33	0.005880	1.62	3.19	13.00	0.64
Wila	0.092	HQ100	8.00	568.37	569.35	569.35	569.51	0.007547	2.05	4.78	13.00	0.74
Wila	0.092	HQ300	13.00	568.37	569.47	569.47	569.70	0.008419	2.38	6.35	13.00	0.80
Wila	0.085	HQ30	4.00	568.28	569.03	569.03	569.16	0.015138	1.57	2.54	10.09	1.00
Wila	0.085	HQ100	8.00	568.28	569.19	569.19	569.36	0.013878	1.82	4.40	13.15	1.00
Wila	0.085	HQ300	13.00	568.28	569.47	569.32	569.56	0.003844	1.39	9.67	18.54	0.58
Wila	0.048	HQ30	4.00	567.85	568.79	568.66	568.82	0.001382	0.79	5.66	15.17	0.33
Wila	0.048	HQ100	8.00	567.85	569.07	568.78	569.10	0.000863	0.79	10.71	23.59	0.28
Wila	0.048	HQ300	13.00	567.85	569.49	568.84	569.51	0.000322	0.64	21.35	25.51	0.18
Wila	0.024	HQ30	4.00	567.41	568.51	568.43	568.73	0.010459	2.08	1.93	3.25	0.86
Wila	0.024	HQ100	8.00	567.41	569.07	568.76	569.08	0.000401	0.50	14.59	22.00	0.18
Wila	0.024	HQ300	13.00	567.41	569.49	568.76	569.50	0.000212	0.47	24.18	25.63	0.14
Wila	0.020		Bridge									
Wila	0.015	HQ30	4.00	567.42	568.34	568.34	568.59	0.014235	2.21	1.81	3.62	1.00
Wila	0.015	HQ100	8.00	567.42	568.66	568.66	568.98	0.012812	2.49	3.22	5.14	1.00
Wila	0.015	HQ300	13.00	567.42	568.99	568.99	569.21	0.006542	2.20	6.78	14.46	0.76
Wila	0.011	HQ30	4.00	567.49	568.35	568.13	568.43	0.003176	1.31	3.41	10.47	0.52
Wila	0.011	HQ100	8.00	567.49	568.59	568.43	568.70	0.002833	1.54	5.97	10.47	0.52
Wila	0.011	HQ300	13.00	567.49	568.78	568.59	568.93	0.003224	1.86	7.91	10.47	0.57
Wila	0	HQ30	4.00	567.49	568.17	568.13	568.36	0.009802	1.93	2.08	4.26	0.88
Wila	0	HQ100	8.00	567.49	568.43	568.43	568.64	0.007052	2.13	4.32	10.47	0.80
Wila	0	HQ300	13.00	567.49	568.59	568.59	568.86	0.007405	2.49	5.99	10.47	0.84