

Atterberg Limit Determinations
Cuttings samples from NC-EWDP-13P

Test ID	Sample Number	Test Date	Determination 1		Determination 2		Average Liquid Limit	Average Plastic Limit	Plasticity Index
			Liquid Limit	Plastic Limit	Liquid Limit	Plastic Limit			
1	13P-2.5-5.0-D	8/31/05		19.7		19.6		20	
2	13P-7.5-10.0-D	8/31/05		16.0		15.4		16	
3	13P-12.5-15.0-D	8/31/05		14.4		15.0		15	
4	13P-17.5-20.0-D	8/31/05		14.4		15.5		15	
5	13P-22.5-25.0-D	8/31/05		19.3		19.7		20	
6	13P-27.5-30.0-D	8/31/05		18.4		19.6		19	
7	13P-32.5-35.0-D	8/31/05		20.0		19.8		20	
8	13P-37.5-40.0-D	8/31/05		18.5		19.0		19	
9	13P-42.5-45.0-D	9/2/05		24.1		24.9		25	
10	13P-47.5-50.0-D	9/2/05		20.9		21.2		21	
11	13P-52.5-55.0-D	9/2/05		22.9		20.4		22	
12	13P-57.5-60.0-D	9/2/05		12.0		11.8		12	
13	13P-62.5-65.0-D	9/2/05		26.6		27.8		27	
14	13P-67.5-70.0-D	9/2/05		15.0		14.0		15	
15	13P-72.5-75.0-D	9/2/05		14.0		13.3		14	
16	13P-77.5-80.0-D	9/2/05		17.4		16.3		17	
17	13P-82.5-85.0-D	9/7/05		26.0		25.4		26	
26	13P-162.5-165.0-D	9/7/05	21.7	22.0	21.7	22.3	22	22	0
27	13P-167.5-170.0-D	9/7/05	36.6	20.8	36.5	20.7	37	21	16
28	13P-172.5-175.0-D	9/7/05	25.5	19.4	25.4	19.6	25	20	5
29	13P-177.5-180.0-D	9/7/05	45.5	19.6	45.2	20.5	45	20	25
31	13P-192.5-195.0-D	9/7/05	45.1	20.8	45.1	20.6	45	21	24
32	13P-197.5-200.0-D	9/7/05	53.7	19.7	53.7	19.8	54	20	34
33	13P-202.5-205.0-D	9/8/05	21.1	21.8	21.0	22.4	21	22	-1
34	13P-207.5-210.0-D	9/8/05	22.2	21.8	21.9	22.0	22	22	0
35	13P-212.5-215.0-D	9/8/05	27.8	17.6	27.7	17.7	28	18	10
36	13P-217.5-220.0-D	9/8/05	20.0	19.9	19.9	18.2	20	19	1
37	13P-222.5-225.0-D	9/8/05	19.1	19.7	19.1	19.4	19	20	-1
38	13P-227.5-230.0-D	9/8/05	21.6	20.4	21.7	20.2	22	20	2
39	13P-232.5-235.0-D	9/8/05	19.4	18.7	19.4	18.1	19	18	1
40	13P-237.5-240.0-D	9/8/05	18.5	18.6	26.6	18.8	23	19	4
41	13P-242.5-245.0-D	9/9/05		19.7		20.3		20	
42	13P-247.5-250.0-D	9/9/05		20.7		21.2		21	
43	13P-252.5-255.0-D	9/9/05		18.9		18.6		19	
44	13P-257.5-260.0-D	9/9/05		18.0		17.7		18	

Note: Blanks in liquid limit columns and plasticity index indicate unmeasurable liquid limit.

