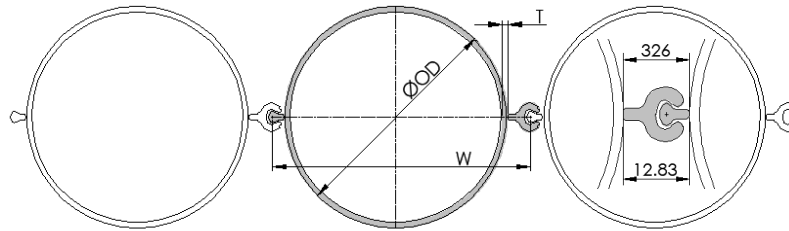




Data Sheet

**Predictable, Quantifiable
Retaining Wall Systems for All
Soil Types**



O-Pile 50 - 936

KEY: (50 = Section Modulus in cm³/m)
(936 = System Width in mm)

O-Pile® systems are available for immediate shipment, these are examples from an endless variety of possible O-Pile®, please configure your own system on O-Pile.com.

* The average weight (per square unit of wall) is usually the most relevant calculation for comparing piling solution costs of the acceptable bending moment, assuming equal or greater minimum thickness of the sheet pile section.

SECTION	UNIT OF WALL						BENDING MOMENT/MEL									
	Diameter OD	Thickness Wall T	System Width W	Section Modulus	Interlock Strength	Moment of Inertia	Weight- Connector Ratio *			50	60	65	X70	X80	Mariner® Steel ASTM A690	
							50%	75%	100%							
in.	in.	in.	in ² /ft	k/ft	in ⁴ /ft	lbs/ft ²	lbs/ft ²	lbs/ft ²	k-ft/ft	k-ft/ft	k-ft/ft	k-ft/ft	k-ft/ft	k-ft/ft		
O-Pile 22-834	20	0.38	32.8	40.7	233.9	406.9	34.32	36.92	39.52	169.6	203.5	220.4	236.1	273	169.6	
O-Pile 23-834	20	0.39	32.8	42.6	233.9	426	35.07	37.67	40.27	177.5	213	230.8	247.2	285.8	177.5	
O-Pile 26-834	20	0.44	32.8	47	233.9	470.3	38.82	41.42	44.02	196	235.2	254.7	272.8	315.5	196	
O-Pile 28-834	20	0.47	32.8	50.5	233.9	505.2	41.05	43.65	46.25	210.5	252.6	273.6	293.1	338.9	210.5	
O-Pile 29-936	24	0.38	36.8	52.7	233.9	632.8	35.89	38.21	40.52	219.7	263.7	285.6	305.9	353.7	219.7	
O-Pile 29-834	20	0.5	32.8	53.2	233.9	532.4	43.28	45.88	48.48	221.8	266.2	288.4	308.9	357.2	221.8	
O-Pile 30-936	24	0.39	36.8	55.2	233.9	662.8	36.70	39.01	41.33	230.1	276.1	299.2	320.4	370.5	230.1	
O-Pile 32-834	20	0.56	32.8	59.3	233.9	593.4	47.72	50.32	52.92	247.2	296.7	321.4	344.2	398	247.2	
O-Pile 33-936	24	0.44	36.8	61	233.9	732.4	40.73	43.05	45.37	254.3	305.2	330.6	354.1	409.4	254.3	
O-Pile 36-1037	28	0.38	40.8	65.2	233.9	912.5	37.15	39.24	41.33	271.6	325.9	353	378.1	437.2	271.6	
O-Pile 36-834	20	0.62	32.8	65.3	233.9	653.1	52.13	54.73	57.33	272.1	326.5	353.8	378.9	438.1	272.1	
O-Pile 36-936	24	0.47	36.8	65.6	233.9	787.5	43.14	45.46	47.78	273.4	328.1	355.5	380.7	440.2	273.4	
O-Pile 37-1037	28	0.39	40.8	68.3	233.9	956.1	38.00	40.09	42.18	284.5	341.5	369.9	396.2	458.1	284.5	
O-Pile 38-936	24	0.5	36.8	69.2	233.9	830.5	45.55	47.87	50.18	288.4	346.1	374.9	401.5	464.3	288.4	
O-Pile 39-1088	30	0.38	42.8	71.5	233.9	1072.8	37.69	39.68	41.67	298	357.6	387.4	414.9	479.8	298	
O-Pile 41-1088	30	0.39	42.8	74.9	233.9	1124.2	38.56	40.56	42.55	312.3	374.7	406	434.8	502.7	312.3	
O-Pile 41-1037	28	0.44	40.8	75.5	233.9	1057.4	42.27	44.36	46.45	314.7	377.7	409.1	438.2	506.7	314.7	
O-Pile 42-834	20	0.75	32.8	76.9	233.9	769	61.59	64.19	66.79	320.4	384.5	416.5	446.1	515.8	320.4	
O-Pile 42-936	24	0.56	36.8	77.3	233.9	927	50.34	52.66	54.98	321.9	386.3	418.4	448.2	518.2	321.9	
O-Pile 42-1139	32	0.38	44.8	77.9	233.9	1246.8	38.18	40.08	41.99	324.7	389.6	422.1	452.1	522.7	324.7	
O-Pile 44-1037	28	0.47	40.8	81.3	233.9	1137.6	44.82	46.91	49.00	338.6	406.3	440.1	471.4	545.1	338.6	
O-Pile 44-1139	32	0.39	44.8	81.7	233.9	1306.7	39.07	40.98	42.88	340.3	408.3	442.4	473.8	547.8	340.3	
O-Pile 45-1088	30	0.44	42.8	82.9	233.9	1243.8	42.93	44.92	46.92	345.5	414.6	449.1	481.1	556.2	345.5	
O-Pile 46-1190	34	0.38	46.8	84.4	233.9	1434.7	38.63	40.45	42.28	351.6	422	457.1	489.6	566.1	351.6	
O-Pile 46-936	24	0.62	36.8	85.2	233.9	1022	55.11	57.43	59.74	354.8	425.8	461.3	494.1	571.3	354.8	
