

**L-31N Seepage Barrier Wall
Miami, Florida
PERMEABILITY and UCS SAMPLE TESTING SUMMARY**

Date Sample Taken	Sample Location	Sample Depth (ft)	UCS (psi)		Permeability (cm/sec)	
			14-day	28-day	14-day	28-day
2/17/2012	105+60	10	9.5	14.2	-	-
2/20/2012	105+00	15	14.9	19.8	-	-
2/20/2012	105+00	30	9.4	17.0	8.13×10^{-6}	5.24×10^{-6}
2/20/2012	104+50	15	17.1	32.3	-	-
2/20/2012	104+50	30	16.0	30.5	-	-
2/21/2012	104+00	15	13.6	18.8	7.64×10^{-6}	6.42×10^{-6}
2/21/2012	104+00	30	13.4	18.5	-	-
2/21/2012	103+50	15	13.4	15.5	-	-
2/21/2012	103+50	30	10.8	16.0	-	-
2/22/2012	103+00	15	19.6	31.8	-	-
2/22/2012	103+00	30	10.9	15.5	5.23×10^{-6}	4.13×10^{-6}
2/22/2012	102+50	15	15.1	18.4	-	-
2/22/2012	102+50	30	11.3	20.1	-	-
2/24/2012	102+00	15	16.3	13.5	5.83×10^{-6}	3.68×10^{-6}
2/24/2012	102+00	30	14.9	13.2	-	-
2/24/2012	101+50	15	13.2	11.2	-	-
2/24/2012	101+50	30	11.4	11.4	-	-

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			14-day	28-day	14-day	28-day
2/25/2012	101+00	15	13.1	18.6	-	-
2/25/2012	101+00	30	12.1	21.3	6.21 x 10 ⁻⁶	3.70 x 10 ⁻⁶
2/27/2012	100+50	15	19.9	23.8	-	-
2/27/2012	100+50	30	17.6	18.2	-	-
2/27/2012	100+00	15	14.7	29.2	5.86 x 10 ⁻⁶	5.77 x 10 ⁻⁶
2/27/2012	100+00	30	16.7	28.8	-	-
2/27/2012	099+50	15	14.2	21.7	-	-
2/27/2012	099+50	30	15.1	20.1	-	-
3/2/2012	099+00	15	13.6	16.7	-	-
3/2/2012	099+00	30	12.8	17.4	6.89 x 10 ⁻⁶	4.94 x 10 ⁻⁶
3/2/2012	098+50	15	12.5	15.7	-	-
3/2/2012	098+50	30	12.2	15.7	-	-
3/2/2012	098+00	15	13.6	17.9	6.59 x 10 ⁻⁶	5.34 x 10 ⁻⁶
3/2/2012	098+00	30	14.2	18.6	-	-
3/3/2012	097+50	15	12.7	20.0	-	-
3/3/2012	097+50	30	14.4	17.8	-	-
3/5/2012	097+00	15	11.1	20.2	-	-
3/5/2012	097+00	30	11.2	19.2	5.54 x 10 ⁻⁶	3.66 x 10 ⁻⁶

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			14-day	28-day	14-day	28-day
3/5/2012	096+50	15	15.9	21.0	-	-
3/5/2012	096+50	30	13.8	18.4	-	-
3/6/2012	096+00	15	11.3	16.3	7.49×10^{-6}	4.96×10^{-6}
3/6/2012	096+00	30	11.2	16.3	-	-
3/8/2012	86+20	15	9.8	16.1	8.78×10^{-6}	8.05×10^{-6}
3/8/2012	86+20	30	9.2	15.6	-	-
3/9/2012	87+40	15	8.1	19.3	-	-
3/9/2012	87+40	30	8.1	19.7	8.99×10^{-6}	8.63×10^{-6}
3/12/2012	88+30	15	9.8	14.2	1.09×10^{-5}	7.11×10^{-6}
3/12/2012	88+30	30	9.2	15.1	-	-
3/13/2012	89+20	15	10.9	16.0	-	-
3/13/2012	89+20	30	14.3	19.4	7.86×10^{-6}	3.36×10^{-6}
3/15/2012	90+60	15	11.5	16.0	6.48×10^{-6}	3.06×10^{-6}
3/15/2012	90+60	30	12.0	17.2	-	-
3/19/2012	92+50	15	13.0	19.1	-	-
3/19/2012	92+50	30	12.8	18.5	8.78×10^{-6}	5.70×10^{-6}
3/22/2012	95+20	15	11.8	17.7	6.34×10^{-6}	5.62×10^{-6}
3/22/2012	95+20	30	10.1	14.4	-	-