Electrical Conductivity
Cuttings samples from NC-EWDP-13P

Test ID	Sample Number	Test Date	Container Weight (g)	Container Plus Moist Sample Weight (g)	Moist Sample Weight (g)	Moisture Correction Factor	Calculated Oven-Dried Sample Weight (g)	Water to be Added (g)	Electrical Conductivity (µmhos/cm)
1	13P-2.5-5.0-D	8/24/05	200.8	307.1	106.3	0.976	103.7	101.1	584
2	13P-7.5-10.0-D	8/24/05	200.7	304.4	103.7	0.969	100.5	97.4	1185
3	13P-12.5-15.0-D	8/24/05	200.6	305.4	104.8	0.978	102.5	100.1	526
4	13P-17.5-20.0-D	8/24/05	200.8	304.7	103.9	0.980	101.8	99.7	380
5	13P-22.5-25.0-D	8/24/05	200.8	305.6	104.8	0.972	101.9	99.0	211
6	13P-27.5-30.0-D	8/24/05	200.8	302.2	101.4	0.982	99.6	97.8	143
7	13P-32.5-35.0-D	8/24/05	199.1	304.3	105.2	0.978	102.9	100.6	146
8	13P-37.5-40.0-D	8/24/05	198.9	305.6	106.7	0.983	104.9	103.2	123
9	13P-42.5-45.0-D	8/24/05	199.8	304.8	105.0	0.984	103.3	101.5	131
10	13P-47.5-50.0-D	8/24/05	200.9	305.7	104.8	0.975	102.2	99.5	138
11	13P-52.5-55.0-D	8/24/05	200.9	304.5	103.6	0.986	102.2	100.7	119
12	13P-57.5-60.0-D	8/24/05	200.7	306.8	106.1	0.989	104.9	103.8	105
13	13P-62.5-65.0-D	8/24/05	200.9	307.8	106.9	0.933	99.7	92.5	656
14	13P-67.5-70.0-D	8/24/05	200.6	305.7	105.1	0.962	101.1	97.1	258
15	13P-72.5-75.0-D	8/24/05	198.9	306.6	107.7	0.972	104.7	101.7	392
16	13P-77.5-80.0-D	8/24/05	200.7	306.9	106.2	0.980	104.0	101.8	744
17	13P-82.5-85.0-D	8/24/05	198.7	304.6	105.9	0.954	101.1	96.3	252
26	13P-162.5-165.0-D	8/24/05	199.8	307.5	107.7	0.928	100.0	92.2	352
27	13P-167.5-170.0-D	8/24/05	199.8	305.6	105.8	0.877	92.8	79.8	514
28	13P-172.5-175.0-D	8/24/05	200.7	307.1	106.4	0.899	95.6	84.8	458
29	13P-177.5-180.0-D	8/24/05	199.4	306.7	107.3	0.897	96.3	85.3	569
31	13P-192.5-195.0-D	8/24/05	199.5	307.4	107.9	0.845	91.2	74.5	682
32	13P-197.5-200.0-D	8/24/05	200.3	306.7	106.4	0.818	87.0	67.6	655
33	13P-202.5-205.0-D	8/25/05	200.7	305.5	104.8	0.951	99.6	94.5	385
34	13P-207.5-210.0-D	8/25/05	199.2	303.3	104.1	0.922	95.9	87.8	438
35	13P-212.5-215.0-D	8/25/05	200.6	306.5	105.9	0.931	98.6	91.3	431
36	13P-217.5-220.0-D	8/25/05	200.6	305.2	104.6	0.936	97.9	91.1	411
37	13P-222.5-225.0-D	8/25/05	200.6	303.4	102.8	0.939	96.5	90.3	393
38	13P-227.5-230.0-D	8/25/05	200.2	304.2	104.0	0.927	96.4	88.7	381
39	13P-232.5-235.0-D	8/25/05	201.0	305.2	104.2	0.931	97.0	89.9	367
40	13P-237.5-240.0-D	8/25/05	199.2	301.2	102.0	0.941	96.0	90.0	371
41	13P-242.5-245.0-D	8/25/05	201.6	306.3	104.7	0.955	100.0	95.3	318
42	13P-247.5-250.0-D	8/25/05	199.7	304.7	105.0	0.950	99.7	94.4	307
43	13P-252.5-255.0-D	8/25/05	200.8	305.6	104.8	0.944	98.9	93.1	340
44	13P-257.5-260.0-D	8/25/05	199.3	304.1	104.8	0.949	99.4	94.1	312

Electrical Conductivity
Cuttings samples from NC-EWDP-13P

Test ID	Sample Number	Test Date	Container Weight (g)	Container Plus Moist Sample Weight (g)	Moist Sample Weight (g)	Moisture Correction Factor	Calculated Oven-Dried Sample Weight (g)	Water to be Added (g)	Electrical Conductivity ($\mu\text{mhos/cm}$)
40	13P-237.5-240.0-D-D	8/25/05	257.7	458.1	200.4	0.941	188.6	176.9	373

Test ID	Sample Number	Test Date	Container Weight (g)	Container Weight Plus Moist Sample (g)	Container Weight Plus Oven-Dried Sample (g)	Water Weight (g)	Oven-Dried Solids Weight (g)	Gravimetric Water Content (g/g)
1	13P-2.5-5.0-D	08/24/05	22.1	95.3	93.5	1.8	71.4	0.025
2	13P-7.5-10.0-D	08/24/05	22.4	96.3	94.1	2.3	71.7	0.032
3	13P-12.5-15.0-D	08/24/05	22.4	94.0	92.4	1.6	70.0	0.023
4	13P-17.5-20.0-D	08/24/05	22.6	92.9	91.5	1.4	69.0	0.020
5	13P-22.5-25.0-D	08/24/05	22.5	94.5	92.5	2.0	70.0	0.028
6	13P-27.5-30.0-D	08/24/05	22.2	92.6	91.3	1.3	69.1	0.018
7	13P-32.5-35.0-D	08/24/05	22.3	93.8	92.3	1.6	70.0	0.022
8	13P-37.5-40.0-D	08/24/05	22.5	93.1	91.9	1.2	69.4	0.017
9	13P-42.5-45.0-D	08/24/05	22.2	95.7	94.5	1.2	72.3	0.017
10	13P-47.5-50.0-D	08/24/05	22.3	95.6	93.7	1.8	71.4	0.026
11	13P-52.5-55.0-D	08/24/05	22.5	93.5	92.5	1.0	70.0	0.014
12	13P-57.5-60.0-D	08/24/05	22.2	96.8	95.9	0.8	73.7	0.011
13	13P-62.5-65.0-D	08/24/05	22.3	97.6	92.5	5.1	70.2	0.072
14	13P-67.5-70.0-D	08/24/05	22.3	95.2	92.4	2.8	70.1	0.039
15	13P-72.5-75.0-D	08/24/05	22.4	96.4	94.3	2.0	71.9	0.029
16	13P-77.5-80.0-D	08/24/05	22.3	96.0	94.5	1.5	72.2	0.021
17	13P-82.5-85.0-D	08/24/05	22.5	93.9	90.6	3.3	68.1	0.048
26	13P-162.5-165.0-D	08/24/05	22.5	94.9	89.7	5.2	67.2	0.077
27	13P-167.5-170.0-D	08/24/05	22.4	96.3	87.2	9.1	64.8	0.140
28	13P-172.5-175.0-D	08/24/05	22.4	95.8	88.4	7.5	66.0	0.113
29	13P-177.5-180.0-D	08/24/05	22.4	95.1	87.7	7.5	65.2	0.114
31	13P-192.5-195.0-D	08/24/05	22.3	95.5	84.1	11.4	61.9	0.183
32	13P-197.5-200.0-D	08/24/05	14.1	84.1	71.3	12.8	57.2	0.223
33	13P-202.5-205.0-D	08/25/05	22.1	94.8	91.2	3.6	69.2	0.052
34	13P-207.5-210.0-D	08/25/05	22.4	96.1	90.3	5.8	67.9	0.085
35	13P-212.5-215.0-D	08/25/05	22.4	94.3	89.3	4.9	66.9	0.074
36	13P-217.5-220.0-D	08/25/05	22.6	95.5	90.8	4.7	68.2	0.069
37	13P-222.5-225.0-D	08/25/05	22.5	92.7	88.4	4.3	66.0	0.065
38	13P-227.5-230.0-D	08/25/05	22.2	94.9	89.6	5.3	67.3	0.079
39	13P-232.5-235.0-D	08/25/05	22.3	94.1	89.1	4.9	66.9	0.074
40	13P-237.5-240.0-D	08/25/05	22.5	91.3	87.3	4.0	64.7	0.062
41	13P-242.5-245.0-D	08/25/05	22.2	93.9	90.7	3.2	68.5	0.047
42	13P-247.5-250.0-D	08/25/05	22.3	96.2	92.5	3.7	70.2	0.053
43	13P-252.5-255.0-D	08/25/05	22.5	96.8	92.6	4.2	70.1	0.059
44	13P-257.5-260.0-D	08/25/05	22.2	94.2	90.5	3.7	68.3	0.054