O-Pile 47-1037	28	0.5	40.8	85.7	233.9	1200.4	47.37	49.46	51.55	357.3	428.7	464.4	497.4	575.2	357.3	

O-Pile 48-1190	34	0.39	46.8	88.5	233.9	1503.7	39.54	41.36	43.19	368.6	442.3	479.1	513.2	593.3	368.6
O-Pile 48-885	22	0.75	34.8	88.6	233.9	974.8	63.58	66.03	68.48	369.2	443.1	480	514.1	594.4	369.2
O-Pile 48-1088	30	0.47	42.8	89.2	233.9	1338.4	45.54	47.54	49.53	371.8	446.1	483.3	517.7	598.5	371.8
O-Pile 49-1139	32	0.44	44.8	90.4	233.9	1446.1	43.53	45.44	47.34	376.6	451.9	489.6	524.4	606.3	376.6
O-Pile 49-1240	36	0.38	48.8	90.9	233.9	1636.3	39.04	40.79	42.54	378.8	454.5	492.4	527.4	609.8	378.8
O-Pile 50-936	24	0.69	36.8	92.9	233.9	1115.3	60.64	62.96	65.27	387.3	464.7	503.4	539.2	623.5	387.3
O-Pile 51-1088	30	0.5	42.8	94.2	233.9	1412.6	48.15	50.14	52.14	392.4	470.9	510.1	546.3	631.7	392.4
O-Pile 52-1240	36	0.39	48.8	95.3	233.9	1715.2	39.97	41.72	43.47	397	476.4	516.1	552.8	639.2	397
O-Pile 52-1037	28	0.56	40.8	95.8	233.9	1341.4	52.44	54.53	56.63	399.2	479.1	519	555.9	642.7	399.2
O-Pile 53-1139	32	0.47	44.8	97.3	233.9	1556.5	46.20	48.10	50.01	405.3	486.4	526.9	564.4	652.6	405.3
O-Pile 53-1291	38	0.38	50.8	97.5	233.9	1851.8	39.43	41.11	42.79	406.1	487.3	527.9	565.4	653.8	406.1
O-Pile 53-1190	34	0.44	46.8	97.9	233.9	1664.5	44.08	45.91	47.73	408	489.6	530.4	568	656.8	408
O-Pile 55-936	24	0.75	36.8	100.6	233.9	1207.2	65.35	67.67	69.99	419.2	503	544.9	583.6	674.8	419.2
O-Pile 55-1291	38	0.39	50.8	102.2	233.9	1941.2	40.37	42.04	43.72	425.7	510.8	553.4	592.7	685.4	425.7
O-Pile 56-1139	32	0.5	44.8	102.7	233.9	1643	48.86	50.77	52.67	427.9	513.4	556.2	595.7	688.8	427.9
O-Pile 56-1342	40	0.38	52.8	104.1	233.9	2081.1	39.78	41.39	43.01	433.6	520.3	563.6	603.7	698	433.6
O-Pile 57-1088	30	0.56	42.8	105.3	233.9	1579.2	53.35	55.34	57.34	438.7	526.4	570.3	610.8	706.2	438.7
O-Pile 57-1190	34	0.47	46.8	105.4	233.9	1791.9	46.80	48.62	50.45	439.2	527	570.9	611.5	707.1	439.2
O-Pile 57-1240	36	0.44	48.8	105.5	233.9	1899	44.59	46.34	48.08	439.6	527.5	571.5	612.1	707.7	439.6
O-Pile 57-1037	28	0.62	40.8	105.7	233.9	1480.4	57.50	59.59	61.68	440.6	528.7	572.8	613.5	709.3	440.6
O-Pile 59-936	24	0.81	36.8	108.1	233.9	1297.5	70.04	72.36	74.67	450.5	540.6	585.7	627.3	725.3	450.5
O-Pile 59-1342	40	0.39	52.8	109.1	233.9	2181.8	40.73	42.35	43.96	454.6	545.5	590.9	632.9	731.8	454.6
O-Pile 60-1393	42	0.38	54.8	110.7	233.9	2324.4	40.11	41.66	43.22	461.2	553.4	599.6	642.2	742.5	461.2
O-Pile 60-1190	34	0.5	46.8	111.3	233.9	1891.8	49.51	51.34	53.16	463.7	556.4	602.8	645.6	746.5	463.7
O-Pile 61-1291	38	0.44	50.8	113.1	233.9	2149.7	45.05	46.73	48.41	471.4	565.7	612.9	656.4	759	471.4
O-Pile 62-1240	36	0.47	48.8	113.6	233.9	2044.7	47.35	49.10	50.85	473.3	568	615.3	659	762	473.3
O-Pile 62-1139	32	0.56	44.8	114.8	233.9	1837.5	54.17	56.08	57.98	478.5	574.2	622.1	666.3	770.4	478.5
O-Pile 63-936	24	0.88	36.8	115.5	233.9	1386.3	75.48	77.79	80.11	481.4	577.6	625.8	670.2	774.9	481.4
O-Pile 63-1037	28	0.69	40.8	115.5	233.9	1617.5	63.37	65.46	67.55	481.4	577.7	625.8	670.3	775	481.4
O-Pile 63-1393	42	0.39	54.8	116.1	233.9	2437.1	41.07	42.63	44.18	483.5	580.3	628.6	673.3	778.5	483.5
O-Pile 63-1088	30	0.62	42.8	116.2	233.9	1743.6	58.53	60.52	62.51	484.3	581.2	629.6	674.4	779.8	484.3
O-Pile 64-1444	44	0.38	56.8	117.3	233.9	2581.6	40.41	41.91	43.41	488.9	586.7	635.6	680.8	787.2	488.9
O-Pile 65-948	24.5	0.88	37.3	119	233.9	1458.3	75.98	78.26	80.55	496	595.2	644.8	690.6	798.6	496