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Date Sample Taken	Sample Location	Sample Depth (ft)	UCS (psi)		Permeability (cm/sec)	
			14-day	28-day	14-day	28-day
3/28/2012	84+30	15	17.8	25.5	-	-
3/28/2012	84+30	30	16.3	22.2	7.48×10^{-6}	7.01×10^{-6}
3/30/2012	81+90	15		16.8	4.27×10^{-6}	3.68×10^{-6}
3/30/2012	81+90	30		16.6	-	-
4/2/2012	79+90	15		16.1	5.85×10^{-6}	4.39×10^{-6}
4/2/2012	79+90	30		16.7	-	-
4/5/2012	77+40	15		19.8	-	-
4/5/2012	77+40	30		18.4	6.52×10^{-6}	4.20×10^{-6}
4/10/2012	75+30	15	18.0	26.9	5.59×10^{-6}	4.04×10^{-6}
4/10/2012	75+30	30	16.7	22.7	-	-
4/13/2012	72+20	15	13.9	24.8	4.19×10^{-6}	3.26×10^{-6}
4/13/2012	72+20	30	13.1	22.0	-	-
4/13/2012	plant			27.7	3.77×10^{-6}	3.34×10^{-6}
4/17/2012	58+80	15	13.6	20.6	5.07×10^{-6}	3.61×10^{-6}
4/17/2012	58+80	30	9.8	14.8	-	-
4/19/2012	61+00	15	12.7	27.3	-	-
4/19/2012	61+00	30	13.9	25.2	5.41×10^{-6}	3.92×10^{-6}
4/19/2012	plant		13.9	24.1	4.37×10^{-6}	4.02×10^{-6}

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Date Sample Taken	Sample Location	Sample Depth (ft)	UCS (psi)		Permeability (cm/sec)	
			14-day	28-day	14-day	28-day
4/23/2012	63+80	15	10.2	12.5	8.50×10^{-6}	5.95×10^{-6}
4/23/2012	63+80	30	10.9	15.0	-	-
4/25/2012	67+20	15	12.5	17.8	-	-
4/25/2012	67+20	30	13.1	20.1	9.58×10^{-6}	5.41×10^{-6}
4/26/2012	69+40	15	15.5	19.0	8.41×10^{-6}	7.42×10^{-6}
4/26/2012	69+40	30	16.1	20.7	-	-
4/26/2012	Plant		27.2	32.1	5.88×10^{-6}	4.92×10^{-6}
5/2/2012	56+00	15	8.1	13.1	-	-
5/2/2012	56+00	30	8.1	13.2	8.50×10^{-6}	5.34×10^{-6}
5/4/2012	52+90	15	12.6	18.9	6.59×10^{-6}	3.92×10^{-6}
5/4/2012	52+90	30	10.9	16.7	-	-
5/4/2012	Plant		24.1	33.7	5.20×10^{-6}	3.86×10^{-6}
5/7/2012	50+40	15	9.3	13.1	-	-
5/7/2012	50+40	30	7.5	12.7	8.48×10^{-6}	5.14×10^{-6}
5/10/2012	47+60	15	16.4	21.7	6.97×10^{-6}	4.99×10^{-6}
5/10/2012	47+60	30	14.4	20.7	-	-
5/10/2012	Plant		23.3	26.8	4.56×10^{-6}	3.23×10^{-6}
5/14/2012	44+70	15	6.5	9.8	-	-