Gravimetric Water Content
Cuttings samples from NC-EWDP-13P

Test ID	Sample Number	Test Date	Container Weight (g)	Container Weight Plus Moist Sample (g)	Container Weight Plus Oven-Dried Sample (g)	Water Weight (g)	Oven-Dried Solids Weight (g)	Gravimetric Water Content (g/g)
40	13P-237.5-240.0-D-D	08/25/05	22.5	91.3	87.3	4.0	64.7	0.062

Gravimetric Water Content
Cuttings samples from NC-EWDP-13P

Test ID	Sample Number	Test Date	Container Weight (g)	Container Weight Plus Moist Sample (g)	Container Weight Plus Oven-Dried Sample (g)	Water Weight (g)	Oven-Dried Solids Weight (g)	Gravimetric Water Content (g/g)
1	13P-2.5-5.0-D	08/02/05	13.6	349.2	339.4	9.8	325.8	0.030
2	13P-7.5-10.0-D	08/02/05	13.6	462.3	457.6	4.8	444.0	0.011
3	13P-12.5-15.0-D	08/02/05	13.8	375.2	366.4	8.8	352.6	0.025
4	13P-17.5-20.0-D	08/02/05	13.7	544.8	532.6	12.3	518.9	0.024
5	13P-22.5-25.0-D	08/02/05	14.1	442.5	430.4	12.0	416.4	0.029
6	13P-27.5-30.0-D	08/02/05	14.4	391.2	384.0	7.3	369.6	0.020
7	13P-32.5-35.0-D	08/02/05	13.8	451.5	440.6	10.9	426.8	0.026
8	13P-37.5-40.0-D	08/02/05	13.6	510.9	501.1	9.8	487.5	0.020
9	13P-42.5-45.0-D	08/02/05	14.1	220.9	217.2	3.7	203.1	0.018
10	13P-47.5-50.0-D	08/02/05	13.6	318.5	311.0	7.4	297.4	0.025
11	13P-52.5-55.0-D	08/04/05	13.8	221.9	219.0	2.9	205.2	0.014
12	13P-57.5-60.0-D	08/04/05	14.2	224.0	221.3	2.7	207.1	0.013
13	13P-62.5-65.0-D	08/04/05	14.3	285.6	267.6	18.0	253.3	0.071
14	13P-67.5-70.0-D	08/04/05	14.2	222.1	213.9	8.2	199.7	0.041
15	13P-72.5-75.0-D	08/04/05	13.6	227.1	220.9	6.1	207.3	0.030
16	13P-77.5-80.0-D	08/04/05	14.1	105.2	103.5	1.7	89.4	0.019
17	13P-82.5-85.0-D	08/04/05	14.2	146.9	140.9	6.0	126.7	0.047
18	13P-87.5-90.0-D	08/04/05	231.1	1332.0	1322.3	9.7	1091.2	0.009
19	13P-92.5-95.0-D	08/04/05	14.2	1199.2	1179.4	19.8	1165.2	0.017
20	13P-97.5-100.0-D	08/04/05	13.5	1047.6	1035.4	12.2	1022.0	0.012
21	13P-102.5-105.0-D	08/05/05	13.8	988.1	979.0	9.1	965.2	0.009
22	13P-112.5-115.0-D	08/05/05	14.3	981.2	973.5	7.8	959.2	0.008
23	13P-117.5-120.0-D	08/05/05	14.3	1096.0	1087.8	8.2	1073.5	0.008
24	13P-122.5-125.0-D	08/05/05	14.2	1130.0	1123.0	7.0	1108.8	0.006
25	13P-127.5-130.0-D	08/05/05	13.6	1205.9	1198.4	7.5	1184.8	0.006
26	13P-162.5-165.0-D	08/05/05	14.2	319.7	299.2	20.5	285.0	0.072
27	13P-167.5-170.0-D	08/05/05	14.3	578.1	514.5	63.6	500.2	0.127
28	13P-172.5-175.0-D	08/05/05	13.5	363.7	331.4	32.3	317.9	0.102
29	13P-177.5-180.0-D	08/05/05	13.6	212.9	188.7	24.1	175.1	0.138
31	13P-192.5-195.0-D	08/08/05	13.8	257.8	218.9	38.9	205.1	0.190
32	13P-197.5-200.0-D	08/08/05	14.3	264.1	218.2	45.9	203.9	0.225
33	13P-202.5-205.0-D	08/08/05	14.3	217.0	206.6	10.4	192.3	0.054
34	13P-207.5-210.0-D	08/08/05	14.2	266.8	247.2	19.6	233.0	0.084
35	13P-212.5-215.0-D	08/08/05	13.8	230.1	215.0	15.0	201.2	0.075
36	13P-217.5-220.0-D	08/08/05	14.1	255.1	239.2	15.9	225.1	0.071

