

Table B.1. Daily Quantities, Field Compaction, Proctor, and Sand-Cone Test Frequencies for the GHP-2 Radon Barrier: 2005-2006

Note: This table lists only those days on which radon barrier material was placed and/or testing performed. CY = Cubic Yards; NG = Nuclear Gauge (field compaction test)
 Testing Frequency Requirements: *Field Compaction Tests: 1: 500 CY* *Proctors: 1: 5000 CY* *Sand-Cones: 1:10 NG tests*

Date	Total Quantities Placed		Field Compaction Test Frequency			Proctor Test Frequency			Sand-Cone Test Frequency		
	Daily Yardage	Cumulative Yardage	Daily Tests Performed	Cumulative No. of Tests	Ratio (per CY)	Daily Tests Performed	Cumulative No. of Tests	Ratio (per CY)	Daily Tests Performed	Cumulative No. of Tests	Ratio (/NG tests)
8/15/05	2,736	2,736		0	--		0	--		0	--
8/16/05	4,832	7,568	7	7	1: 1081	1	1	1: 7568		0	--
8/17/05	2,496	10,064		7	1: 1438		1	1: 10064		0	--
8/18/05	0	10,064	7	14	1: 719	1	2	1: 5032	1	1	1: 14
8/22/05	736	10,800		14	1: 771		2	1: 5400		1	1: 14
8/23/05	928	11,728	4	18	1: 652		2	1: 5864	1	2	1: 9
8/24/05	528	12,256	2	20	1: 613		2	1: 6128		2	1: 10
8/25/05	160	12,416		20	1: 621		2	1: 6208		2	1: 10
8/26/05	256	12,672		20	1: 634		2	1: 6336		2	1: 10
8/29/05	2,032	14,704	1	21	1: 700	1	3	1: 4901		2	1: 11
8/30/05	2,832	17,536	8	29	1: 605		3	1: 5845		2	1: 15
8/31/05	3,888	21,424	7	36	1: 595	1	4	1: 5356	1	3	1: 12
9/1/05	3,632	25,056	8	44	1: 569	1	5	1: 5011	1	4	1: 11
9/6/05	176	25,232		44	1: 573		5	1: 5046		4	1: 11
9/7/05	3,984	29,216	5	49	1: 596		5	1: 5843		4	1: 12
9/8/05	4,080	33,296	2	51	1: 653	1	6	1: 5549		4	1: 13
9/9/05	288	33,584	13	64	1: 525	1	7	1: 4798		4	1: 16
9/12/05	3,424	37,008	4	68	1: 544		7	1: 5287		4	1: 17
9/13/05	3,632	40,640	9	77	1: 528	1	8	1: 5080	2	6	1: 13
9/14/05	0	40,640	6	83	1: 490	1	9	1: 4516		6	1: 14
9/15/05	2,832	43,472	8	91	1: 478	1	10	1: 4347		6	1: 15
9/16/05	2,640	46,112	5	96	1: 480		10	1: 4611	1	7	1: 14
9/19/05	1,456	47,568	2	98	1: 485		10	1: 4757		7	1: 14
9/20/05	2,912	50,480		98	1: 515		10	1: 5048		7	1: 14
9/21/05	0	50,480	3	101	1: 500	1	11	1: 4589		7	1: 14
9/22/05	1,408	51,888		101	1: 514		11	1: 4717		7	1: 14
9/23/05	2,272	54,160	8	109	1: 497	1	12	1: 4513	1	8	1: 14
9/26/05	896	55,056		109	1: 505		12	1: 4588		8	1: 14
9/27/05	3,840	58,896	7	116	1: 508	1	13	1: 4530	2	10	1: 12
9/28/05	2,976	61,872	6	122	1: 507	1	14	1: 4419	1	11	1: 11
9/29/05	2,704	64,576	7	129	1: 501		14	1: 4613	1	12	1: 11
9/30/05	1,888	66,464	4	133	1: 500	1	15	1: 4431		12	1: 11

Table B.1. Daily Quantities, Field Compaction, Proctor, and Sand-Cone Test Frequencies for the GHP-2 Radon Barrier: 2005-2006

Note: This table lists only those days on which radon barrier material was placed and/or testing performed. CY = Cubic Yards; NG = Nuclear Gauge (field compaction test)
 Testing Frequency Requirements: *Field Compaction Tests: 1: 500 CY* *Proctors: 1: 5000 CY* *Sand-Cones: 1:10 NG tests*

Date	Total Quantities Placed		Field Compaction Test Frequency			Proctor Test Frequency			Sand-Cone Test Frequency		
	Daily Yardage	Cumulative Yardage	Daily Tests Performed	Cumulative No. of Tests	Ratio (per CY)	Daily Tests Performed	Cumulative No. of Tests	Ratio (per CY)	Daily Tests Performed	Cumulative No. of Tests	Ratio (/NG tests)
10/3/05	1,040	67,504		133	1: 508		15	1: 4500		12	1: 11
10/4/05	1,776	69,280		133	1: 521		15	1: 4619		12	1: 11
10/8/05	2,176	71,456		133	1: 537		15	1: 4,764		12	1: 11
10/10/05	0	71,456	8	141	1: 507		15	1: 4,764	2	14	1: 10
10/11/05	352	71,808	1	142	1: 506		15	1: 4,787		14	1: 10
10/12/05	0	71,808	6	148	1: 485	1	16	1: 4,488	1	15	1: 10
5/11/06	48	71,856		148	1: 486		16	1: 4,491		15	1: 10
5/12/06	2,620	74,476	2	150	1: 497	1	17	1: 4,381		15	1: 10
5/15/06	1,440	75,916	6	156	1: 487		17	1: 4,466	1	16	1: 10
5/16/06	710	76,626	7	163	1: 470	1	18	1: 4,257	3	19	1: 9

Total Quantities Placed, Summary by Year

Year	Cu Yds Placed
2005	71,808
2006	4,818
TOTAL:	76,626

Table B.2. Field Compaction Test Results for the GHP No. 2 Radon Barrier: 2005-2006

Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed. Max.= Maximum; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both endpoints. CY = Cubic Yards. See NOTES and summary statistics at the end of this table.

Compaction Test ID	Date	Location			Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Remarks
		Northing	Easting	Lift	Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture	Percent Compaction		
								<i>Requirements:</i>	\geq Opt. to +4	≥ 95		
R-1	8/16/05	792110	836660	1	RB-1	104.6	20.0	101.4	22.5	96.9	P	
R-2	8/16/05	792210	836840	1	RB-1	104.6	20.0	103.3	22.8	98.8	P	
R-3	8/16/05	792070	836800	1	RB-1	104.6	20.0	102.5	22.9	98.0	P	
R-4	8/16/05	792010	836910	1	RB-1	104.6	20.0	102.2	21.3	97.7	P	
R-5	8/16/05	792230	836940	Finish	RB-1	104.6	20.0	103.0	21.7	98.5	P	
R-6	8/16/05	792010	836710	Finish	RB-1	104.6	20.0	105.2	21.2	100.6	P	
R-7	8/16/05	792260	836780	Finish	RB-1	104.6	20.0	106.1	20.9	101.4	P	
R-8	* 8/18/05	792280	836660	1	RB-1	104.6	20.0	106.8	20.9	102.1	P	
R-9	8/18/05	792220	836670	1	RB-1	104.6	20.0	106.1	22.0	101.4	P	
R-10	8/18/05	792120	836610	1	RB-1	104.6	20.0	104.0	22.5	99.4	P	
R-11	8/18/05	792290	836710	1	RB-2	106.1	20.5	103.4	22.7	97.5	P	
R-12	8/18/05	792270	836480	1	RB-2	106.1	20.5	103.7	22.9	97.7	P	
R-13	8/18/05	792300	836620	1	RB-2	106.1	20.5	101.1	24.6	95.3	P	
R-14	8/18/05	792260	836550	1	RB-2	106.1	20.5	107.7	20.8	101.5	P	
R-15	8/23/05	792452	836662	Finish	RB-2	106.1	20.5	103.5	22.9	97.5	P	
R-16	8/23/05	792095	836509	Finish	RB-2	106.1	20.5	108.6	21.6	102.4	P	
R-17	* 8/23/05	792291	836540	Finish	RB-2	106.1	20.5	103.0	20.6	97.1	P	
R-18	8/23/05	792455	836579	Finish	RB-2	106.1	20.5	105.5	21.4	99.4	P	
R-19	8/24/05	792083	836415	Finish	RB-2	106.1	20.5	106.4	21.0	100.3	P	
R-20	8/24/05	792186	836464	Finish	RB-2	106.1	20.5	104.8	22.1	98.8	P	
R-20V	8/29/05	792420	836660	1	RB-2	106.1	20.5	107.7	18.7	101.5	F Moist	Verification sample fails moisture.
R-20VR	8/29/05	792420	836660	1	RB-2	106.1	20.5	103.9	21.4	97.9	P	Verification sample retest.
R-21	8/29/05	792370	836500	1	RB-3	103.7	20.3	105.8	20.9	102.0	P	
R-22	8/30/05	792190	836370	1	RB-3	103.7	20.3	103.8	21.5	100.1	P	
R-23	8/30/05	792410	836490	1	RB-3	103.7	20.3	102.5	21.3	98.8	P	
R-24	8/30/05	792270	836350	1	RB-3	103.7	20.3	100.5	23.7	96.9	P	
R-25	8/30/05	792350	836420	1	RB-3	103.7	20.3	101.5	24.0	97.9	P	
R-26	8/30/05	792250	836430	Finish	RB-3	103.7	20.3	103.3	23.7	99.6	P	
R-27	8/30/05	792470	836490	Finish	RB-3	103.7	20.3	105.7	20.5	101.9	P	
R-28	8/30/05	792270	836290	Finish	RB-3	103.7	20.3	100.6	23.6	97.0	P	
R-29	8/30/05	792410	836290	1	RB-3	103.7	20.3	104.9	21.6	101.2	P	
R-30	8/31/05	792475	836395	Finish	RB-3	103.7	20.3	102.8	22.4	99.1	P	
R-31	8/31/05	792515	836490	Finish	RB-4	104.1	20.0	101.9	23.5	97.9	P	
R-32	* 8/31/05	792423	836213	1	RB-4	104.1	20.0	100.2	21.8	96.3	P	
R-33	8/31/05	792545	836365	1	RB-4	104.1	20.0	99.6	23.4	95.7	P	
R-34	8/31/05	792578	836440	1	RB-4	104.1	20.0	99.4	23.1	95.5	P	
R-35	8/31/05	792485	836300	Finish	RB-4	104.1	20.0	103.0	20.5	98.9	P	
R-36	8/31/05	792515	836225	Finish	RB-4	104.1	20.0	105.4	20.7	101.2	P	
R-37	9/1/05	792550	836285	Finish	RB-4	104.1	20.0	101.3	22.7	97.3	P	

Table B.2. Field Compaction Test Results for the GHP No. 2 Radon Barrier: 2005-2006

Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed. Max.= Maximum; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both endpoints. CY = Cubic Yards. See NOTES and summary statistics at the end of this table.

Compaction Test ID	Date	Location			Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Remarks
		Northing	Easting	Lift	Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture	Percent Compaction		
								<i>Requirements:</i>	\geq Opt. to +4	≥ 95		
R-38 *	9/1/05	792570	836185	1	RB-4	104.1	20.0	104.6	21.9	100.5	P	
R-39	9/1/05	792680	836355	1	RB-4	104.1	20.0	105.8	20.4	101.6	P	
R-40	9/1/05	792625	836120	Finish	RB-4	104.1	20.0	103.7	21.4	99.6	P	
R-41	9/1/05	792625	836120	1	RB-5	105.7	20.0	101.2	22.5	95.7	P	
R-42	9/1/05	792730	836355	1	RB-5	105.7	20.0	102.4	22.0	96.9	P	
R-43	9/1/05	792680	836235	1	RB-5	105.7	20.0	103.6	21.9	98.0	P	
R-44	9/1/05	792645	836180	Finish	RB-5	105.7	20.0	102.2	21.8	96.7	P	
R-45	9/7/05	792740	836320	Finish	RB-5	105.7	20.0	103.6	21.8	98.0	P	
R-46	9/7/05	792840	836405	1	RB-5	105.7	20.0	103.4	24.8	97.8	P	
R-47	9/7/05	792795	836350	1	RB-5	105.7	20.0	100.7	24.0	95.3	P	
R-48	9/7/05	792785	836370	Finish	RB-5	105.7	20.0	102.2	22.4	96.7	P	
R-49	9/7/05	792695	836570	1	RB-5	105.7	20.0	102.2	21.0	96.7	P	
R-50	9/8/05	792745	836595	1	RB-5	105.7	20.0	104.6	20.8	99.0	P	
R-51	9/8/05	792770	836525	Finish	RB-6	103.8	21.2	101.7	21.9	98.0	P	
R-52	9/9/05	792540	836575	1	RB-6	103.8	21.2	104.5	21.6	100.7	P	
R-53	9/9/05	792665	836490	Finish	RB-6	103.8	21.2	106.6	21.8	102.7	P	
R-54	9/9/05	792715	836510	1	RB-6	103.8	21.2	102.3	21.7	98.6	P	
R-55	9/9/05	792630	836565	1	RB-6	103.8	21.2	101.1	21.4	97.4	P	
R-56	9/9/05	792550	836630	1	RB-6	103.8	21.2	101.1	21.3	97.4	P	
R-57	9/9/05	792575	836700	1	RB-6	103.8	21.2	101.8	22.3	98.1	P	
R-58	9/9/05	792740	836660	1	RB-6	103.8	21.2	101.4	23.1	97.7	P	
R-59	9/9/05	792810	836575	1	RB-6	103.8	21.2	101.7	21.4	98.0	P	
R-60	9/9/05	792640	836670	Finish	RB-6	103.8	21.2	102.2	21.5	98.5	P	
R-61	9/9/05	792855	836640	Finish	RB-7	106.3	19.8	101.3	20.7	95.3	P	
R-62	9/9/05	792670	836515	Finish	RB-7	106.3	19.8	101.0	20.0	95.0	P	
R-63	9/9/05	792590	836540	Finish	RB-7	106.3	19.8	106.9	20.1	100.6	P	
R-64	9/9/05	792670	836690	Finish	RB-7	106.3	19.8	103.9	20.4	97.7	P	
R-65	9/12/05	792945	836400	1	RB-7	106.3	19.8	101.3	23.4	95.3	P	
R-66	9/12/05	793065	836450	Finish	RB-7	106.3	19.8	105.0	21.1	98.8	P	
R-67	9/12/05	792995	836370	Finish	RB-7	106.3	19.8	101.1	22.4	95.1	P	
R-68	9/12/05	793015	836465	1	RB-7	106.3	19.8	102.2	21.1	96.1	P	
R-69	9/13/05	793120	836410	1	RB-7	106.3	19.8	104.4	20.8	98.2	P	
R-70	9/13/05	793135	836345	1	RB-7	106.3	19.8	104.7	20.5	98.5	P	
R-71	9/13/05	793110	836270	1	RB-8	104.0	21.1	104.1	22.1	100.1	P	
R-72	9/13/05	793180	836305	Finish	RB-8	104.0	21.1	101.7	22.8	97.8	P	
R-73 *	9/13/05	792990	836550	1	RB-8	104.0	21.1	100.4	23.8	96.5	P	
R-74	9/13/05	792810	836705	1	RB-8	104.0	21.1	105.6	22.4	101.5	P	
R-75 *	9/13/05	792905	836620	Finish	RB-8	104.0	21.1	101.9	22.4	98.0	P	
R-76	9/13/05	792710	836770	1	RB-8	104.0	21.1	101.4	24.0	97.5	P	

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Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed. Max.= Maximum; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both endpoints. CY = Cubic Yards. See NOTES and summary statistics at the end of this table.