O-Pile 65-1240	36	0.5	48.8	119.9	233.9	2159	50.11	51.86	53.61	499.8	599.7	649.7	695.9	804.6	499.8
O-Pile 65-1342	40	0.44	52.8	120.8	233.9	2416.6	45.48	47.10	48.72	503.5	604.1	654.5	701	810.5	503.5
O-Pile 66-1291	38	0.47	50.8	121.8	233.9	2315	47.86	49.54	51.22	507.7	609.2	660	706.9	817.3	507.7
O-Pile 67-936	24	0.94	36.8	122.8	233.9	1473.6	80.11	82.43	84.75	511.7	614	665.2	712.4	823.8	511.7
O-Pile 67-1444	44	0.39	56.8	123	233.9	2706.9	41.38	42.89	44.39	512.7	615.2	666.5	713.8	825.4	512.7
O-Pile 67-1190	34	0.56	46.8	124.5	233.9	2116.5	54.93	56.75	58.57	518.8	622.5	674.4	722.3	835.1	518.8
O-Pile 68-1037	28	0.75	40.8	125.2	233.9	1752.7	68.37	70.46	72.55	521.6	626	678.1	726.3	839.8	521.6
O-Pile 69-1139	32	0.62	44.8	126.9	233.9	2029.7	59.46	61.37	63.27	528.6	634.3	687.1	736	851	528.6

O-Pile 69-1088	30	0.69	42.8	127.1	233.9	1906	64.54	66.53	68.53	529.4	635.3	688.3	737.2	852.4	529.4
O-Pile 70-1393	42	0.44	54.8	128.6	233.9	2699.7	45.88	47.44	49.00	535.7	642.8	696.4	745.8	862.4	535.7
O-Pile 70-1291	38	0.5	50.8	128.7	233.9	2444.7	50.66	52.34	54.02	536.1	643.3	696.9	746.5	863.1	536.1
O-Pile 70-936	24	1	36.8	130	233.9	1559.5	84.72	87.04	89.35	541.5	649.8	703.9	754	871.8	541.5
O-Pile 70-1342	40	0.47	52.8	130.1	233.9	2602.7	48.33	49.95	51.56	542.2	650.7	704.9	755	873	542.2
O-Pile 71-1545	48	0.38	60.8	130.8	233.9	3138	40.96	42.36	43.76	544.8	653.7	708.2	758.5	877.1	544.8
O-Pile 73-1240	36	0.56	48.8	134.2	233.9	2416.2	55.62	57.37	59.12	559.3	671.2	727.1	778.8	900.4	559.3
O-Pile 73-1037	28	0.81	40.8	134.7	233.9	1886	73.35	75.44	77.54	561.3	673.6	729.7	781.5	903.6	561.3
O-Pile 74-1444	44	0.44	56.8	136.3	233.9	2999.1	46.26	47.76	49.26	568	681.6	738.4	790.9	914.4	568
O-Pile 74-1545	48	0.39	60.8	137.1	233.9	3290.6	41.95	43.36	44.76	571.3	685.5	742.7	795.4	919.7	571.3
O-Pile 74-1342	40	0.5	52.8	137.4	233.9	2748.9	51.17	52.79	54.41	572.7	687.2	744.5	797.4	922	572.7
O-Pile 74-1596	50	0.38	62.8	137.5	233.9	3437.2	41.20	42.56	43.92	572.9	687.4	744.7	797.6	922.3	572.9
O-Pile 74-1190	34	0.62	46.8	137.6	233.9	2338.7	60.32	62.14	63.97	573.2	687.8	745.2	798.1	922.8	573.2
O-Pile 75-1088	30	0.75	42.8	137.7	233.9	2066.2	69.67	71.66	73.66	573.9	688.7	746.1	799.1	924	573.9
O-Pile 75-1393	42	0.47	54.8	138.5	233.9	2908	48.77	50.32	51.88	577	692.4	750.1	803.4	928.9	577
O-Pile 75-1139	32	0.69	44.8	138.7	233.9	2219.5	65.61	67.51	69.42	578	693.6	751.4	804.8	930.5	578
O-Pile 78-1291	38	0.56	50.8	144	233.9	2736.7	56.26	57.94	59.62	600.1	720.2	780.2	835.6	966.2	600.1
O-Pile 78-1037	28	0.88	40.8	144.1	233.9	2017.3	79.14	81.23	83.32	600.4	720.5	780.5	836	966.6	600.4
O-Pile 78-1596	50	0.39	62.8	144.2	233.9	3604.5	42.21	43.57	44.93	600.8	720.9	781	836.5	967.2	600.8
O-Pile 78-1647	52	0.38	64.8	144.2	233.9	3750.3	41.44	42.75	44.07	601	721.2	781.3	836.8	967.6	601
O-Pile 79-1393	42	0.5	54.8	146.3	233.9	3071.6	51.65	53.20	54.76	609.4	731.3	792.3	848.6	981.2	609.4
O-Pile 79-1444	44	0.47	56.8	146.9	233.9	3230.9	49.17	50.67	52.18	611.9	734.3	795.5	852	985.1	611.9
O-Pile 80-1088	30	0.81	42.8	148.3	233.9	2224.3	74.78	76.77	78.77	617.9	741.4	803.2	860.3	994.7	617.9
O-Pile 80-1240	36	0.62	48.8	148.4	233.9	2670.7	61.11	62.85	64.60	618.2	741.8	803.7	860.8	995.3	618.2
O-Pile 81-1139	32	0.75	44.8	150.4	233.9	2407.1	70.85	72.76	74.66	626.8	752.2	814.9	872.8	1009.2	626.8
O-Pile 81-1190	34	0.69	46.8	150.5	233.9	2558.3	66.59	68.41	70.23	627	752.4	815.1	873.1	1009.5	627
O-Pile 82-1698	54	0.38	66.8	151	233.9	4077.5	41.65	42.93	44.21	629.2	755.1	818	876.1	1013	629.2