Gravimetric Water Content
Cuttings samples from NC-EWDP-13P

Test ID	Sample Number	Test Date	Container Weight (g)	Container Weight Plus Moist Sample (g)	Container Weight Plus Oven-Dried Sample (g)	Water Weight (g)	Oven-Dried Solids Weight (g)	Gravimetric Water Content (g/g)
37	13P-222.5-225.0-D	08/08/05	13.6	204.2	192.2	12.0	178.6	0.067
38	13P-227.5-230.0-D	08/08/05	13.8	313.7	289.9	23.8	276.1	0.086
39	13P-232.5-235.0-D	08/08/05	14.3	165.7	154.4	11.3	140.1	0.081
40	13P-237.5-240.0-D	08/08/05	13.7	190.1	179.4	10.7	165.7	0.065
41	13P-242.5-245.0-D	08/09/05	13.8	127.2	122.6	4.6	108.8	0.042
42	13P-247.5-250.0-D	08/09/05	14.4	346.9	330.8	16.1	316.4	0.051
43	13P-252.5-255.0-D	08/09/05	13.8	380.6	359.9	20.8	346.0	0.060
44	13P-257.5-260.0-D	08/09/05	13.6	265.1	252.4	12.7	238.9	0.053
45	13P-262.5-265.0-D	08/09/05	14.2	755.2	705.1	50.1	691.0	0.072
46	13P-267.5-270.0-D	08/09/05	14.3	801.8	747.2	54.5	732.9	0.074
47	13P-272.5-275.0-D	08/09/05	14.1	768.9	728.8	40.1	714.7	0.056
48	13P-277.5-280.0-D	08/09/05	13.8	641.7	610.6	31.1	596.8	0.052
49	13P-282.5-285.0-D	08/09/05	14.2	704.2	653.2	51.0	639.0	0.080
50	13P-287.5-290.0-D	08/09/05	14.4	751.2	717.4	33.8	703.0	0.048
51	13P-295.0-300.0-D	08/09/05	14.3	675.1	587.2	87.9	573.0	0.153
52	13P-305.0-310.0-D	08/09/05	13.8	587.9	507.2	80.7	493.4	0.164
53	13P-315.0-320.0-D	08/10/05	13.8	734.1	602.2	131.9	588.4	0.224
54	13P-325.0-330.0-D	08/10/05	14.4	526.7	432.8	93.9	418.4	0.224
55	13P-335.0-340.0-D	08/10/05	14.0	619.7	537.7	82.1	523.7	0.157
56	13P-345.0-350.0-D	08/10/05	13.5	537.9	495.6	42.3	482.1	0.088
57	13P-355.0-360.0-D	08/10/05	13.9	364.0	360.9	3.2	347.0	0.009
58	13P-365.0-370.0-D	08/10/05	14.3	444.1	441.5	2.6	427.2	0.006
59	13P-375.0-380.0-D	08/10/05	14.4	367.8	358.0	9.8	343.6	0.029
60	13P-385.0-390.0-D	08/10/05	14.2	525.8	466.3	59.5	452.1	0.132
61	13P-395.0-400.0-D	08/10/05	13.9	529.3	469.2	60.1	455.3	0.132
62	13P-405.0-410.0-D	08/10/05	14.1	554.6	496.1	58.5	482.0	0.121
63	13P-415.0-420.0-D	08/10/05	14.3	591.8	522.4	69.5	508.0	0.137
64	13P-425.0-430.0-D	08/10/05	14.2	778.0	647.2	130.9	632.9	0.207

Hydrometer Particle Size Analysis

Cuttings samples from NC-EWDP-13P with specific gravity passing No. 10 sieve
(Hydrometer number 57878, type 152H)