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			14-day	28-day	14-day	28-day
5/14/2012	44+70	30	7.5	10.3	8.22×10^{-6}	5.55×10^{-6}
5/17/2012	41+80	15	8.7	13.2	5.18×10^{-6}	3.24×10^{-6}
5/17/2012	41+80	30	9.7	14.2	-	-
5/17/2012	Plant		12.1	19.7	6.04×10^{-6}	3.37×10^{-6}
5/21/2012	27+10	15	19.6	22.5	-	-
5/21/2012	27+10	30	16.1	21.8	4.50×10^{-6}	3.73×10^{-6}
5/29/2012	29+50	15	24.1	29.8	5.33×10^{-6}	4.56×10^{-6}
5/29/2012	29+50	30	20.8	27.2	-	-
5/29/2012	plant		29.2	35.0	5.65×10^{-6}	3.25×10^{-6}
5/31/2012	32+40	15	11.4	14.6	-	-
5/31/2012	32+40	30	9.0	13.7	8.55×10^{-6}	4.67×10^{-6}
6/4/2012	35+00	15	16.3	16.8	7.53×10^{-6}	4.41×10^{-6}
6/4/2012	35+00	30	17.5	16.5	-	-
6/4/2012	plant		20.6	37.8	4.07×10^{-6}	2.91×10^{-6}
6/6/2012	38+20	15	15.9	22.1	-	-
6/6/2012	38+20	30	16.1	21.0	9.50×10^{-6}	8.20×10^{-6}
6/7/2012	40+00	15	16.0	19.8	5.85×10^{-6}	3.73×10^{-6}
6/7/2012	40+00	30	15.8	18.3	-	-

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			14-day	28-day	14-day	28-day
6/7/2012	plant		23.1	26.4	4.01 x 10 ⁻⁶	2.92 x 10 ⁻⁶
6/13/2012	1+20	15	19.0	24.6	-	-
6/13/2012	1+20	30	17.5	24.6	6.76 x 10 ⁻⁶	4.93 x 10 ⁻⁶
6/15/2012	4+10	15	17.1	21.3	6.80 x 10 ⁻⁶	5.22 x 10 ⁻⁶
6/15/2012	4+10	30	17.1	21.1	-	-
6/15/2012	Plant		20.6	24.0	5.17 x 10 ⁻⁶	4.38 x 10 ⁻⁶
6/18/2012	6+50	15	15.5	21.2	-	-
6/18/2012	6+50	30	19.6	24.4	8.12 x 10 ⁻⁶	2.16 x 10 ⁻⁶
6/21/12	10+10	15	17.2	21.2	8.56 x 10 ⁻⁶	5.61 x 10 ⁻⁶
6/21/12	10+10	30	19.7	22.6	-	-
6/21/2012	Plant		31.5	32.5	4.84 x 10 ⁻⁶	3.53 x 10 ⁻⁶
6/23/12	24+40	15	15.4	18.3	-	-
6/23/12	24+40	30	15.5	18.9	6.87 x 10 ⁻⁶	6.44 x 10 ⁻⁶
6/26/12	21+30	15	12.6	18.3	5.54 x 10 ⁻⁶	4.10 x 10 ⁻⁶
6/26/12	21+30	30	8.6	12.5	-	-
6/26/12	Plant		25.4	32.9	7.00 x 10 ⁻⁶	4.45 x 10 ⁻⁶
6/27/12	18+30	15	17.2	20.4	-	-
6/27/12	18+30	30	15.4	19.9	9.23 x 10 ⁻⁶	6.72 x 10 ⁻⁶
6/29/12	15+70	15	22.4	19.1	5.75 x 10 ⁻⁶	3.56 x 10 ⁻⁶

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			14-day	28-day	14-day	28-day
6/29/12	15+70	30	23.1	18.4	-	-
6/29/12	Plant		28.9	33.5	5.16×10^{-6}	4.40×10^{-6}
6/30/12	12+90	15	13.8	19.0	-	-
6/30/12	12+90	30	13.1	19.0	7.31×10^{-6}	4.83×10^{-6}