O-Pile 82-1647	52	0.39	64.8	151.3	233.9	3933.1	42.45	43.77	45.08	630.3	756.4	819.4	877.6	1014.7	630.3
O-Pile 82-1545	48	0.44	60.8	151.9	233.9	3646.7	46.92	48.33	49.73	633.1	759.7	823	881.5	1019.2	633.1
O-Pile 83-1037	28	0.94	40.8	153.3	233.9	2146.9	84.07	86.16	88.25	639	766.7	830.6	889.7	1028.7	639
O-Pile 83-1342	40	0.56	52.8	153.9	233.9	3077.9	56.85	58.46	60.08	641.2	769.5	833.6	892.8	1032.3	641.2
O-Pile 84-1444	44	0.5	56.8	155.1	233.9	3412.9	52.09	53.59	55.09	646.4	775.7	840.3	900	1040.6	646.4
O-Pile 85-1748	56	0.38	68.8	157.8	233.9	4418.7	41.86	43.10	44.34	657.5	789.1	854.8	915.5	1058.6	657.5
O-Pile 86-1698	54	0.39	66.8	158.4	233.9	4276.4	42.68	43.95	45.23	659.9	791.9	857.9	918.9	1062.4	659.9
O-Pile 86-1088	30	0.88	42.8	158.7	233.9	2380.4	80.71	82.71	84.70	661.2	793.5	859.6	920.6	1064.5	661.2
O-Pile 86-1291	38	0.62	50.8	159.2	233.9	3025.7	61.83	63.51	65.19	663.5	796.2	862.6	923.9	1068.2	663.5
O-Pile 86-1596	50	0.44	62.8	159.8	233.9	3995	47.23	48.59	49.94	665.8	799	865.6	927.1	1071.9	665.8
O-Pile 88-1139	32	0.81	44.8	162	233.9	2592.3	76.08	77.98	79.89	675.1	810.1	877.6	940	1086.8	675.1
O-Pile 88-1240	36	0.69	48.8	162.4	233.9	2922.4	67.48	69.23	70.98	676.5	811.8	879.4	941.9	1089.1	676.5
O-Pile 88-1037	28	1	40.8	162.5	233.9	2274.6	88.98	91.07	93.16	677	812.3	880	942.6	1089.8	677
O-Pile 88-1190	34	0.75	46.8	163.3	233.9	2775.4	71.94	73.76	75.58	680.3	816.3	884.3	947.2	1095.2	680.3

O-Pile 89-1545	48	0.47	60.8	163.7	233.9	3929.3	49.90	51.31	52.71	682.2	818.6	886.8	949.8	1098.2	682.2
O-Pile 89-1393	42	0.56	54.8	163.8	233.9	3440.1	57.39	58.95	60.51	682.6	819.1	887.3	950.4	1098.9	682.6
O-Pile 89-1748	56	0.39	68.8	165.5	233.9	4634.4	42.89	44.13	45.37	689.6	827.6	896.5	960.2	1110.3	689.6
O-Pile 91-1647	52	0.44	64.8	167.7	233.9	4359.6	47.51	48.83	50.14	698.7	838.4	908.2	972.8	1124.8	698.7
O-Pile 91-1088	30	0.94	42.8	169	233.9	2534.4	85.78	87.77	89.76	704	844.8	915.2	980.2	1133.4	704
O-Pile 92-1342	40	0.62	52.8	170.2	233.9	3403.9	62.50	64.12	65.73	709.1	851	921.9	987.4	1141.7	709.1
O-Pile 93-1850	60	0.38	72.8	171.4	233.9	5143.3	42.24	43.41	44.58	714.3	857.2	928.6	994.6	1150	714.3
O-Pile 93-1596	50	0.47	62.8	172.2	233.9	4305	50.23	51.59	52.95	717.5	861	932.7	999	1155.1	717.5
O-Pile 93-1545	48	0.5	60.8	173	233.9	4151.3	52.88	54.28	55.68	720.7	864.9	936.9	1003.5	1160.3	720.7
O-Pile 94-1139	32	0.88	44.8	173.5	233.9	2775.3	82.15	84.05	85.96	722.7	867.3	939.5	1006.3	1163.5	722.7
O-Pile 94-1444	44	0.56	56.8	173.8	233.9	3823.1	57.90	59.40	60.90	724.1	868.9	941.3	1008.2	1165.7	724.1
O-Pile 94-1291	38	0.69	50.8	174.3	233.9	3311.8	68.31	69.99	71.67	726.3	871.5	944.2	1011.2	1169.2	726.3
O-Pile 95-1698	54	0.44	66.8	175.6	233.9	4740.6	47.78	49.06	50.33	731.6	877.9	951	1018.6	1177.8	731.6
O-Pile 95-1190	34	0.81	46.8	175.9	233.9	2990.1	77.27	79.09	80.91	732.9	879.4	952.7	1020.4	1179.8	732.9
O-Pile 95-1240	36	0.75	48.8	176.2	233.9	3171.4	72.93	74.68	76.43	734.1	880.9	954.3	1022.2	1181.9	734.1
O-Pile 96-1901	62	0.38	74.8	178.3	233.9	5526.6	42.41	43.55	44.69	742.8	891.4	965.7	1034.3	1195.9	742.8
O-Pile 97-1088	30	1	42.8	179.1	233.9	2686.3	90.82	92.81	94.80	746.2	895.4	970.1	1039	1201.3	746.2
O-Pile 97-1850	60	0.39	72.8	179.8	233.9	5394.7	43.28	44.45	45.63	749.3	899.1	974	1043.2	1206.3	749.3
O-Pile 98-1647	52	0.47	64.8	180.7	233.9	4698.3	50.54	51.86	53.18	752.9	903.5	978.8	1048.3	1212.2	752.9
O-Pile 98-1393	42	0.62	54.8	181.2	233.9	3805.2	63.12	64.68	66.23	755	906	981.5	1051.2	1215.5	755