Sample Number	Test Date	Percent Passing No. 10 Sieve	HWC No. 10 Moisture Correction Factor	Sample Weight (g)	Oven-Dried Sample Weight (g)	Total Oven-Dried Sample Weight (g)	Specific Gravity (g/cm ³)	Elapsed Time (min)	Hydrometer Reading	ASTM Depth	Composite Correction	Corrected Reading	Temperature (°C)	ASTM Alpha Correction	ASTM K Value	Largest Particle Passing (mm)	Percent Passing
13P-2.5-5.0-D	8/10/05	27.0	0.961	116.42	111.88	414.90	2.643	2	21	12.9	4.80	16.20	20.0	1.00	0.01365	0.0347	3.9
								5	19	13.2		14.20				0.0222	3.4
								15	17	13.5		12.20				0.0129	2.9
								45	15	13.8		10.20				0.0076	2.5
								120	13	14.2		8.20				0.0047	2.0
13P-7.5-10.0-D	8/10/05	55.4	0.963	114.36	110.15	198.92	2.649	2	16	13.7	4.80	11.20	20.0	1.00	0.01365	0.0357	5.6
								5	14	14.0		9.20				0.0228	4.6
								15	13	14.2		8.20				0.0133	4.1
								45	12	14.3		7.20				0.0077	3.6
								120	10	14.7		5.20				0.0048	2.6
13P-12.5-15.0-D	8/10/05	48.6	0.972	117.92	114.63	235.76	2.595	2	13	14.2	4.80	8.20	20.0	1.01	0.01386	0.0369	3.5
								5	12	14.3		7.20				0.0234	3.1
								15	11	14.5		6.20				0.0136	2.7
								45	10	14.7		5.20				0.0079	2.2
								120	9	14.8		4.20				0.0049	1.8
13P-17.5-20.0-D	8/10/05	51.0	0.975	115.86	113.01	221.76	2.648	2	13	14.2	4.80	8.20	20.0	1.00	0.01365	0.0364	3.7
								5	11	14.5		6.20				0.0232	2.8
								15	10	14.7		5.20				0.0135	2.3
								45	9	14.8		4.20				0.0078	1.9
								120	8	15.0		3.20				0.0048	1.4
13P-22.5-25.0-D	8/10/05	49.8	0.966	116.65	112.66	226.33	2.615	2	19	13.2	4.80	14.20	20.0	1.01	0.01386	0.0356	6.3
								5	18	13.3		13.20				0.0226	5.9
								15	16	13.7		11.20				0.0132	5.0
								45	14	14.0		9.20				0.0077	4.1
								120	13	14.2		8.20				0.0048	3.7
13P-27.5-30.0-D	8/10/05	48.3	0.980	114.86	112.52	233.12	2.634	2	17	13.5	4.80	12.20	20.0	1.00	0.01365	0.0355	5.2
								5	14	14.0		9.20				0.0228	3.9
								15	13	14.2		8.20				0.0133	3.5
								45	11	14.5		6.20				0.0077	2.7
								120	10	14.7		5.20				0.0048	2.2
13P-32.5-35.0-D	8/11/05	53.0	0.973	115.59	112.51	212.47	2.569	2	18	13.3	4.80	13.20	20.0	1.02	0.01408	0.0363	6.3
								5	16	13.7		11.20				0.0233	5.4
								15	15	13.8		10.20				0.0135	4.9
								45	13	14.2		8.20				0.0079	3.9
								120	11	14.5		6.20				0.0049	3.0
13P-37.5-40.0-D	8/11/05	54.6	0.981	116.82	114.63	209.83	2.537	2	14	14.0	4.80	9.20	20.0	1.02	0.01408	0.0373	4.5
								5	12	14.3		7.20				0.0238	3.5
								15	11	14.5		6.20				0.0138	3.0
								45	10	14.7		5.20				0.0080	2.5
								120	9	14.8		4.20				0.0049	2.0

Hydrometer Particle Size Analysis

Cuttings samples from NC-EWDP-13P with specific gravity passing No. 10 sieve
(Hydrometer number 57878, type 152H)

Sample Number	Test Date	Percent Passing No. 10 Sieve	HWC No. 10 Moisture Correction Factor	Sample Weight (g)	Oven-Dried Sample Weight (g)	Total Oven-Dried Sample Weight (g)	Specific Gravity (g/cm ³)	Elapsed Time (min)	Hydrometer Reading	ASTM Depth	Composite Correction	Corrected Reading	Temperature (°C)	ASTM Alpha Correction	ASTM K Value	Largest Particle Passing (mm)	Percent Passing
13P-42.5-45.0-D	8/11/05	54.4	0.982	115.44	113.36	208.50	2.517	2	11	14.5	4.80	6.20	20.0	1.03	0.01431	0.0385	3.1
								5	10	14.7		5.20				0.0245	2.6
								15	9	14.8		4.20				0.0142	2.1
								45	8	15.0		3.20				0.0083	1.6
								120	8	15.0		3.20				0.0051	1.6
13P-47.5-50.0-D	8/11/05		0.973	114.84	111.78		2.542	2	12	14.3	4.80	7.20	20.0	1.02	0.01408	0.0376	
								5	11	14.5		6.20				0.0240	
								15	10	14.7		5.20				0.0139	
								45	9	14.8		4.20				0.0081	
								120	9	14.8		4.20				0.0049	
13P-52.5-55.0-D	8/11/05	41.5	0.984	116.55	114.67	276.17	2.573	2	12	14.3	4.80	7.20	20.0	1.02	0.01408	0.0376	2.7
								5	11	14.5		6.20				0.0240	2.3
								15	10	14.7		5.20				0.0139	1.9
								45	9	14.8		4.20				0.0081	1.6
								120	9	14.8		4.20				0.0049	1.6
13P-57.5-60.0-D	8/11/05	47.9	0.988	117.32	115.92	241.90	2.602	2	10	14.7	4.80	5.20	20.0	1.01	0.01386	0.0376	2.2
								5	9	14.8		4.20				0.0238	1.8
								15	8	15.0		3.20				0.0139	1.3
								45	8	15.0		3.20				0.0080	1.3
								120	8	15.0		3.20				0.0049	1.3
13P-62.5-65.0-D	8/15/05	36.3	0.954	114.78	109.47	301.80	2.572	2	17	13.5	4.80	12.20	20.0	1.02	0.01408	0.0366	4.1
								5	15	13.8		10.20				0.0234	3.4
								15	14	14.0		9.20				0.0136	3.1
								45	12	14.3		7.20				0.0079	2.4
								120	11	14.5		6.20				0.0049	2.1
13P-67.5-70.0-D	8/15/05	74.4	0.957	117.18	112.09	150.72	2.566	2	18	13.3	4.80	13.20	20.0	1.02	0.01408	0.0363	8.9
								5	16	13.7		11.20				0.0233	7.6
								15	15	13.8		10.20				0.0135	6.9
								45	14	14.0		9.20				0.0079	6.2
								120	13	14.2		8.20				0.0048	5.5
13P-72.5-75.0-D	8/15/05	82.7	0.971	114.33	111.07	134.29	2.558	2	19	13.2	4.80	14.20	20.0	1.02	0.01408	0.0362	10.8
								5	17	13.5		12.20				0.0231	9.3
								15	16	13.7		11.20				0.0135	8.5
								45	14	14.0		9.20				0.0079	7.0
								120	13	14.2		8.20				0.0048	6.2
13P-77.5-80.0-D	8/15/05	64.0	0.977	115.45	112.85	176.24	2.562	2	22	12.7	4.80	17.20	20.0	1.02	0.01408	0.0355	10.0
								5	19	13.2		14.20				0.0229	8.2
								15	18	13.3		13.20				0.0133	7.6
								45	15	13.8		10.20				0.0078	5.9
								120	14	14.0		9.20				0.0048	5.3