Compaction Test ID	Date	Location			Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Remarks
		Northing	Easting	Lift	Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture	Percent Compaction		
								<i>Requirements:</i>	<i>≥ Opt. to +4</i>	<i>≥ 95</i>		
R-77	9/13/05	792980	836620	1	RB-8	104.0	21.1	102.6	22.3	98.7	P	
R-78	9/14/05	792475	836730	1	RB-8	104.0	21.1	102.7	21.6	98.8	P	
R-79	9/14/05	793010	836580	Finish	RB-8	104.0	21.1	102.8	23.2	98.8	P	
R-80	9/14/05	792530	836800	Finish	RB-8	104.0	21.1	101.2	23.4	97.3	P	
R-81	9/14/05	792780	836455	1	RB-9	102.6	20.7	103.7	22.0	101.1	P	
R-82	9/14/05	792860	836525	Finish	RB-9	102.6	20.7	103.4	22.1	100.8	P	
R-83	9/14/05	792900	836455	Finish	RB-9	102.6	20.7	99.9	23.7	97.4	P	
R-84	9/15/05	792620	835795	1	RB-9	102.6	20.7	99.3	22.7	96.8	P	
R-85	9/15/05	792560	835830	1	RB-9	102.6	20.7	104.0	21.3	101.4	P	
R-86	9/15/05	792550	835890	1	RB-9	102.6	20.7	93.7	25.4	91.3	F Comp	Fails Compaction and Moisture
R-86R	9/15/05	792550	835890	1	RB-9	102.6	20.7	99.2	22.9	96.7	P	
R-87	9/15/05	792530	835950	1	RB-9	102.6	20.7	103.4	21.9	100.8	P	
R-88	9/15/05	792615	835900	Finish	RB-9	102.6	20.7	103.1	22.5	100.5	P	
R-89	9/15/05	792410	835870	Finish	RB-9	102.6	20.7	102.2	20.7	99.6	P	
R-90	9/15/05	792480	835930	1	RB-10	103.2	20.6	101.5	22.5	98.4	P	
R-91	9/15/05	792405	836010	1	RB-10	103.2	20.6	102.4	22.6	99.2	P	
R-92	9/16/05	792320	835980	Finish	RB-10	103.2	20.6	98.6	21.2	95.5	P	
R-93	9/16/05	792175	836015	1	RB-10	103.2	20.6	100.1	23.1	97.0	P	
R-94	9/16/05	792295	836100	Finish	RB-10	103.2	20.6	102.1	21.2	98.9	P	
R-95	9/16/05	792290	836190	1	RB-10	103.2	20.6	103.9	21.3	100.7	P	
R-96	9/16/05	792580	836030	1	RB-10	103.2	20.6	102.9	22.8	99.7	P	
R-97	9/19/05	792380	836960	1	RB-10	103.2	20.6	99.4	23.0	96.3	P	
R-98	9/19/05	792450	836915	1	RB-10	103.2	20.6	98.3	24.1	95.3	P	
R-99	9/21/05	792540	836970	1	RB-10	103.2	20.6	101.2	23.5	98.1	P	
R-100	9/21/05	792660	836950	1	RB-11	101.0	22.6	96.2	24.5	95.2	P	
R-101	9/21/05	792470	836970	Finish	RB-11	101.0	22.6	100.1	24.3	99.1	P	
R-102	9/23/05	792580	836875	1	RB-12	104.9	20.2	101.7	22.2	96.9	P	
R-103	9/23/05	792550	836920	1	RB-12	104.9	20.2	101.3	22.6	96.6	P	
R-104	9/23/05	792650	836990	Finish	RB-12	104.9	20.2	102.5	22.0	97.7	P	
R-105	9/23/05	792760	836845	1	RB-12	104.9	20.2	104.3	21.3	99.4	P	
R-106	9/23/05	792910	836860	Finish	RB-12	104.9	20.2	104.0	21.7	99.1	P	
R-107	9/23/05	792805	836930	Finish	RB-12	104.9	20.2	101.3	21.8	96.6	P	
R-108	9/23/05	792920	836950	Finish	RB-12	104.9	20.2	102.9	22.2	98.1	P	
R-109	9/23/05	792930	836800	1	RB-12	104.9	20.2	102.5	21.9	97.7	P	
R-110	9/27/05	792970	836805	Finish	RB-12	104.9	20.2	101.2	22.2	96.5	P	
R-111	9/27/05	793000	836740	Finish	RB-12	104.9	20.2	102.0	22.6	97.2	P	
R-112	9/27/05	793050	836770	1	RB-13	104.0	19.2	100.7	23.2	96.8	P	
R-113	9/27/05	793195	836750	1	RB-13	104.0	19.2	100.6	22.9	96.7	P	
R-114	9/27/05	793240	836640	1	RB-13	104.0	19.2	101.7	23.0	97.8	P	

Table B.2. Field Compaction Test Results for the GHP No. 2 Radon Barrier: 2005-2006

Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed.
 Max.= Maximum; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both endpoints. CY = Cubic Yards. See NOTES and summary statistics at the end of this table.

Compaction Test ID	Date	Location			Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Remarks
		Northing	Easting	Lift	Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture	Percent Compaction		
								<i>Requirements:</i>	\geq Opt. to +4	≥ 95		
R-115 *	9/27/05	793160	836780	Finish	RB-13	104.0	19.2	103.4	22.3	99.4	P	
R-116	9/27/05	793300	836640	Finish	RB-13	104.0	19.2	100.8	23.9	96.9	P	
R-117	9/28/05	793090	836590	Finish	RB-13	104.0	19.2	100.9	22.9	97.0	P	
R-118	9/28/05	793070	836680	1	RB-13	104.0	19.2	103.2	21.9	99.2	P	
R-119	9/28/05	793045	836720	Finish	RB-13	104.0	19.2	104.1	21.6	100.1	P	
R-120	9/28/05	793170	836590	Finish	RB-13	104.0	19.2	100.7	24.2	96.8	P	
R-121	9/28/05	793000	836930	1	RB-13	104.0	19.2	103.6	22.3	99.6	P	
R-122 *	9/28/05	793030	836860	Finish	RB-14	103.2	20.8	103.6	22.8	100.4	P	
R-123	9/29/05	793410	836520	1	RB-14	103.2	20.8	99.8	22.0	96.7	P	
R-124	9/29/05	793320	836460	Finish	RB-14	103.2	20.8	101.1	23.5	98.0	P	
R-125 *	9/29/05	792100	836030	1	RB-14	103.2	20.8	103.3	21.7	100.1	P	
R-126	9/29/05	792080	836110	Finish	RB-14	103.2	20.8	99.0	23.1	95.9	P	
R-127	9/29/05	792110	836205	1	RB-14	103.2	20.8	104.7	21.1	101.5	P	
R-128	9/29/05	791980	836130	Finish	RB-14	103.2	20.8	101.0	22.8	97.9	P	
R-129	9/29/05	791990	836250	1	RB-14	103.2	20.8	101.0	22.2	97.9	P	
R-130	9/30/05	791930	836205	Finish	RB-14	103.2	20.8	102.0	21.1	98.8	P	
R-131	9/30/05	792140	836270	1	RB-14	103.2	20.8	103.1	21.1	99.9	P	
R-132	9/30/05	792180	836240	Finish	RB-15	104.7	19.9	103.9	21.8	99.2	P	
R-133	9/30/05	792060	836310	Finish	RB-15	104.7	19.9	103.1	21.7	98.5	P	
R-134 *	10/10/05	791940	836310	1	RB-15	104.7	19.9	100.1	22.7	95.6	P	
R-135	10/10/05	791950	836440	1	RB-15	104.7	19.9	101.0	22.9	96.5	P	
R-136	10/10/05	792050	836395	1	RB-15	104.7	19.9	103.5	21.2	98.9	P	
R-137	10/10/05	791895	836495	1	RB-15	104.7	19.9	102.2	22.1	97.6	P	
R-138	10/10/05	791855	836580	1	RB-15	104.7	19.9	102.2	22.6	97.6	P	
R-139 *	10/10/05	791980	836340	Finish	RB-15	104.7	19.9	102.4	21.8	97.8	P	
R-140	10/10/05	791910	836420	Finish	RB-15	104.7	19.9	100.3	22.0	95.8	P	
R-141	10/10/05	791900	836520	Finish	RB-15	104.7	19.9	100.3	22.3	95.8	P	
R-142	10/11/05	791970	836570	1	RB-15	104.7	19.9	100.3	23.1	95.8	P	
R-143	10/12/05	791840	836640	1	RB-16	106.2	19.5	104.7	20.9	98.6	P	
R-144	10/12/05	791785	836815	1	RB-16	106.2	19.5	106.4	20.7	100.2	P	
R-145	10/12/05	791875	836745	1	RB-16	106.2	19.5	101.8	22.0	95.9	P	
R-146	10/12/05	791805	836770	Finish	RB-16	106.2	19.5	101.1	22.8	95.2	P	
R-147 *	10/12/05	791930	836605	Finish	RB-16	106.2	19.5	102.7	22.1	96.7	P	
R-148	10/12/05	791760	836980	Finish	RB-16	106.2	19.5	102.2	22.9	96.2	P	
R-149	5/12/06	792960	836050	1	RB-17	107.9	18.5	98.3	24.0	91.1	F Comp	Fails Compaction
R-149R	5/15/06	792960	836050	1	RB-17	107.9	18.5	103.5	22.1	95.9	P	Retest
R-150	5/12/06	792780	836220	1	RB-17	107.9	18.5	101.4	18.4	94.0	F C & M	Fails Compaction & Moisture
R-150R	5/15/06	792780	836220	1	RB-17	107.9	18.5	104.1	20.5	96.5	P	Retest

Table B.2. Field Compaction Test Results for the GHP No. 2 Radon Barrier: 2005-2006

Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed. Max.= Maximum; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both endpoints. CY = Cubic Yards. See NOTES and summary statistics at the end of this table.

Compaction Test ID	Date	Location		Lift	Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Remarks
		Northing	Easting		Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture	Percent Compaction		
								Requirements:	≥ Opt. to +4	≥ 95		
R-151	5/15/06	793020	836160	1	RB-17	107.9	18.5	101.1	22.7	93.7	F Comp	Fails Compaction
R-151R	5/15/06	793020	836160	1	RB-17	107.9	18.5	103.9	21.7	96.3	P	Retest
R-152	5/15/06	792850	836235	1	RB-17	107.9	18.5	98.7	24.9	91.5	F Comp	Fails Compaction
R-152R	5/16/06	792850	836235	1	RB-17	107.9	18.5	106.4	21.8	98.6	P	Retest
R-153	5/15/06	792840	836330	2	RB-17	107.9	18.5	100.2	23.2	92.9	F Comp	Fails Compaction
R-153R *	5/16/06	792840	836330	2	RB-17	107.9	18.5	106.2	20.4	98.4	P	Retest
R-154	5/15/06	792820	836130	2	RB-17	107.9	18.5	98.2	24.2	91.0	F Comp	Fails Compaction
R-154R	5/15/06	792820	836130	2	RB-17	107.9	18.5	106.5	20.0	98.7	P	Retest
R-155	5/15/06	792799	836280	2	RB-17	107.9	18.5	106.5	19.0	98.7	P	
R-155R	5/15/06	792799	836280	2	RB-17	107.9	18.5	104.7	21.1	97.0	P	Retest done at discretion of QC officer.
R-156 *	5/15/06	792960	836020	2	RB-17	107.9	18.5	104.1	21.8	96.5	P	
R-157	5/16/06	793090	836170	1	RB-17	107.9	18.5	104.0	21.3	96.4	P	
R-158	5/16/06	792990	836290	1	RB-17	107.9	18.5	103.2	22.6	95.6	P	
R-159	5/16/06	792960	836190	2	RB-18	104.9	19.7	109.7	19.1	104.6	F Moist	Fails Moisture
R-159R	5/16/06	792960	836190	2	RB-18	104.9	19.7	106.7	20.4	101.7	P	Retest
R-160	5/16/06	793060	836140	2	RB-18	104.9	19.7	104.9	19.1	100.0	F Moist	Fails Moisture
R-160R	5/16/06	793060	836140	2	RB-18	104.9	19.7	105.1	21.3	100.2	P	Retest
R-161 *	5/16/06	792895	836365	1	RB-18	104.9	19.7	105.1	21.4	100.2	P	
R-162	5/16/06	792985	836305	2	RB-18	104.9	19.7	104.0	21.3	99.1	P	
R-163 *	5/16/06	792950	836260	2	RB-18	104.9	19.7	104.4	21.3	99.5	P	

Note:

Field density and moisture tests were taken using a nuclear density gauge. The gauge was field standardized at each test location and was correlated by a Sand Cone Test at a frequency of one for every ten nuclear gauge tests.

Total Number of Tests (N): 163
Total Quantities placed: 76,626
Frequency: 1: 470 CY

N reflects passing tests only; also excludes R-20VR and R-155R cubic yards (CY)
meets the required frequency of 1:500 CY.

average:	102.8	22.1	98.2
minimum:	96.2	19.0	95.0
maximum:	108.6	24.8	102.7
standard deviation:	2.1	1.1	1.8
# Failed:	NA	3	7
# Retested:	NA	3	7

Table B.3. Standard Proctor Test Results for the GHP No. 2 Radon Barrier

Date	Laboratory Standard Proctor		
	Proctor ID	Maximum Dry Density (lbs/cu ft)	Optimum Moisture (%)
5/9/05	RB-1	104.6	20.0
8/2/05	RB-2	106.1	20.5
8/16/05	RB-3	103.7	20.3
8/30/05	RB-4	104.1	20.0
8/30/05	R-5	105.7	20.0
9/5/05	RB-6	103.8	21.2
9/6/05	RB-7	106.3	19.8
9/13/05	RB-8	104.0	21.1
9/13/05	RB-9	102.6	20.7
9/13/05	RB-10	103.2	20.6
9/15/05	RB-11	101.0	22.6
9/20/05	RB-12	104.9	20.2
9/26/05	RB-13	104.0	19.2
9/26/05	RB-14	103.2	20.8
9/30/05	RB-15	104.7	19.9
10/10/05	RB-16	106.2	19.5
4/10/06	RB-17	107.9	18.5
5/16/06	RB-18	104.9	19.7

count: 18 18

<i>average:</i>	104.5	20.3
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min: 101.0 18.5

max: 107.9 22.6

standard deviation: 1.6 0.9

Total cubic yards placed: 76,626

Proctor Frequency: 1: 4257 cubic yards placed

Total number of Field tests: 163

Frequency (vs. Field): 1: 9.1

The September 2003 reclamation plan specified a testing frequency of one Proctor test for every 10 or 15 field tests, depending on the variability of soils. As demonstrated herein, radon barrier soils were homogenous and Umetco exceeded the testing frequency requirements.