O-Pile 98-1596	50	0.5	62.8	181.9	233.9	4548.5	53.24	54.59	55.95	758.1	909.7	985.5	1055.5	1220.5	758.1
O-Pile 99-1748	56	0.44	68.8	183.5	233.9	5137.9	48.03	49.27	50.51	764.6	917.5	993.9	1064.6	1230.9	764.6
O-Pile 100-1139	32	0.94	44.8	184.7	233.9	2956	87.33	89.23	91.14	769.8	923.7	1000.7	1071.8	1239.3	769.8
O-Pile 101-1342	40	0.69	52.8	186.3	233.9	3726.7	69.07	70.69	72.31	776.4	931.7	1009.3	1081	1249.9	776.4
O-Pile 101-1901	62	0.39	74.8	187	233.9	5796.9	43.46	44.60	45.74	779.2	935	1012.9	1084.9	1254.4	779.2
O-Pile 102-1190	34	0.88	46.8	188.4	233.9	3202.2	83.46	85.28	87.10	784.9	941.8	1020.3	1092.8	1263.6	784.9
O-Pile 102-1291	38	0.75	50.8	189.2	233.9	3595	73.84	75.52	77.20	788.4	946	1024.9	1097.7	1269.2	788.4
O-Pile 102-1698	54	0.47	66.8	189.2	233.9	5109.2	50.83	52.11	53.39	788.5	946.1	1025	1097.8	1269.4	788.5
O-Pile 103-1240	36	0.81	48.8	189.9	233.9	3417.7	78.36	80.10	81.85	791.1	949.4	1028.5	1101.5	1273.7	791.1
O-Pile 103-1647	52	0.5	64.8	190.9	233.9	4964.4	53.57	54.89	56.20	795.6	954.7	1034.2	1107.7	1280.8	795.6
O-Pile 104-1202	34.5	0.88	47.3	192.1	233.9	3314	83.77	85.57	87.38	800.5	960.6	1040.6	1114.6	1288.7	800.5
O-Pile 104-1444	44	0.62	56.8	192.3	233.9	4229.8	63.70	65.20	66.70	801.1	961.3	1041.4	1115.4	1289.7	801.1
O-Pile 105-1545	48	0.56	60.8	193.8	233.9	4652	58.81	60.22	61.62	807.6	969.2	1049.9	1124.5	1300.2	807.6
O-Pile 106-1139	32	1	44.8	195.9	233.9	3134.5	92.49	94.39	96.29	816.3	979.5	1061.1	1136.5	1314.1	816.3
O-Pile 107-1748	56	0.47	68.8	197.8	233.9	5537.8	51.11	52.35	53.59	824.1	988.9	1071.3	1147.4	1326.7	824.1
O-Pile 107-1393	42	0.69	54.8	198.4	233.9	4167	69.78	71.34	72.90	826.8	992.1	1074.8	1151.2	1331.1	826.8
O-Pile 108-1850	60	0.44	72.8	199.4	233.9	5981.7	48.49	49.66	50.84	830.8	996.9	1080	1156.8	1337.5	830.8
O-Pile 108-1698	54	0.5	66.8	200	233.9	5399	53.89	55.16	56.44	833.2	999.8	1083.1	1160.1	1341.3	833.2
O-Pile 108-1190	34	0.94	46.8	200.7	233.9	3411.9	88.75	90.57	92.39	836.3	1003.5	1087.1	1164.4	1346.3	836.3
O-Pile 109-1342	40	0.75	52.8	202.3	233.9	4046.3	74.69	76.31	77.92	843	1011.6	1095.9	1173.7	1357.1	843
O-Pile 110-1240	36	0.88	48.8	203.4	233.9	3661.3	84.66	86.41	88.16	847.5	1017	1101.8	1180.1	1364.5	847.5

O-Pile 110-1596	50	0.56	62.8	203.9	233.9	5097.9	59.23	60.59	61.95	849.6	1019.6	1104.5	1183	1367.9	849.6
O-Pile 110-1291	38	0.81	50.8	204	233.9	3875.3	79.36	81.04	82.72	849.8	1019.8	1104.8	1183.3	1368.2	849.8
O-Pile 112-1901	62	0.44	74.8	207.4	233.9	6428.2	48.70	49.84	50.98	864	1036.8	1123.2	1203	1391	864
O-Pile 113-1748	56	0.5	68.8	209	233.9	5852.2	54.18	55.42	56.67	870.9	1045	1132.1	1212.6	1402	870.9
O-Pile 114-1444	44	0.69	56.8	210.6	233.9	4632.9	70.44	71.94	73.44	877.4	1052.9	1140.7	1221.7	1412.6	877.4
O-Pile 115-2155	72	0.38	84.8	212.6	233.9	7654.3	43.16	44.16	45.17	885.9	1063.1	1151.7	1233.5	1426.2	885.9
O-Pile 115-1190	34	1	46.8	212.9	233.9	3619.2	94.01	95.84	97.66	887.1	1064.5	1153.2	1235.1	1428.1	887.1
O-Pile 116-1647	52	0.56	64.8	214	233.9	5564.8	59.62	60.93	62.25	891.8	1070.2	1159.3	1241.7	1435.7	891.8
O-Pile 116-1545	48	0.62	60.8	214.5	233.9	5148.6	64.74	66.14	67.54	893.9	1072.6	1162	1244.6	1439	893.9
O-Pile 116-1850	60	0.47	72.8	214.9	233.9	6448.1	51.61	52.78	53.96	895.6	1074.7	1164.2	1247	1441.8	895.6
O-Pile 116-1393	42	0.75	54.8	215.5	233.9	4525.5	75.47	77.03	78.59	897.9	1077.5	1167.3	1250.2	1445.6	897.9
O-Pile 117-1240	36	0.94	48.8	216.8	233.9	3902.3	90.05	91.80	93.55	903.3	1084	1174.3	1257.7	1454.3	903.3