Hydrometer Particle Size Analysis

Cuttings samples from NC-EWDP-13P with specific gravity passing No. 10 sieve
(Hydrometer number 57878, type 152H)

Sample Number	Test Date	Percent Passing No. 10 Sieve	HWC No. 10 Moisture Correction Factor	Sample Weight (g)	Oven-Dried Sample Weight (g)	Total Oven-Dried Sample Weight (g)	Specific Gravity (g/cm ³)	Elapsed Time (min)	Hydrometer Reading	ASTM Depth	Composite Correction	Corrected Reading	Temperature (°C)	ASTM Alpha Correction	ASTM K Value	Largest Particle Passing (mm)	Percent Passing
13P-82.5-85.0-D	8/15/05	72.2	0.948	115.31	109.33	151.41	2.579	2	19	13.2	4.80	14.20	20.0	1.01	0.01365	0.0351	9.5
								5	17	13.5		12.20				0.0224	8.1
								15	16	13.7		11.20				0.0130	7.5
								45	15	13.8		10.20				0.0076	6.8
								120	14	14.0		9.20				0.0047	6.1
13P-162.5-165.0-D	8/15/05	77.0	0.926	117.19	108.56	140.92	2.616	2	27	11.9	4.80	22.20	20.0	1.01	0.01365	0.0333	15.9
								5	24	12.4		19.20				0.0215	13.8
								15	21	12.9		16.20				0.0127	11.6
								45	18	13.3		13.20				0.0074	9.5
								120	16	13.7		11.20				0.0046	8.0
13P-167.5-170.0-D	8/16/05	68.0	0.864	118.32	102.27	150.40	2.682	2	45	8.9	4.80	40.20	20.0	0.99	0.01344	0.0284	26.5
								5	41	9.6		36.20				0.0186	23.8
								15	36	10.4		31.20				0.0112	20.5
								45	32	11.1		27.20				0.0067	17.9
								120	30	11.4		25.20				0.0041	16.6
13P-172.5-175.0-D	8/16/05	83.1	0.900	115.23	103.69	124.82	2.628	2	36	10.4	4.80	31.20	20.0	1.00	0.01365	0.0311	25.0
								5	33	10.9		28.20				0.0202	22.6
								15	30	11.4		25.20				0.0119	20.2
								45	27	11.9		22.20				0.0070	17.8
								120	24	12.4		19.20				0.0044	15.4
13P-177.5-180.0-D	8/16/05	88.3	0.893	51.42	45.91	52.02	2.671	2	30	11.4	4.80	25.20	20.0	1.00	0.01365	0.0326	48.4
								5	29	11.5		24.20				0.0207	46.5
								15	28	11.7		23.20				0.0121	44.6
								45	26	12.0		21.20				0.0070	40.8
								120	25	12.2		20.20				0.0044	38.8
13P-192.5-195.0-D	8/16/05	99.2	0.854	52.33	44.70	45.07	2.688	2	32	11.1	4.80	27.20	20.0	0.99	0.01344	0.0317	59.8
								5	31	11.2		26.20				0.0201	57.6
								15	30	11.4		25.20				0.0117	55.4
								45	29	11.5		24.20				0.0068	53.2
								120	27	11.9		22.20				0.0042	48.8
13P-197.5-200.0-D	8/16/05	100.0	0.877	52.25	45.81	45.81	2.704	2	39	9.9	4.80	34.20	20.0	0.99	0.01344	0.0299	73.9
								5	38	10.1		33.20				0.0191	71.7
								15	37	10.2		32.20				0.0111	69.6
								45	35	10.6		30.20				0.0065	65.3
								120	31	11.2		26.20				0.0041	56.6
13P-202.5-205.0-D	8/17/05	65.8	0.982	115.75	113.70	172.75	2.600	2	24	12.2	4.80	19.20	20.0	1.01	0.01386	0.0342	11.2
								5	22	12.7		17.20				0.0221	10.1
								15	20	13.0		15.20				0.0129	8.9
								45	18	13.3		13.20				0.0075	7.7
								120	16	13.7		11.20				0.0047	6.5

Hydrometer Particle Size Analysis

Cuttings samples from NC-EWDP-13P with specific gravity passing No. 10 sieve
(Hydrometer number 57878, type 152H)