Table B.4. Sand-Cone Correlation Documentation for the GHP-2 Radon Barrier

Date	Compaction Test ID	Nuclear Gauge Tests		Sand-Cone Tests		Sand-Cone Correlation Results	
		In-Place Wet Density (pcf)	Moisture Content (%)	In-Place Wet Density (pcf)	Moisture Content (%)	Wet Unit Weight Variation (%)	Moisture Content Variation (%)
8/18/05	R-8	129.2	20.9	123.1	21.8	-4.7	0.9
8/23/05	R-17	124.2	20.6	116.6	22.3	-6.1	1.7
8/31/05	R-32	122.0	21.8	119.8	24.9	-1.8	3.1
9/1/05	R-38	127.9	21.9	124.8	21.4	-2.4	-0.5
9/13/05	R-73	124.3	23.8	120.5	24.6	-3.1	0.8
9/13/05	R-75	124.7	22.4	125.0	21.2	0.2	-1.2
9/16/05	R-91	123.2	23.1	122.7	21.7	-0.4	-1.4
9/23/05	R-107	123.4	21.8	122.1	21.8	-1.1	0.0
9/27/05	R-112	124.1	23.2	121.0	24.4	-2.5	1.2
9/27/05	R-115	126.5	22.3	122.3	23.1	-3.3	0.8
9/28/05	R-122	127.2	22.8	123.0	23.5	-3.3	0.7
9/29/05	R-125	125.8	21.7	123.1	22.6	-2.1	0.9
10/10/05	R-134	122.9	22.7	123.1	23.6	0.2	0.9
10/10/05	R-139	124.8	21.8	121.5	22.1	-2.6	0.3
10/12/05	R-147	125.5	22.1	124.1	23.3	-1.1	1.2
5/15/06	R-156	126.8	21.8	125.6	20.2	-0.9	-1.6
5/16/06	R-153R	127.9	20.4	129.4	19.2	1.2	-1.2
5/16/06	R-161	127.5	21.4	128.1	20.5	0.5	-0.9
5/16/06	R-163	126.7	21.3	123.8	21.0	-2.3	-0.3

pcf - pounds per cubic feet

<i>Number of sand-cone tests:</i>	19	
<i>average percent variation:</i>	-1.9	0.3
<i>average percent variation on absolute value:</i>	2.1	1.0
<i>standard deviation (absolute value):</i>	1.6	0.7

Note:

For the GHP-2 radon barrier, a sand-cone correlation test was performed for every 9 nuclear gauge tests. Correlations were deemed acceptable if the average of ten nuclear test results vs. sand cone test results comparisons met the following criteria:

sand-cone method wet density: +/- 3%
sand-cone method moisture content: +/- 2%

As shown above, most results closely correlated and variations were generally below the above criteria. In cases where discrete variations exceeded these criteria (see highlighted cells above), the running averages (for every 10 tests) were $\leq 2\%$ for both endpoints.

Table B.5. Soil Classification Test Results for the GHP No. 2 Radon Barrier

Date Sampled	Gradation Sample ID	PARTICLE SIZE ANALYSIS Seive Size (% Passing)										Atterberg Sample ID	Atterberg Limits		Unified Soil Classification
		1"	3/4"	3/8"	#4	#8	#16	#30	#50	#100	#200		Liquid Limit	Plastic Index	
Plan Requirements:		maximum particle size = 1" ≥ 50											≥ 25	≥ 10	CL or CH
5/9/05	RB-1	-	-	-	100	99.0	98.0	97.0	96.1	95.3	94.3	RB-1	58	42	CH
8/2/05	RB-2	-	-	-	100	98.5	97.0	94.9	92.3	89.9	87.3	RB-2	63	43	CH
8/16/05	R3	-	-	-	100	98.7	97.8	96.9	94.7	93.5	91.8	R3	58	42	CH
8/16/05	R5	-	-	-	100	99.1	98.1	97.2	96.3	95.5	94.4	R5	57	41	CH
8/16/05	R7	-	-	-	100	98.7	97.6	95.9	94.3	92.9	91.1	R7	57	41	CH
8/18/05	R9	-	-	-	100	99.0	97.5	95.0	92.4	90.2	88.2	R9	58	40	CH
8/18/05	R13	-	-	-	100	99.0	97.9	96.4	94.8	83.5	91.8	R13	55	39	CH
8/23/05	R15	-	-	-	100	99.0	98.2	97.2	96.2	95.4	93.9	R15	55	38	CH
8/23/05	R17	-	-	-	100	99.3	98.4	97.1	95.8	94.7	93.3	R17	55	38	CH
8/24/05	R19	-	-	-	100	99.3	98.4	97.1	95.9	94.8	93.5	R19	58	40	CH
8/16/05	RB-3	-	-	-	100	99.2	98.4	97.4	96.6	95.9	95.2	RB-3	57	41	CH
8/30/05	R23	-	-	-	100	99.0	97.9	96.2	95.0	94.4	93.7	R23	72	53	CH
8/30/05	R25	-	-	-	100	99.3	98.2	96.7	95.4	94.4	93.1	R25	57	40	CH
8/30/05	R27	-	-	-	100	99.3	98.3	96.7	95.2	93.9	92.4	R27	56	39	CH
8/30/05	R29	-	-	-	100	99.3	98.0	95.9	94.1	92.8	91.3	R29	57	39	CH
8/30/05	RB-4	-	-	-	100	99.4	98.7	97.5	96.7	96.2	95.5	RB-4	60	42	CH
8/31/05	R-33	-	-	-	100	99.4	98.3	96.8	95.4	94.2	92.7	R-33	56	39	CH
8/31/05	R-35	-	-	-	100	99.1	97.9	96.0	94.2	92.8	90.9	R-35	58	41	CH
8/30/05	R-5	-	-	-	100	99.0	97.3	95.0	93.1	91.5	89.7	R-5	54	37	CH
9/1/05	R-37	-	-	-	100	98.8	97.7	96.0	94.4	92.9	90.9	R-37	58	43	CH
9/1/05	R-39	-	-	-	100	99.6	99.2	98.7	98.3	98.0	97.5	R-39	51	35	CH
9/1/05	R-43	-	-	-	100	98.1	96.9	95.9	95.1	94.6	93.8	R-43	56	39	CH
9/7/05	R-45	-	-	-	100	99.0	97.9	96.8	95.9	95.1	94.2	R-45	59	42	CH
9/7/05	R-47	-	-	-	100	98.8	97.6	96.0	94.5	93.4	92.1	R-47	53	37	CH
9/7/05	R-49	-	-	-	100	99.5	98.6	96.8	95.0	93.5	91.7	R-49	58	40	CH
9/5/05	RB-6	-	-	-	100	99.2	98.3	96.6	94.4	91.8	89.8	RB-6	55	38	CH
9/6/05	RB-7	-	-	-	100	99.2	98.2	97.2	96.4	95.8	95.0	RB-7	58	45	CH
9/9/05	R-53	-	-	-	100	99.0	97.8	96.2	94.7	93.3	91.2	R-53	54	36	CH
9/9/05	R-55	-	-	-	100	99.5	98.4	96.6	94.9	93.4	91.2	R-55	54	36	CH
9/9/05	R-57	-	-	-	100	99.2	98.3	97.2	96.3	95.5	94.5	R-57	58	41	CH
9/9/05	R-59	-	-	-	100	99.1	98.2	96.6	95.2	94.1	92.8	R-59	57	39	CH
9/9/05	R-63	-	-	-	100	98.8	97.3	94.3	91.4	89.0	86.0	R-63	54	36	CH
9/12/05	R-65	-	-	-	100	98.1	96.9	95.2	93.6	92.3	90.3	R-65	51	35	CH
9/12/05	R-67	-	-	-	100	99.2	98.3	96.9	95.7	94.8	93.1	R-67	53	36	CH
9/13/05	RB-8	-	-	-	100	99.6	99.1	98.4	97.7	97.0	96.0	RB-8	52	34	CH
9/13/05	R-69	-	-	-	100	98.6	97.8	96.5	95.4	94.4	93.1	R-69	59	42	CH
9/13/05	R-73	-	-	-	100	98.6	97.3	95.4	93.6	91.9	89.8	R-73	50	34	CH
9/13/05	R-75	-	-	-	100	99.5	98.9	97.9	97.2	96.7	96.0	R-75	53	34	CH

Table B.5. Soil Classification Test Results for the GHP No. 2 Radon Barrier

Date Sampled	Gradation Sample ID	PARTICLE SIZE ANALYSIS										Atterberg Sample ID	Atterberg Limits		Unified Soil Classification
		Seive Size (% Passing)											Liquid Limit	Plastic Index	
		1"	3/4"	3/8"	#4	#8	#16	#30	#50	#100	#200				
Plan Requirements:		maximum particle size = 1" ≥ 50											≥ 25	≥ 10	CL or CH
9/13/05	R-77	-	-	-	100	99.0	98.0	96.9	95.9	95.0	94.0	R-77	56	40	CH
9/13/05	RB-9	-	-	-	100	99.0	98.2	97.4	96.8	96.3	95.7	RB-9	54	37	CH
9/14/05	R-79	-	-	-	100	99.3	98.2	96.9	95.6	94.4	92.7	R-79	59	43	CH
9/14/05	R-83	-	-	-	100	97.8	96.4	94.7	93.2	92.2	91.0	R-83	53	35	CH
9/13/05	RB-10	-	-	-	100	99.2	98.2	97.3	96.6	96.0	95.3	RB-10	54	37	CH
9/15/05	R-85	-	-	-	100	98.6	97.5	96.2	95.0	93.9	92.5	R-85	56	39	CH
9/15/05	R-87	-	-	-	100	98.9	98.0	96.7	95.5	94.4	93.2	R-87	61	44	CH
9/15/05	R-89	-	-	-	100	99.6	99.0	97.3	95.9	95.1	94.2	R-89	57	41	CH
9/16/05	R-93	-	-	-	100	99.2	98.3	96.9	95.6	94.5	92.5	R-93	54	38	CH
9/16/05	R-95	-	-	-	100	98.6	97.3	95.8	94.5	93.2	91.4	R-95	55	37	CH
9/19/05	R-97	-	-	-	100	98.8	97.5	95.7	93.7	92.0	90.3	R-97	60	44	CH
9/15/05	RB-11	-	-	-	100	98.9	96.7	92.4	88.3	84.9	82.5	RB-11	60	43	CH
9/21/05	R-99	-	-	-	100	99.4	98.7	97.6	96.6	95.8	94.7	R-99	55	35	CH
9/20/05	RB-12	-	-	-	100	99.0	97.1	93.8	90.9	88.6	86.4	RB-12	52	35	CH
9/23/05	R-105	-	-	-	100	99.1	98.0	96.6	95.2	94.1	92.7	R-105	61	43	CH
9/23/05	R-107	-	-	-	100	98.6	97.5	95.8	94.2	93.0	91.5	R-107	51	34	CH
9/23/05	R-109	-	-	-	100	99.4	98.5	97.3	96.4	95.7	94.8	R-109	54	38	CH
9/26/05	RB-13	-	-	-	100	99.4	98.2	95.6	91.8	87.3	82.6	RB-13	50	34	CH
9/27/05	R-111	-	-	-	100	99.0	98.0	96.5	95.3	94.4	93.1	R-111	52	36	CH
9/27/05	R-115	-	-	-	100	99.2	98.2	96.6	94.8	93.4	91.9	R-115	55	38	CH
9/26/05	RB-14	-	-	-	100	99.2	98.0	96.4	94.8	93.3	91.8	RB-14	58	41	CH
9/28/05	R-117	-	-	-	100	99.3	98.5	97.4	96.6	95.9	94.8	R-117	50	34	CH
9/28/05	R-119	-	-	-	100	98.7	97.7	96.0	94.6	93.7	92.6	R-119	55	38	CH
9/28/05	R-121	-	-	-	100	99.2	98.1	97.0	95.8	94.8	93.0	R-121	49	33	CL
9/29/05	R-125	-	-	-	100	98.9	97.8	96.1	94.5	93.1	91.2	R-125	57	39	CH
9/29/05	R-127	-	-	-	100	98.5	97.4	95.9	94.4	93.1	91.4	R-127	52	35	CH
9/29/05	R-129	-	-	-	100	99.0	98.2	96.7	95.2	94.0	92.3	R-129	61	43	CH
9/30/05	RB-15	-	-	-	100	99.4	98.2	96.1	93.8	91.6	89.6	RB-15	50	33	CH
9/30/05	R-131	-	-	-	100	98.9	97.7	96.4	95.2	94.2	93.1	R-131	58	42	CH
10/10/05	R-135	-	-	-	100	99.1	98.2	96.7	95.4	94.3	92.7	R-135	54	37	CH
10/10/05	R-137	-	-	-	100	98.6	97.6	96.1	94.5	93.2	91.7	R-137	58	42	CH
10/10/05	R-139	-	-	-	100	99.2	98.3	97.1	96.0	95.1	93.7	R-139	58	41	CH
10/10/05	R-141	-	-	-	100	99.3	98.6	97.8	97.0	96.1	94.5	R-141	58	40	CH
10/10/05	RB-16	-	-	-	100	99.1	97.1	93.6	90.9	89.0	87.5	RB-16	54	36	CH
10/12/05	R-145	-	-	-	100	98.8	97.7	96.5	95.6	94.9	93.8	R-145	56	41	CH
10/12/05	R-147	-	-	-	100	98.6	97.5	96.2	95.0	93.9	92.5	R-147	54	37	CH
4/10/06	RB-17	-	-	-	100	98.6	96.6	93.1	89.6	86.3	82.0	RB-17	44	30	CL
5/15/06	R-151R	-	-	-	100	99.8	99.3	98.3	97.4	96.6	95.2	RB-151R	58	44	CH

Table B.5. Soil Classification Test Results for the GHP No. 2 Radon Barrier

Date Sampled	Gradation Sample ID	PARTICLE SIZE ANALYSIS										Atterberg Sample ID	Atterberg Limits		Unified Soil Classification
		Seive Size (% Passing)											Liquid Limit	Plastic Index	
		1"	3/4"	3/8"	#4	#8	#16	#30	#50	#100	#200				
Plan Requirements:		maximum particle size = 1" ≥ 50											≥ 25	≥ 10	CL or CH
5/15/06	R-154R	-	-	-	100	99.7	99.2	98.4	97.8	97.2	96.3	RB-154R	56	40	CH
5/15/06	R-156	-	-	-	100	99.8	99.1	98.1	97.2	96.6	95.6	RB-156	56	40	CH
5/16/06	RB-18	-	-	-	100	99.4	98.2	96.2	94.5	93.3	91.7	RB-18	48	34	CL
5/16/06	R-153R	-	-	-	100	99.6	98.7	97.0	95.2	93.4	90.0	R-153R	52	33	CH
5/16/06	R-158	-	-	-	100	99.6	98.7	97.2	95.7	94.4	91.4	R-158	61	48	CH
5/16/06	R-159R	-	-	-	100	99.7	99.1	97.9	96.5	94.6	92.1	R-159R	57	42	CH
5/16/06	R-162	-	-	-	100	99.5	98.3	96.4	94.6	93.3	91.8	R-162	51	35	CH

averages: -- -- -- 100.0 99.1 98.0 96.5 95.0 93.6 92.1

Test Summary: All GHP No. 2 soil classification tests met the design specifications. For all samples 100% passed the #4 sieve (particle size <3/8"); an average of 92.1% passed the #200 seive. Liquid limits and plastic indices were all well above the plan requirements. Although no soil classes were specified in the 2003 plan, 96.4% of the material placed for the GHP No. 2 radon barrier consisted of fat clay (CH) and 3.6 % was lean clay (CL).