O-Pile 118-1342	40	0.81	52.8	218.1	233.9	4362.9	80.29	81.90	83.52	908.9	1090.7	1181.6	1265.6	1463.3	908.9
O-Pile 118-1291	38	0.88	50.8	218.6	233.9	4152.7	85.77	87.45	89.13	910.7	1092.8	1183.9	1268	1466.1	910.7
O-Pile 120-2155	72	0.39	84.8	223	233.9	8029.7	44.23	45.24	46.25	929.4	1115.2	1208.2	1294	1496.2	929.4
O-Pile 121-1901	62	0.47	74.8	223.5	233.9	6929.8	51.84	52.98	54.13	931.4	1117.7	1210.9	1296.9	1499.5	931.4
O-Pile 121-1698	54	0.56	66.8	224.2	233.9	6052.7	59.98	61.26	62.54	934.1	1120.9	1214.3	1300.5	1503.8	934.1
O-Pile 122-1596	50	0.62	62.8	225.7	233.9	5643	65.21	66.57	67.93	940.5	1128.6	1222.7	1309.5	1514.1	940.5
O-Pile 123-1850	60	0.5	72.8	227.2	233.9	6814.8	54.73	55.90	57.07	946.5	1135.8	1230.5	1317.9	1523.8	946.5
O-Pile 123-1444	44	0.75	56.8	228.7	233.9	5032.4	76.20	77.70	79.21	953.1	1143.7	1239	1327.1	1534.4	953.1
O-Pile 124-1240	36	1	48.8	230	233.9	4140.7	95.42	97.16	98.91	958.5	1150.2	1246	1334.6	1543.1	958.5
O-Pile 125-1393	42	0.81	54.8	232.4	233.9	4880.6	81.15	82.71	84.26	968.4	1162	1258.9	1348.3	1559	968.4
O-Pile 126-1291	38	0.94	50.8	233	233.9	4427.3	91.25	92.93	94.61	970.9	1165.1	1262.2	1351.8	1563.1	970.9
O-Pile 126-1342	40	0.88	52.8	233.8	233.9	4676.4	86.80	88.41	90.03	974.2	1169.1	1266.5	1356.5	1568.5	974.2
O-Pile 126-1748	56	0.56	68.8	234.3	233.9	6561.6	60.33	61.57	62.81	976.4	1171.7	1269.4	1359.5	1572	976.4
O-Pile 127-1545	48	0.69	60.8	235.1	233.9	5641.3	71.63	73.03	74.43	979.4	1175.3	1273.2	1363.7	1576.7	979.4
O-Pile 128-1901	62	0.5	74.8	236.3	233.9	7324.2	54.98	56.12	57.26	984.4	1181.3	1279.8	1370.7	1584.9	984.4
O-Pile 128-1647	52	0.62	64.8	237	233.9	6160.7	65.65	66.97	68.28	987.3	1184.8	1283.5	1374.7	1589.5	987.3
O-Pile 133-1444	44	0.81	56.8	246.7	233.9	5428.5	81.95	83.45	84.95	1028.1	1233.7	1336.6	1431.5	1655.2	1028.1
O-Pile 133-1291	38	1	50.8	247.3	233.9	4699	96.71	98.39	100.07	1030.5	1236.6	1339.6	1434.8	1659	1030.5
O-Pile 133-1596	50	0.69	62.8	247.4	233.9	6184	72.16	73.52	74.88	1030.7	1236.8	1339.9	1435.1	1659.3	1030.7
O-Pile 134-2155	72	0.44	84.8	247.4	233.9	8906.7	49.61	50.62	51.63	1030.9	1237	1340.1	1435.3	1659.6	1030.9
O-Pile 134-1698	54	0.62	66.8	248.2	233.9	6701.8	66.06	67.34	68.62	1034.2	1241.1	1344.5	1440	1665	1034.2
O-Pile 134-1393	42	0.88	54.8	249.2	233.9	5232.5	87.75	89.31	90.86	1038.2	1245.8	1349.6	1445.5	1671.4	1038.2
O-Pile 135-1342	40	0.94	52.8	249.3	233.9	4986.8	92.36	93.97	95.59	1038.9	1246.7	1350.6	1446.6	1672.6	1038.9
O-Pile 137-2460	84	0.38	96.8	254.1	233.9	10672.3	43.85	44.73	45.61	1058.8	1270.5	1376.4	1474.2	1704.5	1058.8
O-Pile 137-1850	60	0.56	72.8	254.8	233.9	7642.7	60.96	62.13	63.30	1061.5	1273.8	1379.9	1478	1708.9	1061.5
O-Pile 138-1545	48	0.75	60.8	255.4	233.9	6130.1	77.52	78.92	80.32	1064.2	1277.1	1383.5	1481.8	1713.4	1064.2
O-Pile 140-1748	56	0.62	68.8	259.5	233.9	7266.3	66.45	67.70	68.94	1081.3	1297.5	1405.7	1505.5	1740.8	1081.3
O-Pile 140-1647	52	0.69	64.8	259.7	233.9	6752.3	72.67	73.98	75.30	1082.1	1298.5	1406.7	1506.7	1742.1	1082.1
O-Pile 143-1444	44	0.88	56.8	264.6	233.9	5821	88.63	90.13	91.64	1102.5	1323	1433.2	1535	1774.9	1102.5

O-Pile 143-1342	40	1	52.8	264.7	233.9	5294.2	97.90	99.52	101.13	1103	1323.6	1433.8	1535.7	1775.7	1103
O-Pile 143-1901	62	0.56	74.8	265	233.9	8214.8	61.25	62.39	63.53	1104.1	1325	1435.4	1537.4	1777.6	1104.1
O-Pile 143-1393	42	0.94	54.8	265.8	233.9	5581.1	93.39	94.94	96.50	1107.4	1328.8	1439.6	1541.8	1782.8	1107.4
O-Pile 144-2460	84	0.39	96.8	266.6	233.9	11197	44.95	45.83	46.71	1110.8	1333	1444.1	1546.7	1788.3	1110.8