Sample Number	Test Date	Percent Passing No. 10 Sieve	HWC No. 10 Moisture Correction Factor	Sample Weight (g)	Oven-Dried Sample Weight (g)	Total Oven-Dried Sample Weight (g)	Specific Gravity (g/cm ³)	Elapsed Time (min)	Hydrometer Reading	ASTM Depth	Composite Correction	Corrected Reading	Temperature (°C)	ASTM Alpha Correction	ASTM K Value	Largest Particle Passing (mm)	Percent Passing
13P-207.5-210.0-D	8/17/05	73.6	0.969	113.58	110.02	149.42	2.629	2	32	11.1	4.80	27.20	20.0	1.00	0.01365	0.0322	18.2
								5	30	11.4		25.20				0.0206	16.9
								15	27	11.9		22.20				0.0122	14.9
								45	24	12.4		19.20				0.0072	12.8
								120	22	12.7		17.20				0.0044	11.5
13P-212.5-215.0-D	8/17/05	68.3	0.968	115.81	112.14	164.29	2.618	2	37	10.2	4.80	32.20	20.0	1.01	0.01386	0.0313	19.8
								5	35	10.6		30.20				0.0202	18.6
								15	32	11.1		27.20				0.0119	16.7
								45	29	11.5		24.20				0.0070	14.9
								120	26	12.0		21.20				0.0044	13.0
13P-217.5-220.0-D	8/17/05	76.5	0.976	112.74	110.02	143.76	2.616	2	28	11.7	4.80	23.20	20.0	1.02	0.01408	0.0341	16.5
								5	26	12.0		21.20				0.0218	15.0
								15	23	12.5		18.20				0.0129	12.9
								45	21	12.9		16.20				0.0075	11.5
								120	19	13.2		14.20				0.0047	10.1
13P-222.5-225.0-D	8/17/05	68.9	0.975	111.07	108.27	157.15	2.607	2	28	11.7	4.80	23.20	20.0	1.01	0.01386	0.0335	14.9
								5	25	12.2		20.20				0.0217	13.0
								15	23	12.5		18.20				0.0127	11.7
								45	20	13.0		15.20				0.0074	9.8
								120	18	13.3		13.20				0.0046	8.5
13P-227.5-230.0-D	8/17/05	69.1	0.973	112.73	109.65	158.70	2.589	2	31	11.2	4.80	26.20	20.0	1.01	0.01386	0.0328	16.7
								5	28	11.7		23.20				0.0212	14.8
								15	25	12.2		20.20				0.0125	12.9
								45	23	12.5		18.20				0.0073	11.6
								120	20	13.0		15.20				0.0046	9.7
13P-232.5-235.0-D	8/18/05	68.5	0.981	110.06	108.02	157.67	2.580	2	25	12.2	4.80	20.20	20.0	1.01	0.01386	0.0342	12.9
								5	23	12.5		18.20				0.0219	11.7
								15	21	12.9		16.20				0.0129	10.4
								45	19	13.2		14.20				0.0075	9.1
								120	17	13.5		12.20				0.0046	7.8
13P-237.5-240.0-D	8/18/05	70.0	0.976	115.28	112.47	160.77	2.589	2	26	12.0	4.80	21.20	20.0	1.01	0.01386	0.0339	13.3
								5	23	12.5		18.20				0.0219	11.4
								15	21	12.9		16.20				0.0129	10.2
								45	19	13.2		14.20				0.0075	8.9
								120	17	13.5		12.20				0.0046	7.7
13P-242.5-245.0-D	8/18/05	88.7	0.989	116.35	115.11	129.76	2.474	2	16	13.7	4.80	11.34	20.0	1.05	0.01456	0.0381	9.2
								5	14	14.0		9.20				0.0244	7.4
								15	13	14.2		8.20				0.0142	6.6
								45	12	14.3		7.20				0.0082	5.8
								120	10	14.7		5.20				0.0051	4.2

Hydrometer Particle Size Analysis

Cuttings samples from NC-EWDP-13P with specific gravity passing No. 10 sieve
(Hydrometer number 57878, type 152H)

Sample Number	Test Date	Percent Passing No. 10 Sieve	HWC No. 10 Moisture Correction Factor	Sample Weight (g)	Oven-Dried Sample Weight (g)	Total Oven-Dried Sample Weight (g)	Specific Gravity (g/cm ³)	Elapsed Time (min)	Hydrometer Reading	ASTM Depth	Composite Correction	Corrected Reading	Temperature (°C)	ASTM Alpha Correction	ASTM K Value	Largest Particle Passing (mm)	Percent Passing
13P-247.5-250.0-D	8/18/05	64.2	0.987	113.64	112.12	174.77	2.518	2	18	13.3	4.80	13.20	20.0	1.03	0.01431	0.0369	7.8
								5	15	13.8		10.20				0.0238	6.0
								15	14	14.0		9.20				0.0138	5.4
								45	12	14.3		7.20				0.0081	4.2
								120	10	14.7		5.20				0.0050	3.1
13P-252.5-255.0-D	8/18/05	69.8	0.974	115.36	112.40	160.96	2.570	2	23	12.5	4.80	18.20	20.0	1.02	0.01408	0.0352	11.5
								5	20	13.0		15.20				0.0227	9.6
								15	18	13.3		13.20				0.0133	8.4
								45	15	13.8		10.20				0.0078	6.5
								120	13	14.2		8.20				0.0048	5.2
13P-257.5-260.0-D	8/18/05	76.7	0.980	113.43	111.12	144.96	2.584	2	20	13.0	4.80	15.20	20.0	1.01	0.01386	0.0353	10.6
								5	18	13.3		13.20				0.0226	9.2
								15	16	13.7		11.20				0.0132	7.8
								45	14	14.0		9.20				0.0077	6.4
								120	13	14.2		8.20				0.0048	5.7