<i>Total Number of Tests (N):</i>	83	83	83	
<i>average:</i>	92.1	55.6	38.9	
<i>minimum:</i>	82.0	44.0	30.0	CH: 96.4% (n=80)
<i>maximum:</i>	97.5	72.0	53.0	CL: 3.6% (n=3)
<i>standard deviation:</i>	2.9	3.8	3.8	
<i>Total Quantities placed:</i>	76,626 cubic yards (CY)			
<i>Testing Frequency:</i>	1 test for every 923 CY, meeting the 1:1000 CY requirement.			

Table B.6. GHP-2 Radon Barrier Visual Depth Check Documentation

Date	Depth Check Test ID	Northing	Easting	Radon Barrier Depth (ft)
8/23/05	1	791970	836870	1.0
8/23/05	2	791962	836936	1.1
8/23/05	3	792120	837002	1.4
8/23/05	4	792225	837005	1.2
8/25/05	5	791962	836803	1.1
8/25/05	6	792215	836887	1.3
8/25/05	7	792299	836789	1.0
8/25/05	8	792023	836072	1.3
8/26/05	9	792212	836629	1.4
8/26/05	10	792134	836601	1.4
8/29/05	11	792125	836534	1.5
8/29/05	12	792158	836527	1.5
8/29/05	13	792425	836685	1.1
8/30/05	14	792273	836368	1.1
8/30/05	15	792261	836437	1.2
8/31/05	16	792353	836368	1.3
8/31/05	17	792452	836516	1.1
8/31/05	18	792478	836562	1.2
9/1/05	19	792563	836552	1.0
9/1/05	20	792423	836255	1.1
9/1/05	21	792645	836424	1.1
9/1/05	22	792561	836224	1.1
9/1/05	23	792580	836290	1.1
9/7/05	24	792613	836151	1.1
9/9/05	25	792763	836359	1.1
9/9/05	26	792733	836309	1.1
9/9/05	27	792744	836481	1.0
9/9/05	28	792659	836631	1.2
9/9/05	29	792617	836643	1.0
9/9/05	30	792696	836545	1.0
9/12/05	31	792716	836682	1.3
9/12/05	32	792763	836686	1.2
9/12/05	33	792768	836639	1.3
9/12/05	34	792606	836706	1.6
9/13/05	35	793142	836464	1.1
9/13/05	36	793070	836523	1.0
9/13/05	37	792980	836439	1.1
9/13/05	38	793009	836407	1.4
9/13/05	39	793085	836273	1.2
9/13/05	40	793125	836293	1.1
9/13/05	41	793255	836357	1.2
9/13/05	42	793235	836389	1.3
9/14/05	43	792686	836048	1.6
9/14/05	44	792755	836041	1.1
9/14/05	45	792832	836030	1.0
9/14/05	46	792652	836762	1.0
9/14/05	47	792717	836747	1.4
9/14/05	48	792722	836780	1.1
9/14/05	49	792808	836771	1.2
9/14/05	50	792878	836749	1.2
9/14/05	51	792847	836671	1.4
9/14/05	52	792653	836781	1.1
9/14/05	53	792938	836693	1.1
9/14/05	54	792877	836533	1.3
9/14/05	55	792942	836558	1.3
9/14/05	56	792439	836701	1.0
9/14/05	57	792519	836708	1.1
9/14/05	58	792567	836792	1.3
9/16/05	59	792603	835881	1.4

Table B.6. GHP-2 Radon Barrier Visual Depth Check Documentation

Date	Depth Check Test ID	Northing	Easting	Radon Barrier Depth (ft)
9/16/05	60	792567	835902	1.0
9/16/05	61	792516	835945	1.0
9/16/05	62	792461	835974	1.2
9/16/05	63	792421	835969	1.4
9/16/05	64	792301	835972	1.2
9/16/05	65	792368	836051	1.5
9/16/05	66	792461	835859	1.1
9/16/05	67	792389	835887	1.0
9/16/05	68	792205	835992	1.1
9/16/05	69	792209	836038	1.4
9/16/05	70	792274	836029	1.0
9/16/05	71	792484	836028	1.6
9/16/05	72	792642	836055	1.1
9/16/05	73	792365	836109	1.5
9/16/05	74	792318	836112	1.3
9/16/05	75	792308	836195	1.4
9/16/05	76	792439	836124	1.6
9/16/05	77	792672	835947	1.2
9/22/05	78	792528	836904	1.4
9/22/05	79	792485	836849	1.2
9/22/05	80	792375	836971	1.4
9/22/05	81	792394	837012	1.3
9/22/05	82	792478	836982	1.8
9/22/05	83	792439	837100	1.1
9/22/05	84	792495	837069	1.5
9/22/05	85	792719	836981	1.1
9/22/05	86	792730	836873	1.2
9/22/05	87	792625	836883	1.1
9/22/05	88	792682	836836	1.7
9/22/05	89	792588	836835	1.4
9/22/05	90	792733	836787	1.3
9/22/05	91	792641	836980	1.2
9/23/05	92	792672	836798	1.1
9/23/05	93	792694	836864	1.3
9/23/05	94	792689	836885	1.3
9/23/05	95	792680	836909	1.3
9/23/05	96	792705	836923	1.1
9/23/05	97	792726	836978	1.1
9/28/05	98	792784	836996	1.1
9/28/05	99	792785	836950	1.2
9/28/05	100	792818	836888	1.1
9/28/05	101	792785	836874	1.3
9/28/05	102	792787	836828	1.2
9/28/05	103	792814	836817	1.8
9/28/05	104	792878	836976	1.2
9/28/05	105	792878	836885	1.2
9/28/05	106	792923	836876	1.2
9/28/05	107	792891	836834	1.1
9/28/05	108	792858	836817	1.4
9/28/05	109	792865	836777	1.2
9/28/05	110	793051	836904	1.5
9/28/05	111	793012	836827	1.2
9/28/05	112	792952	836814	1.6
9/28/05	113	792937	836765	1.2
9/28/05	114	792964	836864	1.3
9/28/05	115	792950	836741	1.3
9/28/05	116	792988	836873	1.1
9/28/05	117	793105	836808	1.2
9/28/05	118	793051	836786	1.4

Table B.6. GHP-2 Radon Barrier Visual Depth Check Documentation

Date	Depth Check Test ID	Northing	Easting	Radon Barrier Depth (ft)
9/28/05	119	793038	836768	1.3
9/28/05	120	793030	836737	1.1
9/28/05	121	793006	836702	1.2
9/28/05	122	793071	836683	1.0
9/28/05	123	793107	836731	1.5
9/28/05	124	793167	836778	1.2
9/28/05	125	792218	836760	1.4
9/28/05	126	793115	836679	1.4
9/28/05	127	793135	836666	1.2
9/28/05	128	793113	836649	1.4
9/28/05	129	793098	836601	1.2
9/28/05	130	793243	836703	1.5
9/28/05	131	793197	836639	1.4
9/28/05	132	793157	836579	1.1
9/28/05	133	793139	836582	1.6
9/28/05	134	793185	836534	1.5
9/28/05	135	793242	836562	1.5
9/28/05	136	793253	836580	1.2
9/28/05	137	793189	836664	1.2
9/28/05	138	793348	836671	1.2
9/28/05	139	793354	836598	1.1
9/28/05	140	793314	836555	1.1
9/28/05	141	793218	836500	1.5
9/28/05	142	793264	836485	1.1
9/28/05	143	793227	836461	1.2
9/28/05	144	793245	836404	1.3
9/28/05	145	793279	836365	1.3
9/28/05	146	793309	836343	1.3
9/28/05	147	793307	836380	1.5
9/28/05	148	793325	836448	1.3
9/28/05	149	793345	836468	1.3
9/28/05	150	793373	836477	1.8
9/28/05	151	793386	836513	1.3
9/28/05	152	793403	836556	1.3
9/28/05	153	793452	836587	1.4
9/28/05	154	793456	836617	1.2
9/28/05	155	793466	836647	1.3
9/28/05	156	793415	836631	1.3
9/28/05	157	793123	836541	1.3
9/28/05	159	793214	836614	1.4
9/28/05	160	793284	836543	1.3
9/28/05	161	793337	836503	1.6
9/28/05	162	793349	836426	1.1
9/28/05	163	793319	836418	1.9
9/28/05	164	793400	836406	1.2
9/28/05	165	793405	836447	1.2
9/28/05	166	793441	836494	1.6
9/28/05	167	793502	836527	1.3
9/28/05	168	793583	836604	1.0
9/28/05	169	793608	836600	1.9
9/28/05	170	793682	836623	1.2
9/28/05	171	793682	836640	1.3
9/28/05	172	793543	836631	1.1
9/28/05	173	792227	836160	1.4
9/28/05	174	792174	836103	1.4
9/28/05	175	792098	836075	1.2
9/28/05	176	792174	836050	1.3
9/28/05	177	792098	836150	1.1
9/28/05	178	792074	836149	1.1

Table B.6. GHP-2 Radon Barrier Visual Depth Check Documentation

Date	Depth Check Test ID	Northing	Easting	Radon Barrier Depth (ft)
9/28/05	179	792083	836085	1.5
9/30/05	180	792043	836222	2.1
9/30/05	181	792018	836211	1.3
9/30/05	182	792032	836157	1.3
9/30/05	183	791937	836175	1.3
9/30/05	184	791889	836227	1.5
9/30/05	185	791890	836260	1.2
9/30/05	186	791871	836334	1.5
9/30/05	187	791933	836357	1.5
9/30/05	188	792043	836222	1.4
9/30/05	189	792018	836243	1.2
9/30/05	190	792007	836295	1.2
9/30/05	191	791996	836326	1.4
9/30/05	192	791987	836398	1.2
9/30/05	193	792004	836403	1.6
9/30/05	194	792159	836289	1.1
9/30/05	195	792171	836249	1.2
10/12/05	196	792019	836503	1.5
10/12/05	197	791977	836462	1.2
10/12/05	198	791902	836369	1.1
10/12/05	199	791826	836370	1.4
10/12/05	200	791854	836398	1.3
10/12/05	201	791851	836484	1.3
10/12/05	202	791838	836529	1.2
10/12/05	203	791919	836515	1.2
10/12/05	204	791974	836597	1.6
10/12/05	205	791953	836652	1.6
10/12/05	206	791825	836588	1.4
10/12/05	207	791765	836540	1.3
10/12/05	208	791737	836634	1.4
10/12/05	209	791814	836657	1.5
10/12/05	210	791943	836720	1.6
10/12/05	211	791875	836800	1.6
10/12/05	212	791788	836774	1.3
10/12/05	213	791734	836785	1.3
10/12/05	214	791755	836870	1.3
10/12/05	215	791791	836927	1.6
10/12/05	216	791744	836947	1.3
10/12/05	217	791777	836991	2.2
5/16/06	218	792964	836029	1.5
5/16/06	219	792994	836084	1.5
5/16/06	220	792911	836145	1.3
5/16/06	221	792731	836251	1.1
5/16/06	222	792949	836003	1.5
5/16/06	223	793021	836178	1.4
5/16/06	224	792860	836377	1.5
5/16/06	225	792942	836377	1.3
5/16/06	226	792995	836298	1.1
5/16/06	227	793125	836165	1.0

N: 226

average: 1.3

minimum: 1.0

maximum: 2.2

standard deviation: 0.2

Appendix C
Frost Protection

Table C.1. Daily Quantities, Field Compaction, Proctor, and Sand-Cone Test Frequencies for the GHP-2 Frost Protection Layer: 2005-2006

Note: This table lists only those days on which frost protection material was placed and/or testing performed. CY = Cubic Yards; NG = Nuclear Gauge (field compaction test)
 Testing Frequency Requirements: *Field Compaction Tests: 1: 500 CY* *Proctors: 1: 5000 CY* *Sand-Cones: 1:10 NG tests*

Date	Total Quantities Placed		Field Compaction Test Frequency			Proctor Test Frequency			Sand-Cone Test Frequency		
	Daily Yardage	Cumulative Yardage	Daily Tests Performed	Cumulative No. of Tests	Ratio (per CY)	Daily Tests Performed	Cumulative No. of Tests	Ratio (per CY)	Daily Tests Performed	Cumulative No. of Tests	Ratio (/NG tests)
8/23/05	2,100	2,100		0	--		0	--		0	--
8/24/05	840	2,940		0	--		0	--		0	--
8/25/05	4,368	7,308		0	--		0	--		0	--
8/26/05	1,176	8,484		0	--		0	--		0	--
8/29/05	2,520	11,004		0	--		0	--		0	--
8/30/05	3,213	14,217		0	--		0	--		0	--
8/31/05	798	15,015		0	--		0	--		0	--
9/1/05	4,998	20,013		0	--		0	--		0	--
9/6/05	6,531	26,544		0	--		0	--		0	--
9/9/05	6,027	32,571		0	--		0	--		0	--
9/12/05	651	33,222		0	--		0	--		0	--
9/13/05	483	33,705		0	--		0	--		0	--
9/14/05	7,728	41,433		0	--		0	--		0	--
9/15/05	3,234	44,667	4	4	1: 11,167	1	1	1: 44,667	1	1	1: 4
9/16/05	1,113	45,780		4	1: 11,445		1	1: 45,780		1	1: 4
9/19/05	4,662	50,442		4	1: 12,611		1	1: 50,442		1	1: 4
9/20/05	1,764	52,206	2	6	1: 8701		1	1: 52,206		1	1: 6
9/21/05	1,197	53,403		6	1: 8901		1	1: 53,403		1	1: 6
9/22/05	1,890	55,293	41	47	1: 1176	4	5	1: 11,059	6	7	1: 7
9/23/05	189	55,482	1	48	1: 1156	1	6	1: 9247		7	1: 7
9/24/05	0	55,482	35	83	1: 668	3	9	1: 6165	4	11	1: 8
9/26/05	9,915	65,397	19	102	1: 641	2	11	1: 5945	1	12	1: 9
9/27/05	11,770	77,167	26	128	1: 603	3	14	1: 5512	2	14	1: 9
9/28/05	11,495	88,662	14	142	1: 624	1	15	1: 5911	2	16	1: 9
9/29/05	12,595	101,257	19	161	1: 629	3	18	1: 5625	2	18	1: 9
9/30/05	8,525	109,782	13	174	1: 631	1	19	1: 5778	1	19	1: 9
10/3/05	10,890	120,672	12	186	1: 649	1	20	1: 6034	1	20	1: 9
10/4/05	7,865	128,537		186	1: 691		20	1: 6427		20	1: 9
10/6/05	8,360	136,897		186	1: 736		20	1: 6845		20	1: 9
10/7/05	9,405	146,302	4	190	1: 770		20	1: 7315	1	21	1: 9
10/8/05	5,500	151,802	22	212	1: 716	3	23	1: 6600	1	22	1: 10
10/11/05	7,315	159,117	16	228	1: 698	2	25	1: 6365	2	24	1: 10