O-Pile 144-2155	72	0.47	84.8	266.8	233.9	9604.1	52.84	53.84	54.85	1111.6	1333.9	1445.1	1547.7	1789.6	1111.6
O-Pile 145-1596	50	0.75	62.8	268.8	233.9	6720.8	78.11	79.47	80.83	1120.1	1344.2	1456.2	1559.6	1803.3	1120.1
O-Pile 147-1698	54	0.69	66.8	272.1	233.9	7346.4	73.14	74.42	75.70	1133.7	1360.4	1473.8	1578.5	1825.2	1133.7
O-Pile 149-1545	48	0.81	60.8	275.6	233.9	6614.9	83.39	84.79	86.20	1148.4	1378.1	1492.9	1599	1848.9	1148.4
O-Pile 152-2155	72	0.5	84.8	282	233.9	10152.6	56.06	57.07	58.07	1175.1	1410.1	1527.6	1636.1	1891.8	1175.1
O-Pile 152-1850	60	0.62	72.8	282.2	233.9	8465.3	67.17	68.34	69.52	1175.7	1410.9	1528.5	1637	1892.8	1175.7
O-Pile 152-1393	42	1	54.8	282.2	233.9	5926.5	99.01	100.57	102.12	1175.9	1411.1	1528.7	1637.3	1893.1	1175.9
O-Pile 152-1444	44	0.94	56.8	282.3	233.9	6210.2	94.34	95.85	97.35	1176.2	1411.4	1529	1637.7	1893.5	1176.2
O-Pile 152-1647	52	0.75	64.8	282.3	233.9	7339.6	78.67	79.99	81.30	1176.2	1411.5	1529.1	1637.7	1893.6	1176.2
O-Pile 153-1748	56	0.69	68.8	284.5	233.9	7966	73.59	74.83	76.07	1185.4	1422.5	1541.1	1650.5	1908.4	1185.4
O-Pile 156-1596	50	0.81	62.8	290.1	233.9	7253.5	84.04	85.40	86.76	1208.9	1450.7	1571.6	1683.3	1946.3	1208.9
O-Pile 158-1901	62	0.62	74.8	293.5	233.9	9099.9	67.50	68.64	69.78	1223.1	1467.7	1590	1703	1969.1	1223.1
O-Pile 159-1545	48	0.88	60.8	295.7	233.9	7095.8	90.23	91.63	93.03	1231.9	1478.3	1601.5	1715.3	1983.3	1231.9
O-Pile 160-1698	54	0.75	66.8	295.8	233.9	7986.3	79.19	80.47	81.75	1232.5	1478.9	1602.2	1716	1984.1	1232.5
O-Pile 160-2460	84	0.44	96.8	295.8	233.9	12423.2	50.46	51.34	52.22	1232.5	1479	1602.2	1716	1984.2	1232.5
O-Pile 162-1444	44	1	56.8	299.8	233.9	6595.8	100.04	101.54	103.04	1249.2	1499	1624	1739.3	2011.1	1249.2
O-Pile 164-1647	52	0.81	64.8	304.7	233.9	7922.4	84.66	85.97	87.29	1269.6	1523.5	1650.5	1767.8	2044	1269.6
O-Pile 167-1748	56	0.75	68.8	309.3	233.9	8661.1	79.69	80.93	82.17	1288.9	1546.6	1675.5	1794.6	2075	1288.9
O-Pile 167-1850	60	0.69	72.8	309.4	233.9	9282.7	74.41	75.58	76.75	1289.3	1547.1	1676	1795.1	2075.6	1289.3
O-Pile 168-1596	50	0.88	62.8	311.3	233.9	7782.1	90.95	92.30	93.66	1297	1556.4	1686.1	1805.9	2088.1	1297
O-Pile 170-1545	48	0.94	60.8	315.5	233.9	7572.8	96.07	97.47	98.87	1314.7	1577.7	1709.1	1830.6	2116.6	1314.7
O-Pile 171-2155	72	0.56	84.8	316.4	233.9	11391.9	62.49	63.50	64.51	1318.5	1582.2	1714.1	1835.8	2122.7	1318.5
O-Pile 172-2460	84	0.47	96.8	319	233.9	13398.6	53.76	54.64	55.52	1329.2	1595.1	1728	1850.8	2140	1329.2
O-Pile 172-1698	54	0.81	66.8	319.3	233.9	8621.7	85.23	86.51	87.79	1330.5	1596.6	1729.7	1852.5	2142	1330.5
O-Pile 174-1901	62	0.69	74.8	321.9	233.9	9979.6	74.78	75.92	77.06	1341.3	1609.6	1743.7	1867.6	2159.5	1341.3
O-Pile 176-1647	52	0.88	64.8	327	233.9	8501	91.62	92.94	94.26	1362.3	1634.8	1771	1896.9	2193.2	1362.3
O-Pile 179-1596	50	0.94	62.8	332.3	233.9	8306.6	96.85	98.21	99.56	1384.4	1661.3	1799.8	1927.6	2228.8	1384.4
O-Pile 180-1748	56	0.81	68.8	334	233.9	9351.3	85.77	87.01	88.25	1391.6	1669.9	1809	1937.6	2240.3	1391.6
O-Pile 181-1545	48	1	60.8	335.2	233.9	8046	101.89	103.30	104.70	1396.9	1676.2	1815.9	1945	2248.9	1396.9
O-Pile 181-1850	60	0.75	72.8	336.5	233.9	10094.8	80.59	81.77	82.94	1402.1	1682.5	1822.7	1952.2	2257.2	1402.1
O-Pile 182-2460	84	0.5	96.8	337.3	233.9	14166.3	57.06	57.94	58.82	1405.4	1686.5	1827	1956.8	2262.6	1405.4
O-Pile 185-1698	54	0.88	66.8	342.7	233.9	9252.6	92.26	93.53	94.81	1427.9	1713.4	1856.2	1988.1	2298.7	1427.9