Wet Sieve Particle Size Analysis

Cuttings samples from NC-EWDP-13P

Sample Number	Test Start Date	Sample Weight (g)	Hygroscopic Moisture Correction Factor (g/g)	Oven Dried Sample Weight (g)	Percent of Sample Passing								
					3-inch Sieve	1½-inch Sieve	¾-inch Sieve	3/8-inch Sieve	No. 4 Sieve	No. 10 Sieve	No. 40 Sieve	No. 100 Sieve	No. 200 Sieve
13P-2.5-5.0-D	8/3/05	602.6	0.971	585.1	100.0	100.0	98.1	68.0	45.6	27.0	15.8	8.6	4.8
13P-7.5-10.0-D	8/3/05	730.4	0.989	722.7	100.0	100.0	100.0	92.7	76.0	55.4	35.9	18.1	9.9
13P-12.5-15.0-D	8/3/05	822.9	0.976	802.9	100.0	100.0	98.5	87.1	65.3	48.6	36.1	17.2	6.9
13P-17.5-20.0-D	8/3/05	948.3	0.977	926.4	100.0	100.0	100.0	87.0	74.8	51.0	31.3	20.2	14.8
13P-22.5-25.0-D	8/3/05	950.4	0.972	923.7	100.0	100.0	100.0	92.8	75.0	49.8	29.4	15.9	9.2
13P-27.5-30.0-D	8/3/05	1023.1	0.981	1003.4	100.0	100.0	98.0	90.9	72.7	48.3	25.8	14.8	8.4
13P-32.5-35.0-D	8/3/05	729.9	0.975	711.7	100.0	100.0	97.6	85.7	70.8	53.0	31.4	17.3	10.1
13P-37.5-40.0-D	8/3/05	720.4	0.980	706.2	100.0	100.0	100.0	91.0	73.5	54.6	27.6	14.4	7.5
13P-42.5-45.0-D	8/3/05	384.0	0.982	377.2	100.0	100.0	97.2	79.8	64.4	54.4	38.6	18.9	6.2
13P-47.5-50.0-D	8/4/05		-675.887										
13P-52.5-55.0-D	8/4/05	351.1	0.986	346.3	100.0	100.0	100.0	76.7	60.6	41.5	19.5	9.0	3.4
13P-57.5-60.0-D	8/4/05	338.5	0.987	334.1	100.0	100.0	100.0	81.6	60.7	47.9	34.3	19.4	6.1
13P-62.5-65.0-D	8/4/05	492.0	0.934	459.4	100.0	100.0	95.2	77.8	56.6	36.3	14.7	5.1	2.0
13P-67.5-70.0-D	8/5/05	500.0	0.961	480.3	100.0	100.0	100.0	94.5	86.1	74.4	46.7	22.2	10.2
13P-72.5-75.0-D	8/5/05	394.2	0.971	382.8	100.0	100.0	100.0	96.2	90.6	82.7	58.3	31.7	14.9
13P-77.5-80.0-D	8/5/05	264.9	0.981	260.0	100.0	100.0	100.0	85.8	74.7	64.0	44.8	24.1	12.2
13P-82.5-85.0-D	8/5/05	300.7	0.955	287.2	100.0	100.0	100.0	92.8	84.2	72.2	47.2	20.1	9.9
13P-162.5-165.0-D	8/5/05	530.8	0.933	495.1	100.0	100.0	100.0	98.6	90.8	77.0	51.3	31.1	20.7
13P-167.5-170.0-D	8/8/05	690.3	0.887	612.4	100.0	100.0	100.0	95.2	85.2	68.0	49.4	39.0	33.9
13P-172.5-175.0-D	8/8/05	609.1	0.908	552.9	100.0	100.0	100.0	98.7	93.7	83.1	63.9	46.1	30.5
13P-177.5-180.0-D	8/8/05	663.2	0.879	582.9	100.0	100.0	100.0	98.3	94.8	88.3	76.5	65.4	54.8

Wet Sieve Particle Size Analysis

Cuttings samples from NC-EWDP-13P

Sample Number	Test Start Date	Sample Weight (g)	Hygroscopic Moisture Correction Factor (g/g)	Oven Dried Sample Weight (g)	Percent of Sample Passing								
					3-inch Sieve	1½-inch Sieve	¾-inch Sieve	3/8-inch Sieve	No. 4 Sieve	No. 10 Sieve	No. 40 Sieve	No. 100 Sieve	No. 200 Sieve
13P-192.5-195.0-D	8/8/05	649.1	0.840	545.6	100.0	100.0	100.0	100.0	99.8	99.2	96.0	88.9	80.9
13P-197.5-200.0-D	8/8/05	664.4	0.816	542.3	100.0	100.0	100.0	100.0	100.0	100.0	97.3	93.1	83.5
13P-202.5-205.0-D	8/8/05	354.3	0.949	336.1	100.0	100.0	100.0	89.4	78.9	65.8	46.6	28.4	14.3
13P-207.5-210.0-D	8/9/05	486.8	0.922	449.0	100.0	100.0	100.0	96.1	87.1	73.6	52.2	33.9	23.2
13P-212.5-215.0-D	8/9/05	484.2	0.930	450.5	100.0	100.0	100.0	94.4	83.3	68.3	49.2	33.9	25.0
13P-217.5-220.0-D	8/9/05	457.4	0.934	427.3	100.0	100.0	100.0	97.7	88.7	76.5	56.5	35.2	21.9
13P-222.5-225.0-D	8/11/05	370.9	0.937	347.6	100.0	100.0	100.0	94.0	83.7	68.9	47.2	28.3	18.1
13P-227.5-230.0-D	8/11/05	526.8	0.921	485.1	100.0	100.0	100.0	94.1	81.2	69.1	49.3	31.0	20.8
13P-232.5-235.0-D	8/11/05	358.4	0.925	331.6	100.0	100.0	96.3	86.8	77.3	68.5	51.2	29.8	18.3
13P-237.5-240.0-D	8/11/05	477.7	0.939	448.7	100.0	100.0	100.0	93.1	80.8	70.0	48.9	27.5	17.8
13P-242.5-245.0-D	8/11/05	275.0	0.960	264.0	100.0	100.0	100.0	98.7	96.2	88.7	65.8	33.9	16.2
13P-247.5-250.0-D	8/12/05	452.0	0.952	430.2	100.0	100.0	100.0	89.7	77.1	64.2	40.0	20.1	11.5
13P-252.5-255.0-D	8/12/05	580.7	0.943	547.8	100.0	100.0	100.0	91.1	81.5	69.8	49.9	29.2	18.0
13P-257.5-260.0-D	8/12/05	529.6	0.950	502.9	100.0	100.0	96.1	93.3	86.1	76.7	54.4	27.7	16.1