Table C.1. Daily Quantities, Field Compaction, Proctor, and Sand-Cone Test Frequencies for the GHP-2 Frost Protection Layer: 2005-2006

Note: This table lists only those days on which frost protection material was placed and/or testing performed. CY = Cubic Yards; NG = Nuclear Gauge (field compaction test)
 Testing Frequency Requirements: *Field Compaction Tests: 1: 500 CY* *Proctors: 1: 5000 CY* *Sand-Cones: 1:10 NG tests*

Date	Total Quantities Placed		Field Compaction Test Frequency			Proctor Test Frequency			Sand-Cone Test Frequency		
	Daily Yardage	Cumulative Yardage	Daily Tests Performed	Cumulative No. of Tests	Ratio (per CY)	Daily Tests Performed	Cumulative No. of Tests	Ratio (per CY)	Daily Tests Performed	Cumulative No. of Tests	Ratio (/NG tests)
10/12/05	6,435	165,552	29	257	1: 644	3	28	1: 5913	2	26	1: 10
10/13/05	8,557	174,109	25	282	1: 617	3	31	1: 5616	3	29	1: 10
10/14/05	8,085	182,194	20	302	1: 603	2	33	1: 5521	2	31	1: 10
10/17/05	10,450	192,644	13	315	1: 612	1	34	1: 5666	3	34	1: 9
10/18/05	12,100	204,744	10	325	1: 630	1	35	1: 5850	1	35	1: 9
10/19/05	13,605	218,349	18	343	1: 637	2	37	1: 5901	2	37	1: 9
10/20/05	8,415	226,764	11	354	1: 641	1	38	1: 5967	1	38	1: 9
10/21/05	8,813	235,577	11	365	1: 645	1	39	1: 6040	2	40	1: 9
10/25/05	2,625	238,202	15	380	1: 627	1	40	1: 5955	2	42	1: 9
10/26/05	2,730	240,932	7	387	1: 623	1	41	1: 5876	1	43	1: 9
10/27/05	1,197	242,129		387	1: 626		41	1: 5906		43	1: 9
10/28/05	4,179	246,308		387	1: 636		41	1: 6008		43	1: 9
11/1/05	1,953	248,261		387	1: 642		41	1: 6055		43	1: 9
11/2/05	0	248,261	15	402	1: 618	1	42	1: 5911	2	45	1: 9
11/3/05	3,717	251,978	15	417	1: 604	2	44	1: 5727	1	46	1: 9
11/4/05	1,743	253,721	5	422	1: 601		44	1: 5766	2	48	1: 9
11/7/05	2,814	256,535	13	435	1: 590	1	45	1: 5701	1	49	1: 9
11/8/05	567	257,102	14	449	1: 573	2	47	1: 5470	2	51	1: 9
11/9/05	0	257,102	14	463	1: 555	1	48	1: 5356	1	52	1: 9
11/10/05	0	257,102	11	474	1: 542	1	49	1: 5247	1	53	1: 9
11/11/05	1,743	258,845	14	488	1: 530	2	51	1: 5075	1	54	1: 9
11/14/05	1,029	259,874		488	1: 533		51	1: 5096		54	1: 9
4/20/06	Early testing in 2006 reflects completion of compaction tests for material placed in 2005.		1	489	1: 531	1	52	1: 4998		54	1: 9
4/21/06			2	491	1: 529		52	1: 4998		54	1: 9
4/28/06			2	493	1: 527	1	53	1: 4903		54	1: 9
5/2/06			17	510	1: 510	1	54	1: 4812	2	56	1: 9
5/3/06	0	259,874	5	515	1: 505	1	55	1: 4725	1	57	1: 9
5/4/06	0	259,874	1	516	1: 504		55	1: 4725		57	1: 9
5/5/06	630	260,504	10	526	1: 495	1	56	1: 4652	1	58	1: 9
5/8/06	0	260,504	2	528	1: 493	1	57	1: 4570		58	1: 9
5/9/06	2,916	263,420	3	531	1: 496		57	1: 4621		58	1: 9
5/10/06	705	264,125	1	532	1: 496		57	1: 4634		58	1: 9

Table C.1. Daily Quantities, Field Compaction, Proctor, and Sand-Cone Test Frequencies for the GHP-2 Frost Protection Layer: 2005-2006

Note: This table lists only those days on which frost protection material was placed and/or testing performed. CY = Cubic Yards; NG = Nuclear Gauge (field compaction test)
 Testing Frequency Requirements: *Field Compaction Tests: 1: 500 CY* *Proctors: 1: 5000 CY* *Sand-Cones: 1:10 NG tests*

Date	Total Quantities Placed		Field Compaction Test Frequency			Proctor Test Frequency			Sand-Cone Test Frequency		
	Daily Yardage	Cumulative Yardage	Daily Tests Performed	Cumulative No. of Tests	Ratio (per CY)	Daily Tests Performed	Cumulative No. of Tests	Ratio (per CY)	Daily Tests Performed	Cumulative No. of Tests	Ratio (/NG tests)
5/11/06	819	264,944	2	534	1: 496		57	1: 4648		58	1: 9
5/15/06	1,527	266,471		534	1: 499		57	1: 4675		58	1: 9
5/16/06	5,211	271,682	2	536	1: 507		57	1: 4766		58	1: 9
5/17/06	6,642	278,324	4	540	1: 515	1	58	1: 4799		58	1: 9
5/18/06	11,526	289,850	21	561	1: 517	1	59	1: 4913	3	61	1: 9
5/19/06	11,100	300,950	24	585	1: 514	3	62	1: 4854	3	64	1: 9
5/20/06	5,856	306,806	5	590	1: 520		62	1: 4948	1	65	1: 9
5/21/06	90	306,896		590	1: 520		62	1: 4950		65	1: 9
5/22/06	315	307,211	2	592	1: 519	1	63	1: 4876		65	1: 9
5/23/06	0	307,211	2	594	1: 517		63	1: 4876		65	1: 9
5/25/06	0	307,211	4	598	1: 514		63	1: 4876		65	1: 9
5/30/06	0	307,211	2	600	1: 512	1	64	1: 4800		65	1: 9
5/31/06	0	307,211	3	603	1: 509		64	1: 4800	1	66	1: 9
6/1/06	0	307,211	1	604	1: 509		64	1: 4800		66	1: 9
6/7/06	270	307,481	4	608	1: 506	1	65	1: 4730		66	1: 9
6/8/06	0	307,481	5	613	1: 502		65	1: 4730		66	1: 9
6/13/06	126	307,607	2	615	1: 500	1	66	1: 4661		66	1: 9
6/14/06	147	307,754		615	1: 500		66	1: 4663		66	1: 9
6/15/06	0	307,754	8	623	1: 494		66	1: 4663		66	1: 9
6/16/06	0	307,754	4	627	1: 491	1	67	1: 4593	1	67	1: 9
6/20/06	0	307,754	1	628	1: 490		67	1: 4593		67	1: 9
6/21/06	0	307,754		628	1: 490		67	1: 4593	1	68	1: 9
6/23/06	588	308,342	1	629	1: 490		67	1: 4602		68	1: 9
6/29/06	321	308,663	1	630	1: 490	1	68	1: 4539		68	1: 9
6/30/06	0	308,663	3	633	1: 488		68	1: 4539		68	1: 9
7/6/06	357	309,020		633	1: 488		68	1: 4544		68	1: 9
7/19/06	0	309,020	2	635	1: 487		68	1: 4544		68	1: 9
7/21/06	210	309,230		635	1: 487		68	1: 4548		68	1: 9
7/25/06	0	309,230	1	636	1: 486		68	1: 4548		68	1: 9
7/28/06	0	309,230	1	637	1: 485		68	1: 4548	1	69	1: 9
7/31/06	0	309,230	1	638	1: 485		68	1: 4548		69	1: 9

Year 2005 Total: 259,874 CY; Year 2006 Total: 49,356 CY

Table C.2. Field Compaction Test Results for the GHP-2 Frost Protection Layer: 2005-2006

Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed.
 Max.= Maximum; FG = Finish Grade; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both test endpoints.
 See NOTES and summary statistics at the end of this table.

Compaction Test ID	Date	Location			Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Comments
		Northing	Easting	Lift	Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture (PM)	Percent Compaction		
								Requirements:	PM ≥ Opt. - 2	≥ 95		
F-1	9/15/05	791955	836870	1	FP-1	117.2	13.0	111.7	14.7	95.3	P	
F-2	9/16/05	792295	836805	1	FP-1	117.2	13.0	112.6	11.7	96.1	P	
F-3	9/17/05	792240	836805	1	FP-1	117.2	13.0	112.5	15.8	96.0	P	
F-4	* 9/18/05	791990	836810	1	FP-1	117.2	13.0	113.2	13.8	96.6	P	
F-5	9/20/05	792245	836960	1	FP-1	117.2	13.0	113.9	11.5	97.2	P	
F-6	9/20/05	792210	836970	1	FP-1	117.2	13.0	116.3	13.9	99.2	P	
F-7	9/22/05	792995	836605	1	FP-2	118.7	11.7	111.1	10.1	93.6	F Comp	Fails Compaction
F-7R	9/22/05	792995	836605	1	FP-2	118.7	11.7	114.3	13.4	96.3	P	Retest
F-7R	9/26/05	792995	836605	1	FP-2	118.7	11.7	114.8	10.6	96.7	P	Incidental second retest
F-8	9/22/05	792950	836695	1	FP-2	118.7	11.7	119.9	9.7	101.0	P	
F-9	9/22/05	792860	836470	1	FP-2	118.7	11.7	114.1	9.6	96.1	F Moist	Fails Moisture
F-9R	9/26/05	792860	836470	1	FP-2	118.7	11.7	117.7	11.3	99.2	P	Retest
F-10	9/22/05	792795	836485	1	FP-2	118.7	11.7	115.2	12.8	97.1	P	
F-11	* 9/22/05	792200	837005	1	FP-1	117.2	13.0	115.3	8.7	98.4	F Moist	Fails Moisture
F-11R	9/26/05	792200	837005	1	FP-1	117.2	13.0	117.5	14.3	100.3	P	Retest
F-12	9/22/05	792705	836530	1	FP-2	118.7	11.7	115.9	12.7	97.6	P	
F-13	9/22/05	792625	836560	1	FP-2	118.7	11.7	113.9	12.8	96.0	P	
F-14	9/22/05	792545	836600	1	FP-2	118.7	11.7	112.5	11.8	94.8	F Comp	Fails Compaction
F-14R	9/22/05	792545	836600	1	FP-2	118.7	11.7	114.1	13.8	96.1	P	Retest
F-15	9/22/05	792545	836625	1	FP-2	118.7	11.7	113.5	12.7	95.6	P	
F-16	9/22/05	792455	836670	1	FP-2	118.7	11.7	116.0	11.1	97.7	P	
F-17	* 9/22/05	792455	836650	1	FP-2	118.7	11.7	116.4	9.7	98.1	P	
F-18	9/22/05	792645	836645	1	FP-3	118.4	11.9	111.7	13.5	94.3	F Comp	Fails Compaction
F-18R	9/22/05	792645	836645	1	FP-3	118.4	11.9	116.0	13.5	98.0	P	Retest
F-19	9/22/05	792645	836645	1	FP-3	118.4	11.9	115.3	11.3	97.4	P	
F-20	9/22/05	792815	836590	1	FP-3	118.4	11.9	113.5	12.3	95.9	P	
F-21	9/22/05	792905	836580	1	FP-3	118.4	11.9	112.2	13.9	94.8	F Comp	Fails Compaction
F-21R	9/26/05	792905	836580	1	FP-3	118.4	11.9	118.6	12.3	100.2	P	Retest
F-22	* 9/22/05	792875	836700	1	FP-3	118.4	11.9	113.9	10.4	96.2	P	
F-23	9/22/05	792830	836695	1	FP-3	118.4	11.9	115.0	14.8	97.1	P	
F-24	9/22/05	792770	836735	1	FP-3	118.4	11.9	116.1	12.0	98.1	P	
F-25	9/22/05	792695	836720	1	FP-3	118.4	11.9	115.5	12.6	97.6	P	
F-26	9/22/05	792620	836745	1	FP-3	118.4	11.9	114.7	11.6	96.9	P	
F-27	9/22/05	792530	836740	1	FP-3	118.4	11.9	117.3	13.1	99.1	P	

Table C.2. Field Compaction Test Results for the GHP-2 Frost Protection Layer: 2005-2006

Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed.
 Max.= Maximum; FG = Finish Grade; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both test endpoints.
 See NOTES and summary statistics at the end of this table.