O-Pile 188-1647	52	0.94	64.8	349	233.9	9075.3	97.58	98.89	100.21	1454.4	1745.2	1890.7	2025	2341.4	1454.4
O-Pile 189-1901	62	0.75	74.8	350.1	233.9	10853.8	81.01	82.15	83.29	1458.8	1750.6	1896.5	2031.2	2348.6	1458.8
O-Pile 189-2155	72	0.62	84.8	350.7	233.9	12624.6	68.92	69.92	70.93	1461.2	1753.4	1899.5	2034.5	2352.4	1461.2
O-Pile 190-1596	50	1	62.8	353.1	233.9	8827	102.73	104.09	105.45	1471.2	1765.4	1912.5	2048.4	2368.5	1471.2
O-Pile 193-1748	56	0.88	68.8	358.5	233.9	10036.8	92.86	94.10	95.34	1493.6	1792.3	1941.6	2079.6	2404.5	1493.6

O-Pile 196-1850	60	0.81	72.8	363.4	233.9	10901.8	86.77	87.94	89.11	1514.1	1817	1968.4	2108.2	2437.6	1514.1
O-Pile 197-1698	54	0.94	66.8	365.9	233.9	9878.9	98.27	99.54	100.82	1524.5	1829.4	1981.9	2122.7	2454.4	1524.5
O-Pile 200-1647	52	1	64.8	371	233.9	9645.2	103.52	104.84	106.15	1545.7	1854.8	2009.4	2152.2	2488.5	1545.7
O-Pile 204-1901	62	0.81	74.8	378.2	233.9	11722.7	87.22	88.37	89.51	1575.6	1890.8	2048.3	2193.8	2536.6	1575.6
O-Pile 204-2460	84	0.56	96.8	378.6	233.9	15901.4	63.65	64.53	65.41	1577.5	1893	2050.8	2196.5	2539.7	1577.5
O-Pile 206-1748	56	0.94	68.8	382.8	233.9	10717.6	98.91	100.15	101.39	1594.9	1913.9	2073.4	2220.7	2567.6	1594.9
O-Pile 207-2155	72	0.69	84.8	384.7	233.9	13850.9	76.40	77.41	78.41	1603.1	1923.7	2084	2232.1	2580.9	1603.1
O-Pile 210-1698	54	1	66.8	388.9	233.9	10500.8	104.26	105.54	106.81	1620.5	1944.6	2106.6	2256.3	2608.9	1620.5
O-Pile 210-1850	60	0.88	72.8	390.1	233.9	11703.6	93.95	95.13	96.30	1625.5	1950.6	2113.2	2263.3	2616.9	1625.5
O-Pile 219-1901	62	0.88	74.8	406	233.9	12586.1	94.46	95.60	96.74	1691.7	2030	2199.2	2355.4	2723.5	1691.7
O-Pile 219-1748	56	1	68.8	406.9	233.9	11393.7	104.96	106.20	107.44	1695.5	2034.6	2204.1	2360.7	2729.6	1695.5
O-Pile 225-1850	60	0.94	72.8	416.7	233.9	12500.3	100.10	101.27	102.45	1736.1	2083.4	2257	2417.3	2795.1	1736.1
O-Pile 226-2155	72	0.75	84.8	418.6	233.9	15070.6	82.80	83.81	84.81	1744.3	2093.1	2267.6	2428.7	2808.2	1744.3
O-Pile 226-2460	84	0.62	96.8	419.7	233.9	17628.8	70.23	71.11	71.99	1748.9	2098.7	2273.6	2435.1	2815.6	1748.9
O-Pile 234-1901	62	0.94	74.8	433.7	233.9	13444.2	100.65	101.79	102.93	1807	2168.4	2349.1	2516	2909.2	1807
O-Pile 239-1850	60	1	72.8	443.1	233.9	13291.8	106.24	107.41	108.58	1846.1	2215.3	2399.9	2570.4	2972	1846.1
O-Pile 244-2155	72	0.81	84.8	452.3	233.9	16283.9	89.19	90.20	91.20	1884.7	2261.7	2450.1	2624.2	3034.2	1884.7
O-Pile 248-2460	84	0.69	96.8	460.7	233.9	19348.3	77.90	78.78	79.66	1919.5	2303.4	2495.3	2672.6	3090.2	1919.5
O-Pile 248-1901	62	1	74.8	461.2	233.9	14297	106.82	107.97	109.11	1921.6	2306	2498.1	2675.6	3093.7	1921.6
O-Pile 262-2155	72	0.88	84.8	485.9	233.9	17490.8	96.63	97.64	98.64	2024.4	2429.3	2631.7	2818.7	3259.1	2024.4
O-Pile 270-2460	84	0.75	96.8	501.4	233.9	21060.1	84.46	85.34	86.22	2089.3	2507.1	2716.1	2909.1	3363.6	2089.3
O-Pile 280-2155	72	0.94	84.8	519.2	233.9	18691.1	103.00	104.00	105.01	2163.3	2596	2812.3	3012.1	3482.8	2163.3
O-Pile 292-2460	84	0.81	96.8	542	233.9	22764	91.01	91.89	92.77	2258.3	2710	2935.8	3144.4	3635.7	2258.3
O-Pile 297-2155	72	1	84.8	552.4	233.9	19885.2	109.35	110.36	111.36	2301.5	2761.8	2992	3204.6	3705.3	2301.5
O-Pile 314-2460	84	0.88	96.8	582.4	233.9	24460.3	98.64	99.52	100.40	2426.6	2911.9	3154.6	3378.7	3906.7	2426.6
O-Pile 335-2460	84	0.94	96.8	622.6	233.9	26148.8	105.17	106.05	106.93	2594.1	3113	3372.4	3612	4176.3	2594.1
O-Pile 357-2460	84	1	96.8	662.6	233.9	27829.7	111.69	112.57	113.46	2760.9	3313.1	3589.1	3844.1	4444.8	2760.9