Compaction Test ID	Date	Location		Lift	Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Comments
		Northing	Easting		Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture (PM)	Percent Compaction		
								Requirements:	PM ≥ Opt. - 2	≥ 95		
F-28	9/22/05	792920	836425	1	FP-4	118.2	11.4	114.3	11.0	96.7	P	
F-29	9/22/05	793005	836510	1	FP-4	118.2	11.4	116.5	9.5	98.6	P	
F-30	9/22/05	793075	836570	1	FP-4	118.2	11.4	111.8	10.8	94.6	F Comp	Fails Compaction
F-30R	9/22/05	793075	836605	1	FP-4	118.2	11.4	113.7	13.2	96.2	P	Retest
F-31	9/22/05	793120	836515	1	FP-4	118.2	11.4	113.6	10.1	96.1	P	
F-32	9/22/05	793075	836450	1	FP-4	118.2	11.4	112.4	10.4	95.1	P	
F-33	* 9/22/05	793000	836360	1	FP-4	118.2	11.4	117.7	10.5	99.6	P	
F-34	9/22/05	793185	836440	1	FP-4	118.2	11.4	114.1	12.4	96.5	P	
F-35	9/22/05	793100	836340	1	FP-4	118.2	11.4	114.6	9.8	97.0	P	
F-36	9/22/05	793270	836350	1	FP-4	118.2	11.4	113.9	15.2	96.4	P	
F-37	9/22/05	793180	836330	1	FP-4	118.2	11.4	114.2	10.5	96.6	P	
F-38	9/22/05	793135	836220	1	FP-5	119.8	11.5	115.7	12.9	96.6	P	
F-39	9/22/05	791970	836710	1	FP-5	119.8	11.5	113.8	15.5	95.0	P	
F-40	9/22/05	792050	836650	1	FP-5	119.8	11.5	114.9	14.9	95.9	P	
F-41	9/22/05	792120	836710	1	FP-5	119.8	11.5	114.5	13.7	95.6	P	
F-42	* 9/22/05	792190	836645	1	FP-5	119.8	11.5	113.9	13.6	95.1	P	
F-43	9/22/05	792260	836715	1	FP-5	119.8	11.5	114.7	14.9	95.7	P	
F-44	9/22/05	792350	836650	1	FP-5	119.8	11.5	115.8	13.9	96.7	P	
F-45	9/22/05	792350	836650	1	FP-5	119.8	11.5	115.8	13.9	96.7	P	
F-46	9/22/05	792190	836765	1	FP-5	119.8	11.5	117.6	10.2	98.2	P	
F-47	* 9/22/05	792995	836750	1	FP-5	119.8	11.5	118.4	11.5	98.8	P	
F-48	9/23/05	792750	836355	1	FP-6	118.9	11.8	114.3	11.4	96.1	P	
F-49	9/24/05	792640	836420	1	FP-6	118.9	11.8	118.1	10.3	99.3	P	
F-50	9/24/05	792540	836460	1	FP-6	118.9	11.8	117.8	10.1	99.1	P	
F-51	9/24/05	792385	836520	1	FP-6	118.9	11.8	115.3	10.9	97.0	P	
F-52	9/24/05	792310	836480	1	FP-6	118.9	11.8	115.8	11.3	97.4	P	
F-53	9/24/05	792435	836405	1	FP-6	118.9	11.8	120.1	11.9	101.0	P	
F-54	9/24/05	792535	836405	1	FP-6	118.9	11.8	118.4	9.8	99.6	P	
F-55	* 9/24/05	792590	836320	1	FP-6	118.9	11.8	116.9	12.0	98.3	P	
F-56	9/24/05	792675	836310	1	FP-6	118.9	11.8	119.3	11.3	100.3	P	
F-57	9/24/05	792505	836255	1	FP-6	118.9	11.8	120.1	10.9	101.0	P	
F-58	9/24/05	792490	836330	1	FP-7	120.0	11.8	117.9	11.6	98.3	P	
F-59	9/24/05	792345	836400	1	FP-7	120.0	11.8	115.9	10.8	96.6	P	
F-60	* 9/24/05	792150	836520	1	FP-7	120.0	11.8	116.6	13.8	97.2	P	

Table C.2. Field Compaction Test Results for the GHP-2 Frost Protection Layer: 2005-2006

Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed.
 Max.= Maximum; FG = Finish Grade; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both test endpoints.
 See NOTES and summary statistics at the end of this table.

Compaction Test ID	Date	Location		Lift	Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Comments	
		Northing	Easting		Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture (PM)	Percent Compaction			
								Requirements:	PM ≥ Opt. - 2	≥ 95			
F-61	9/24/05	792330	836400	1	FP-7	120.0	11.8	116.9	12.9	97.4	P		
F-62	9/24/05	792355	836310	1	FP-7	120.0	11.8	116.8	10.5	97.3	P		
F-63	9/24/05	792430	836200	1	FP-7	120.0	11.8	116.3	12.8	96.9	P		
F-64	9/24/05	792540	836140	1	FP-7	120.0	11.8	115.3	10.8	96.1	P		
F-65	9/24/05	792685	836265	1	FP-7	120.0	11.8	116.2	10.5	96.8	P		
F-66	9/24/05	792730	836205	1	FP-7	120.0	11.8	119.5	11.5	99.6	P		
F-67	9/24/05	792795	836130	1	FP-7	120.0	11.8	118.7	12.4	98.9	P		
F-68	9/24/05	792850	836060	1	FP-8	119.6	12.2	118.4	11.1	99.0	P		
F-69	9/24/05	792920	836995	1	FP-8	119.6	12.2	116.7	12.5	97.6	P		
F-70	9/24/05	792570	836245	1	FP-8	119.6	12.2	120.3	11.7	100.6	P		
F-71	*	9/24/05	792620	836150	1	FP-8	119.6	12.2	114.6	11.6	95.8	P	
F-72		9/24/05	792685	836090	1	FP-8	119.6	12.2	115.6	11.2	96.7	P	
F-73		9/24/05	792770	836025	1	FP-8	119.6	12.2	117.2	11.0	98.0	P	
F-74		9/24/05	792845	835975	1	FP-8	119.6	12.2	116.3	12.7	97.2	P	
F-75	9/24/05	792760	836930	1	FP-8	119.6	12.2	116.1	11.5	97.1	P		
F-76	9/24/05	792650	835995	1	FP-8	119.6	12.2	117.7	9.4	98.4	F Moist	Fails Moisture	
F-76R	9/26/05	792650	835995	1	FP-8	119.6	12.2	116.8	10.5	97.7	P	Retest	
F-77	9/24/05	792560	836045	1	FP-8	119.6	12.2	119.0	11.3	99.5	P		
F-78	9/24/05	792465	836090	1	FP-9	120.0	11.8	115.7	11.8	96.4	P		
F-79	9/24/05	792335	836145	1	FP-9	120.0	11.8	115.2	10.1	96.0	P		
F-80	9/24/05	792070	836185	1	FP-9	120.0	11.8	115.7	9.4	96.4	F Moist	Fails Moisture	
F-80R	9/26/05	792070	836185	1	FP-9	120.0	11.8	116.0	13.5	96.7	P	Retest	
F-81	9/24/05	792110	836185	1	FP-9	120.0	11.8	115.7	8.6	96.4	F Moist	Fails Moisture	
F-81R	9/26/05	792110	836275	1	FP-9	120.0	11.8	114.5	12.1	95.4	P	Retest	
F-82	9/24/05	792170	836330	1	FP-9	120.0	11.8	115.2	11.3	96.0	P		
F-83	*	9/24/05	792340	836240	1	FP-9	120.0	11.8	115.7	12.2	96.4	P	
F-84		9/26/05	792615	835995	1	FP-9	120.0	11.8	115.5	12.8	96.3	P	
F-85		9/26/05	792460	836995	1	FP-9	120.0	11.8	113.6	13.1	94.7	F Comp	Fails Compaction
F-85R		9/26/05	792460	836995	1	FP-9	120.0	11.8	114.5	14.8	95.4	P	Retest
F-86	9/26/05	792330	836070	1	FP-9	120.0	11.8	113.1	11.9	94.3	F Comp	Fails Compaction	
F-86R	9/26/05	792330	836070	1	FP-9	120.0	11.8	114.9	14.3	95.8	P	Retest	
F-87	9/26/05	792540	835840	1	FP-9	120.0	11.8	114.0	13.7	95.0	P		
F-88	9/26/05	792385	835910	1	FP-10	119.9	11.6	115.8	10.0	96.6	P		
F-89	9/26/05	792270	835965	1	FP-10	119.9	11.6	114.6	10.3	95.6	P		

Table C.2. Field Compaction Test Results for the GHP-2 Frost Protection Layer: 2005-2006

Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed.
 Max = Maximum; FG = Finish Grade; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both test endpoints.
 See NOTES and summary statistics at the end of this table.

Compaction Test ID	Date	Location		Lift	Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Comments
		Northing	Easting		Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture (PM)	Percent Compaction		
								Requirements:	PM ≥ Opt. - 2	≥ 95		
F-90 *	9/26/05	792205	836060	1	FP-10	119.9	11.6	114.1	11.6	95.2	P	
F-91	9/26/05	792045	836915	1	FP-1	117.2	13.0	116.5	10.2	99.4	F Moist	Fails Moisture
F-91R	9/26/05	792045	836915	1	FP-1	117.2	13.0	118.8	13.1	101.4	P	Retest
F-92	9/26/05	792000	836900	1	FP-1	117.2	13.0	115.3	12.7	98.4	P	
F-93	9/26/05	792360	836890	1	FP-1	117.2	13.0	118.9	12.2	101.5	P	
F-94	9/26/05	793120	836240	2	FP-11	113.5	14.9	107.6	16.4	94.8	F Comp	Fails Compaction
F-94R	9/26/05	793120	836240	2	FP-11	113.5	14.9	111.4	13.4	98.1	P	Retest
F-95	9/26/05	792910	836420	2	FP-11	113.5	14.9	109.1	17.5	96.1	P	
F-96	9/26/05	792715	836470	2	FP-11	113.5	14.9	108.6	17.3	95.7	P	
F-97	9/26/05	792435	836510	2	FP-11	113.5	14.9	108.2	18.8	95.3	P	
F-98	9/26/05	792155	836536	2	FP-11	113.5	14.9	108.0	18.8	95.2	P	
F-99	9/26/05	793080	836343	2	FP-11	113.5	14.9	108.3	13.0	95.4	P	
F-100	9/26/05	792895	836500	2	FP-11	113.5	14.9	108.0	15.2	95.2	P	
F-101	9/26/05	792604	836558	2	FP-11	113.5	14.9	114.1	13.4	100.5	P	
F-102	9/26/05	792340	836590	2	FP-11	113.5	14.9	103.3	21.6	91.0	F Comp	Fails Compaction
F-102R	9/26/05	792340	836590	2	FP-11	113.5	14.9	111.1	17.0	97.9	P	Retest
F-103	9/27/05	792214	836640	2	FP-12	114.4	14.8	108.3	15.5	94.7	F Comp	Fails Compaction
F-103R	9/27/05	792214	836640	2	FP-12	114.4	14.8	109.6	12.7	95.8	F Moist	Retest Fails Moisture
F-103R2	9/27/05	792214	836640	2	FP-12	114.4	14.8	110.5	14.8	96.6	P	Second Retest Passes
F-104	9/27/05	792135	836720	2	FP-12	114.4	14.8	107.6	16.3	94.1	F Comp	Fails Compaction
F-104R	9/27/05	792135	836720	2	FP-12	114.4	14.8	108.4	14.8	94.8	F Comp	Retest Fails Compaction
F-104R2	9/27/05	792135	836720	2	FP-12	114.4	14.8	109.0	14.8	95.3	P	Second Retest Passes
F-105	9/27/05	792410	836690	2	FP-12	114.4	14.8	110.7	15.8	96.8	P	
F-106	9/27/05	792500	836618	2	FP-12	114.4	14.8	107.9	15.0	94.3	F Comp	Fails Compaction
F-106R	9/27/05	792500	836618	2	FP-12	114.4	14.8	110.5	14.7	96.6	P	Retest
F-107	9/27/05	792645	836670	2	FP-12	114.4	14.8	113.0	15.2	98.8	P	
F-108	9/27/05	792718	836590	2	FP-12	114.4	14.8	107.2	16.1	93.7	F Comp	Fails Compaction
F-108R	9/27/05	792718	836659	2	FP-12	114.4	14.8	110.5	15.2	96.6	P	Retest
F-109	9/27/05	792875	836640	2	FP-12	114.4	14.8	108.0	14.7	94.4	F Comp	Fails Compaction
F-109R	9/27/05	792875	836640	2	FP-12	114.4	14.8	110.9	14.5	96.9	P	Retest
F-110 *	9/27/05	792950	836550	2	FP-12	114.4	14.8	109.7	15.2	95.9	P	
F-111	9/27/05	793090	836490	2	FP-12	114.4	14.8	107.1	15.1	93.6	F Comp	Fails Compaction
F-111R	9/27/05	793090	836490	2	FP-12	114.4	14.8	109.0	14.6	95.3	P	Retest
F-112	9/27/05	793143	836364	2	FP-12	114.4	14.8	109.6	16.3	95.8	P	

Table C.2. Field Compaction Test Results for the GHP-2 Frost Protection Layer: 2005-2006

Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed.
 Max.= Maximum; FG = Finish Grade; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both test endpoints.
 See NOTES and summary statistics at the end of this table.

Compaction Test ID	Date	Location		Lift	Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Comments	
		Northing	Easting		Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture (PM)	Percent Compaction			
								Requirements:	PM ≥ Opt. - 2	≥ 95			
F-113	9/27/05	792230	836540	3	FP-13	114.0	15.4	107.5	12.3	94.3	F C & M	Fails Compaction & Moisture	
F-113R	9/27/05	792230	836540	3	FP-13	114.0	15.4	108.7	14.8	95.4	P	Retest	
F-114	9/27/05	792300	836590	3	FP-13	114.0	15.4	106.3	12.8	93.2	F C & M	Fails Compaction & Moisture	
F-114R	9/27/05	792300	836590	3	FP-13	114.0	15.4	109.4	13.8	96.0	P	Retest	
F-115	9/27/05	792520	836520	3	FP-13	114.0	15.4	105.6	15.3	92.6	F Comp	Fails Compaction	
F-115R	9/27/05	792520	836520	3	FP-13	114.0	15.4	109.3	15.1	95.9	P	Retest	
F-116	9/27/05	792640	836560	3	FP-13	114.0	15.4	106.0	13.1	93.0	F C & M	Fails Compaction & Moisture	
F-116R	9/27/05	792640	836560	3	FP-13	114.0	15.4	109.0	14.9	95.6	P	Retest	
F-117	*	9/27/05	792800	836480	3	FP-13	114.0	15.4	109.6	13.1	96.1	F Moist	Fails Moisture
F-117R		9/27/05	792800	836480	3	FP-13	114.0	15.4	108.6	16.0	95.3	P	Retest
F-118	9/27/05	792930	836485	3	FP-13	114.0	15.4	110.0	16.5	96.5	P		
F-119	9/27/05	793070	836290	3	FP-13	114.0	15.4	108.8	13.8	95.4	P		
F-120	9/27/05	793160	836290	3	FP-13	114.0	15.4	109.2	13.9	95.8	P		
F-121	9/27/05	792180	836660	3	FP-13	114.0	15.4	108.6	12.2	95.3	F Moist	Fails Moisture	
F-121R	9/27/05	792180	836660	3	FP-13	114.0	15.4	108.5	15.9	95.2	P	Retest	
F-122	9/27/05	792390	836660	3	FP-13	114.0	15.4	109.2	16.8	95.8	P		
F-123	9/27/05	792175	836411	2	FP-14	113.5	14.3	110.9	14.8	97.7	P		
F-124	9/27/05	792455	836382	2	FP-14	113.5	14.3	110.9	15.6	97.7	P		
F-125	9/27/05	792690	836363	2	FP-14	113.5	14.3	108.8	15.3	95.9	P		
F-126	9/27/05	792720	836283	2	FP-14	113.5	14.3	108.0	15.8	95.2	P		
F-127	9/27/05	792560	836301	2	FP-14	113.5	14.3	108.7	14.4	95.8	P		
F-128	9/27/05	792340	836311	2	FP-14	113.5	14.3	108.5	15.9	95.6	P		
F-129	9/28/05	791990	836690	2	FP-14	113.5	14.3	108.7	13.7	95.8	P		
F-130	9/28/05	792320	836750	2	FP-14	113.5	14.3	107.9	13.7	95.1	P		
F-131	9/28/05	792560	836735	2	FP-14	113.5	14.3	111.2	13.5	98.0	P		
F-132	9/28/05	792230	836805	2	FP-14	113.5	14.3	108.0	13.0	95.2	P		
F-133	*	9/28/05	792500	836795	2	FP-15	115.7	13.8	110.0	14.5	95.1	P	
F-134		9/28/05	792500	836620	3	FP-15	115.7	13.8	110.5	12.9	95.5	P	
F-135	*	9/28/05	792590	836590	3	FP-15	115.7	13.8	111.8	13.1	96.6	P	
F-136		9/28/05	792710	836590	3	FP-15	115.7	13.8	113.8	13.9	98.4	P	
F-137	9/28/05	792690	836630	3	FP-15	115.7	13.8	108.2	15.4	93.5	F Comp	Fails Compaction	
F-137R	9/28/05	792690	836630	3	FP-15	115.7	13.8	110.3	14.8	95.3	P	Retest	
F-138	9/28/05	792920	836570	3	FP-15	115.7	13.8	109.1	14.4	94.3	F Comp	Fails Compaction	
F-138R	9/28/05	792900	836570	3	FP-15	115.7	13.8	110.9	14.5	95.9	P	Retest	

Table C.2. Field Compaction Test Results for the GHP-2 Frost Protection Layer: 2005-2006

Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed.
 Max.= Maximum; FG = Finish Grade; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both test endpoints.
 See NOTES and summary statistics at the end of this table.

Compaction Test ID	Date	Location		Lift	Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Comments
		Northing	Easting		Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture (PM)	Percent Compaction		
								Requirements:	PM ≥ Opt. - 2	≥ 95		
F-139	9/28/05	792430	837015	1	FP-10	119.9	11.6	116.4	10.1	97.1	P	
F-140	9/28/05	792435	836795	1	FP-10	119.9	11.6	114.8	10.7	95.7	P	
F-141	9/28/05	792650	836855	1	FP-10	119.9	11.6	116.4	11.2	97.1	P	
F-142	9/28/05	793070	836420	3	FP-16	117.1	13.0	115.9	9.8	99.0	F Moist	Fails Moisture
F-142R	9/28/05	793070	836420	3	FP-16	117.1	13.0	113.5	11.3	96.9	P	Retest
F-143	9/29/05	792090	836720	3	FP-16	117.1	13.0	113.2	11.2	96.7	P	
F-144	9/29/05	792220	836780	3	FP-16	117.1	13.0	116.4	11.7	99.4	P	
F-145	9/29/05	792330	836720	3	FP-16	117.1	13.0	113.4	11.4	96.8	P	
F-146	9/29/05	792410	836780	3	FP-16	117.1	13.0	110.6	14.2	94.4	F Comp	Fails Compaction
F-146R	9/29/05	792410	836780	3	FP-16	117.1	13.0	111.8	13.9	95.5	P	Retest
F-147	9/29/05	792510	836710	3	FP-16	117.1	13.0	113.6	11.1	97.0	P	
F-148	* 9/29/05	792605	836735	3	FP-16	117.1	13.0	111.7	17.4	95.4	P	
F-149	9/29/05	792700	836700	3	FP-16	117.1	13.0	112.5	14.8	96.1	P	
F-150	9/29/05	792860	836060	3	FP-16	117.1	13.0	113.8	14.0	97.2	P	
F-151	9/29/05	792540	837025	1	FP-16	117.1	13.0	113.3	14.5	96.8	P	
F-152	9/29/05	792490	836980	1	FP-17	118.9	12.6	113.4	13.0	95.4	P	
F-153	9/29/05	792680	836905	1	FP-17	118.9	12.6	114.5	12.7	96.3	P	
F-154	9/29/05	792675	836920	1	FP-17	118.9	12.6	113.2	13.2	95.2	P	
F-155	9/29/05	792680	836750	2	FP-17	118.9	12.6	108.8	14.9	91.5	F Comp	Fails Compaction
F-155R	9/29/05	792680	836750	3	FP-17	118.9	12.6	114.4	12.2	96.2	P	Retest
F-156	* 9/29/05	792652	836229	2	FP-18	115.2	14.2	114.1	13.6	99.0	P	
F-157	9/29/05	792192	836282	2	FP-18	115.2	14.2	111.5	13.6	96.8	P	
F-158	9/29/05	792523	836230	2	FP-18	115.2	14.2	111.0	13.3	96.4	P	
F-159	9/29/05	792305	836230	2	FP-18	115.2	14.2	110.4	15.0	95.8	P	
F-160	9/29/05	792760	836160	2	FP-18	115.2	14.2	119.2	10.4	103.5	F Moist	Fails Moisture
F-160R	10/3/05	792760	836160	2	FP-18	115.2	14.2	110.9	12.6	96.3	P	Retest
F-161	* 9/29/05	792890	836070	2	FP-18	115.2	14.2	115.1	10.5	99.9	F Moist	Fails Moisture
F-161R	10/3/05	792890	836070	2	FP-18	115.2	14.2	110.1	13.1	95.6	P	Retest
F-161D	9/30/05	792880	836748	2	FP-17	118.9	12.6	115.7	12.3	97.3	P	Duplicate ID (included in frequency)
F-162	9/30/05	792782	836749	2	FP-17	118.9	12.6	115.3	12.4	97.0	P	
F-163	9/30/05	792710	836805	2	FP-17	118.9	12.6	113.9	10.9	95.8	P	
F-164	9/30/05	792570	836828	2	FP-17	118.9	12.6	115.6	11.0	97.2	P	
F-165	9/30/05	792395	836845	2	FP-17	118.9	12.6	116.1	10.5	97.6	F Moist	Fails Moisture
F-165R	9/30/05	792570	836828	2	FP-17	118.9	12.6	113.9	11.2	95.8	P	Retest

Table C.2. Field Compaction Test Results for the GHP-2 Frost Protection Layer: 2005-2006

Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed.
 Max.= Maximum; FG = Finish Grade; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both test endpoints.
 See NOTES and summary statistics at the end of this table.

Compaction Test ID	Date	Location			Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Comments
		Northing	Easting	Lift	Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture (PM)	Percent Compaction		
								Requirements:	PM ≥ Opt. - 2	≥ 95		
F-166	9/30/05	792210	836760	2	FP-17	118.9	12.6	116.6	10.5	98.1	F Moist	Fails Moisture
F-166R	9/30/05	792200	836862	2	FP-17	118.9	12.6	115.1	10.6	96.8	P	Retest
F-167	9/30/05	792080	836790	2	FP-19	117.4	13.5	113.7	11.6	96.8	P	
F-168	9/30/05	793195	836500	1	FP-19	117.4	13.5	114.4	11.9	97.4	P	
F-169	9/30/05	792940	836775	1	FP-19	117.4	13.5	117.5	12.5	100.1	P	
F-170	9/30/05	792645	836805	1	FP-19	117.4	13.5	116.9	14.0	99.6	P	
F-171	9/30/05	792930	836690	2	FP-19	117.4	13.5	117.2	11.9	99.8	P	
F-172	9/30/05	793040	836480	2	FP-19	117.4	13.5	114.3	12.2	97.4	P	
F-173	9/30/05	793199	836435	2	FP-19	117.4	13.5	115.3	14.1	98.2	P	
F-174	10/3/05	792870	835940	2	FP-18	115.2	14.2	110.2	12.4	95.7	P	
F-175	10/3/05	792765	835932	2	FP-18	115.2	14.2	111.3	15.2	96.6	P	
F-176	10/3/05	792629	835995	2	FP-18	115.2	14.2	111.7	12.7	97.0	P	
F-177	10/3/05	792468	836080	2	FP-18	115.2	14.2	112.4	12.6	97.6	P	
F-178	10/3/05	792325	836170	2	FP-19	117.4	13.5	111.8	13.9	95.2	P	
F-179	10/3/05	792540	836155	2	FP-19	117.4	13.5	111.9	16.2	95.3	P	
F-180	10/3/05	792688	836098	2	FP-19	117.4	13.5	112.3	14.2	95.7	P	
F-181	10/3/05	792760	836040	2	FP-19	117.4	13.5	112.5	13.1	95.8	P	
F-182	10/3/05	792760	836040	1	FP-20	117.2	13.0	112.4	15.3	95.9	P	
F-183	10/3/05	792910	836815	1	FP-20	117.2	13.0	111.7	14.7	95.3	P	
F-184	10/3/05	793045	836700	1	FP-20	117.2	13.0	113.5	12.7	96.8	P	
F-185	10/3/05	793245	836500	1	FP-20	117.2	13.0	114.1	15.2	97.4	P	
F-186	10/7/05	792090	836160	1	FP-20	117.2	13.0	113.9	12.9	97.2	P	
F-187	10/7/05	792000	836105	1	FP-20	117.2	13.0	112.2	12.9	95.7	P	
F-188	10/7/05	792000	836455	1	FP-20	117.2	13.0	114.5	14.0	97.7	P	
F-189	10/7/05	792030	836570	1	FP-20	117.2	13.0	113.9	11.3	97.2	P	
F-190	10/8/05	792200	836390	3	FP-21	118.6	12.0	114.2	10.9	96.3	P	
F-191	10/8/05	792320	836420	3	FP-21	118.6	12.0	113.9	10.9	96.0	P	
F-192	10/8/05	792470	836410	3	FP-21	118.6	12.0	116.4	10.7	98.1	P	
F-193	10/8/05	792630	836405	3	FP-21	118.6	12.0	117.1	11.8	98.7	P	
F-194	10/8/05	792760	836370	3	FP-21	118.6	12.0	116.3	12.8	98.1	P	
F-195	10/8/05	792290	836350	3	FP-21	118.6	12.0	119.5	11.5	100.8	P	
F-196	10/8/05	792430	836310	3	FP-21	118.6	12.0	115.3	14.2	97.2	P	
F-197	10/8/05	792530	836305	3	FP-21	118.6	12.0	114.4	12.8	96.5	P	
F-198	10/8/05	792650	836280	3	FP-21	118.6	12.0	117.4	13.1	99.0	P	

Table C.2. Field Compaction Test Results for the GHP-2 Frost Protection Layer: 2005-2006

Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed.
 Max.= Maximum; FG = Finish Grade; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both test endpoints.
 See NOTES and summary statistics at the end of this table.

Compaction Test ID	Date	Location			Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Comments
		Northing	Easting	Lift	Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture (PM)	Percent Compaction		
								Requirements:	PM ≥ Opt. - 2	≥ 95		
F-199	10/8/05	792560	836210	3	FP-21	118.6	12.0	114.8	13.5	96.8	P	
F-200	10/8/05	792190	836210	3	FP-22	118.0	12.9	117.2	10.9	99.3	P	
F-201	10/8/05	792350	836130	3	FP-22	118.0	12.9	115.3	11.0	97.7	P	
F-202	10/8/05	792470	836070	3	FP-22	118.0	12.9	116.8	11.4	99.0	P	
F-203	10/8/05	792620	835990	3	FP-22	118.0	12.9	115.4	13.4	97.8	P	
F-204	* 10/8/05	792740	835940	3	FP-22	118.0	12.9	117.2	12.7	99.3	P	
F-205	10/8/05	792850	835940	3	FP-22	118.0	12.9	114.2	11.5	96.8	P	
F-206	10/8/05	792720	836010	3	FP-22	118.0	12.9	115.7	12.7	98.1	P	
F-207	10/8/05	792590	836070	3	FP-22	118.0	12.9	114.9	12.8	97.4	P	
F-208	10/8/05	792460	836140	3	FP-22	118.0	12.9	114.6	14.1	97.1	P	
F-209	10/8/05	792310	836210	3	FP-22	118.0	12.9	114.7	11.9	97.2	P	
F-210	10/8/05	792210	836270	3	FP-23	119.4	12.5	114.6	11.9	96.0	P	
F-211	10/8/05	792120	836380	3	FP-23	119.4	12.5	114.4	12.8	95.8	P	
F-212	10/11/05	793215	836580	1	FP-23	119.4	12.5	113.9	14.0	95.4	P	
F-213	10/11/05	793015	836785	1	FP-23	119.4	12.5	115.4	10.9	96.6	P	
F-214	10/11/05	792875	836860	1	FP-23	119.4	12.5	114.6	13.4	96.0	P	
F-215	10/11/05	792170	836460	3	FP-23	119.4	12.5	113.7	16.7	95.2	P	
F-216	10/11/05	792390	836470	3	FP-23	119.4	12.5	113.9	10.8	95.4	P	
F-217	10/11/05	792530	836430	3	FP-23	119.4	12.5	114.5	11.5	95.9	P	
F-218	10/11/05	792750	836420	3	FP-23	119.4	12.5	113.6	13.2	95.1	P	
F-219	* 10/11/05	792820	836370	3	FP-23	119.4	12.5	116.3	12.3	97.4	P	
F-220	10/11/05	792900	836010	3	FP-24	115.7	14.1	110.5	12.8	95.5	P	
F-221	10/11/05	792810	836110	3	FP-24	115.7	14.1	110.0	15.5	95.1	P	
F-222	* 10/11/05	792720	836230	3	FP-24	115.7	14.1	111.2	16.8	96.1	P	
F-223	10/11/05	793240	836490	2	FP-25	118.9	12.9	114.4	11.8	96.2	P	
F-224	10/11/05	793140	836490	3	FP-25	118.9	12.9	114.4	12.8	96.2	P	
F-225	10/11/05	793125	836620	2	FP-25	118.9	12.9	114.7	13.2	96.5	P	
F-226	10/11/05	792995	836760	2	FP-25	118.9	12.9	114.5	11.9	96.3	P	
F-227	10/11/05	792712	836855	2	FP-25	118.9	12.9	115.8	14.6	97.4	P	
F-228	10/12/05	792790	836770	3	FP-25	118.9	12.9	114.5	11.2	96.3	P	
F-229	10/12/05	792950	836720	3	FP-25	118.9	12.9	114.3	12.0	96.1	P	
F-230	10/12/05	793070	836580	3	FP-25	118.9	12.9	113.8	10.9	95.7	P	
F-231	10/12/05	793230	836410	3	FP-25	118.9	12.9	115.1	12.9	96.8	P	
F-232	10/12/05	792790	836410	4	FP-26	118.4	12.3	116.4	11.2	98.3	P	

Table C.2. Field Compaction Test Results for the GHP-2 Frost Protection Layer: 2005-2006

Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed.
 Max.= Maximum; FG = Finish Grade; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both test endpoints.
 See NOTES and summary statistics at the end of this table.

Compaction Test ID	Date	Location		Lift	Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Comments
		Northing	Easting		Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture (PM)	Percent Compaction		
								Requirements:	PM ≥ Opt. - 2	≥ 95		
F-233	10/12/05	792680	836450	4	FP-26	118.4	12.3	113.4	12.9	95.8	P	
F-234	10/12/05	792520	836455	4	FP-26	118.4	12.3	112.7	11.6	95.2	P	
F-235	10/12/05	792830	836730	4	FP-26	118.4	12.3	114.9	12.4	97.0	P	
F-236	10/12/05	792710	836710	4	FP-26	118.4	12.3	113.1	14.8	95.5	P	
F-237	10/12/05	792600	836780	4	FP-26	118.4	12.3	114.0	12.8	96.3	P	
F-238	* 10/12/05	792410	836805	4	FP-26	118.4	12.3	114.0	14.0	96.3	P	
F-239	10/12/05	792270	836825	4	FP-26	118.4	12.3	113.7	12.3	96.0	P	
F-240	10/12/05	792120	836840	4	FP-26	118.4	12.3	114.6	10.9	96.8	P	
F-241	10/12/05	792170	836850	4	FP-26	118.4	12.3	114.2	11.1	96.5	P	
F-242	10/12/05	792050	836750	4	FP-27	116.5	13.4	113.9	14.8	97.8	P	
F-243	10/12/05	792220	836760	4	FP-27	116.5	13.4	113.4	11.9	97.3	P	
F-244	* 10/12/05	792435	836730	4	FP-27	116.5	13.4	117.8	12.4	101.1	P	
F-245	10/12/05	792595	836710	4	FP-27	116.5	13.4	112.7	12.3	96.7	P	
F-246	10/12/05	791895	837010	3	FP-27	116.5	13.4	115.0	13.3	98.7	P	
F-247	10/12/05	792070	836320	3	FP-27	116.5	13.4	114.0	13.8	97.9	P	
F-248	10/12/05	792050	837030	4	FP-27	116.5	13.4	112.8	12.9	96.8	P	
F-249	10/12/05	792040	836650	4	FP-27	116.5	13.4	115.3	13.5	99.0	P	
F-250	10/12/05	792270	836680	4	FP-27	116.5	13.4	113.6	12.4	97.5	P	
F-251	10/12/05	792425	836660	4	FP-27	116.5	13.4	112.0	11.8	96.1	P	
F-252	10/12/05	792610	836640	4	FP-28	117.9	11.6	113.9	11.5	96.6	P	
F-253	10/12/05	792760	836640	4	FP-28	117.9	11.6	115.3	11.1	97.8	P	
F-254	10/12/05	792185	836590	4	FP-28	117.9	11.6	114.6	10.5	97.2	P	
F-255	10/12/05	792340	836580	4	FP-28	117.9	11.6	112.3	11.7	95.3	P	
F-256	10/12/05	792570	836560	4	FP-28	117.9	11.6	111.9	13.6	94.9	P	Test passed at discretion of QC officer.
F-257	10/13/05	792090	836490	4	FP-28	117.9	11.6	113.2	11.5	96.0	P	
F-258	10/13/05	792210	836480	4	FP-28	117.9	11.6	114.3	10.9	96.9	P	
F-259	* 10/13/05	792420	836450	4	FP-28	117.9	11.6	113.9	10.8	96.6	P	
F-260	10/13/05	792550	836490	4	FP-28	117.9	11.6	113.6	12.6	96.4	P	
F-261	10/13/05	792720	836330	4	FP-28	117.9	11.6	118.1	10.3	100.2	P	
F-262	10/13/05	793140	836235	4	FP-29	118.0	12.9	113.0	14.2	95.8	P	
F-263	10/13/05	793010	836350	4	FP-29	118.0	12.9	113.3	11.7	96.0	P	
F-264	10/13/05	792900	836430	4	FP-29	118.0	12.9	113.1	14.6	95.8	P	
F-265	10/13/05	792750	836520	4	FP-29	118.0	12.9	113.9	11.7	96.5	P	
F-266	* 10/13/05	792840	836620	4	FP-29	118.0	12.9	115.9	11.1	98.2	P	

Table C.2. Field Compaction Test Results for the GHP-2 Frost Protection Layer: 2005-2006

Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed.
 Max.= Maximum; FG = Finish Grade; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both test endpoints.
 See NOTES and summary statistics at the end of this table.

Compaction Test ID	Date	Location		Lift	Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Comments	
		Northing	Easting		Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture (PM)	Percent Compaction			
								Requirements:	PM ≥ Opt. - 2	≥ 95			
F-267	10/13/05	792930	836550	4	FP-29	118.0	12.9	115.4	13.0	97.8	P		
F-268	10/13/05	793030	836440	4	FP-29	118.0	12.9	113.9	15.1	96.5	P		
F-269	10/13/05	793140	836350	4	FP-29	118.0	12.9	113.9	11.1	96.5	P		
F-270	10/13/05	793180	836450	4	FP-29	118.0	12.9	114.2	16.0	96.8	P		
F-271	10/13/05	793070	836540	4	FP-29	118.0	12.9	112.2	12.0	95.1	P		
F-272	10/13/05	792930	836680	4	FP-30	118.0	12.8	116.9	13.8	99.1	P		
F-273	10/13/05	792100	836395	4	FP-30	118.0	12.8	117.5	11.3	99.6	P		
F-274	10/13/05	792315	836410	4	FP-30	118.0	12.8	119.6	12.6	101.4	P		
F-275	10/13/05	792522	835960	2	FP-31	117.5	13.5	115.7	13.5	98.5	P		
F-276	10/13/05	792445	836890	2	FP-31	117.5	13.5	113.1	12.4	96.3	P		
F-277	*	10/13/05	792390	835983	2	FP-31	117.5	13.5	113.1	15.3	96.3	P	
F-278	10/13/05	792420	836360	4	FP-30	118.0	12.8	114.1	15.1	96.7	P		
F-279	10/13/05	792550	836310	4	FP-30	118.0	12.8	112.2	13.4	95.1	P		
F-280	10/13/05	792650	836260	4	FP-30	118.0	12.8	113.3	15.5	96.0	P		
F-281	10/13/05	792710	836210	4	FP-30	118.0	12.8	116.2	13.7	98.5	P		
F-282	10/14/05	792130	836310	4	FP-30	118.0	12.8	113.2	12.6	95.9	P		
F-283	10/14/05	792270	836370	4	FP-30	118.0	12.8	113.2	14.3	95.9	P		
F-284	10/14/05	792430	836300	4	FP-30	118.0	12.8	113.7	12.3	96.4	P		
F-285	10/14/05	792520	836240	4	FP-32	120.0	12.0	117.0	11.9	97.5	P		
F-286	10/14/05	792640	836180	4	FP-32	120.0	12.0	116.1	13.0	96.8	P		
F-287	*	10/14/05	792690	836120	4	FP-32	120.0	12.0	118.7	12.1	98.9	P	
F-288	10/14/05	792830	836060	4	FP-32	120.0	12.0	115.1	13.1	95.9	P		
F-289	10/14/05	792309	837003	2	FP-32	120.0	12.0	115.4	12.3	96.2	P		
F-290	10/14/05	792840	835960	4	FP-32	120.0	12.0	114.6	14.2	95.5	P		
F-291	10/14/05	792700	836010	4	FP-32	120.0	12.0	119.6	11.8	99.7	P		
F-292	10/14/05	792343	836914	2	FP-32	120.0	12.0	115.0	12.0	95.8	P		
F-293	*	10/14/05	792275	836962	2	FP-32	120.0	12.0	117.0	13.4	97.5	P	
F-294	10/14/05	792155	836920	2	FP-32	120.0	12.0	117.0	13.9	97.5	P		
F-295	10/14/05	792089	836960	2	FP-33	118.5	12.8	115.2	12.7	97.2	P		
F-296	10/14/05	791920	836910	2	FP-33	118.5	12.8	113.9	11.4	96.1	P		
F-297	10/14/05	792443	836943	2	FP-33	118.5	12.8	113.4	13.1	95.7	P		
F-298	10/14/05	792330	836065	2	FP-31	117.5	13.5	112.3	11.8	95.6	P		
F-299	10/14/05	792260	835968	2	FP-31	117.5	13.5	111.6	11.7	95.0	P		
F-300	10/14/05	792120	836155	2	FP-31	117.5	13.5	112.8	11.8	96.0	P		

Table C.2. Field Compaction Test Results for the GHP-2 Frost Protection Layer: 2005-2006

Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed. Max.= Maximum; FG = Finish Grade; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both test endpoints. See NOTES and summary statistics at the end of this table.

Compaction Test ID	Date	Location		Lift	Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Comments
		Northing	Easting		Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture (PM)	Percent Compaction		
								Requirements:	PM ≥ Opt. - 2	≥ 95		
F-301	10/14/05	792130	836035	2	FP-31	117.5	13.5	111.9	11.5	95.2	P	
F-302	10/17/05	792370	836890	4	FP-33	118.5	12.8	114.0	11.0	96.2	P	
F-303	10/17/05	792480	836830	4	FP-33	118.5	12.8	112.7	11.0	95.1	P	
F-304	10/17/05	792690	836810	4	FP-33	118.5	12.8	114.4	12.8	96.5	P	
F-305	10/17/05	792880	836770	4	FP-33	118.5	12.8	112.8	11.2	95.2	P	
F-306	* 10/17/05	793000	836670	4	FP-33	118.5	12.8	117.4	12.3	99.1	P	
F-307	10/17/05	793150	836530	4	FP-33	118.5	12.8	114.1	10.8	96.3	P	
F-308	10/17/05	792170	836235	4	FP-33	118.5	12.8	114.2	11.5	96.4	P	
F-309	10/17/05	792220	836170	4	FP-34	119.0	12.4	113.9	10.7	95.7	P	
F-310	10/17/05	792410	836100	4	FP-34	119.0	12.4	113.9	12.4	95.7	P	
F-311	* 10/17/05	792570	836020	4	FP-34	119.0	12.4	114.6	11.3	96.3	P	
F-312	10/17/05	792660	835900	2	FP-31	117.5	13.5	115.3	13.9	98.1	P	
F-313	10/17/05	792583	835880	2	FP-31	117.5	13.5	112.1	11.9	95.4	P	
F-314	* 10/17/05	792575	835810	2	FP-31	117.5	13.5	112.4	11.4	95.7	P	Test passed at discretion of QC officer.
F-315	10/18/05	792250	836270	4	FP-34	119.0	12.4	114.3	13.0	96.1	P	
F-316	10/18/05	792330	836280	4	FP-34	119.0	12.4	113.3	10.5	95.2	P	
F-317	10/18/05	792420	836250	4	FP-34	119.0	12.4	116.7	13.3	98.1	P	
F-318	10/18/05	792560	836190	4	FP-34	119.0	12.4	116.9	15.3	98.2	P	
F-319	10/18/05	792560	836090	4	FP-34	119.0	12.4	116.8	14.8	98.2	P	
F-320	* 10/18/05	792410	836170	4	FP-34	119.0	12.4	115.7	15.2	97.2	P	
F-321	10/18/05	791950	836560	1	FP-34	119.0	12.4	118.6	12.3	99.7	P	
F-322	10/18/05	791845	836810	1	FP-35	119.5	12.3	114.2	10.8	95.6	P	
F-323	10/18/05	791990	836500	2	FP-35	119.5	12.3	116.0	11.8	97.1	P	
F-324	10/18/05	791880	836730	2	FP-35	119.5	12.3	116.2	10.8	97.2	P	
F-325	10/19/05	792090	836155	2	FP-35	119.5	12.3	113.8	13.2	95.2	P	
F-326	10/19/05	791980	836120	2	FP-35	119.5	12.3	113.8	11.8	95.2	P	
F-327	10/19/05	791915	836200	2	FP-35	119.5	12.3	115.8	12.0	96.9	P	
F-328	10/19/05	792010	836290	2	FP-35	119.5	12.3	114.1	10.7	95.5	P	
F-329	10/19/05	791850	836385	1	FP-35	119.5	12.3	114.2	10.2	95.6	F Moist	Fails Moisture
F-329R	10/19/05	791850	836385	1	FP-35	119.5	12.3	113.6	11.1	95.1	P	
F-330	10/19/05	791850	836560	1	FP-35	119.5	12.3	115.0	10.4	96.2	P	
F-331	10/19/05	791795	836630	1	FP-35	119.5	12.3	114.3	11.5	95.6	P	
F-332	10/19/05	791750	836800	1	FP-36	119.4	12.8	113.9	13.1	95.4	P	
F-333	10/19/05	792020	836295	2	FP-36	119.4	12.8	113.8	14.6	95.3	P	

Table C.2. Field Compaction Test Results for the GHP-2 Frost Protection Layer: 2005-2006

Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed.
 Max.= Maximum; FG = Finish Grade; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both test endpoints.
 See NOTES and summary statistics at the end of this table.

Compaction Test ID	Date	Location		Lift	Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Comments
		Northing	Easting		Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture (PM)	Percent Compaction		
								Requirements:	PM ≥ Opt. - 2	≥ 95		
F-334	10/19/05	792055	836363	2	FP-36	119.4	12.8	113.9	10.9	95.4	P	
F-335	10/19/05	792072	836460	2	FP-36	119.4	12.8	114.9	11.1	96.2	P	
F-336	* 10/19/05	792018	836563	2	FP-36	119.4	12.8	119.0	12.6	99.7	P	
F-337	10/19/05	793240	836500	3	FP-36	119.4	12.8	114.7	13.1	96.1	P	
F-338	10/19/05	793070	836680	3	FP-36	119.4	12.8	114.8	11.8	96.1	P	
F-339	10/19/05	792940	836805	3	FP-36	119.4	12.8	114.2	12.2	95.6	P	
F-340	10/19/05	793020	836780	3	FP-36	119.4	12.8	114.5	15.0	95.9	P	
F-341	10/19/05	793210	836590	3	FP-36	119.4	12.8	113.8	12.8	95.3	P	
F-342	* 10/19/05	793270	836510	3	FP-37	120.8	11.8	119.2	12.1	98.7	P	
F-343	10/20/05	792800	836840	3	FP-37	120.8	11.8	116.8	12.1	96.7	P	
F-344	10/20/05	792590	836870	3	FP-37	120.8	11.8	115.2	11.0	95.4	P	
F-345	10/20/05	792450	836940	3	FP-37	120.8	11.8	115.7	10.9	95.8	P	
F-346	10/20/05	792510	836950	3	FP-37	120.8	11.8	115.7	11.5	95.8	P	
F-347	10/20/05	792680	836900	3	FP-37	120.8	11.8	116.0	10.3	96.0	P	
F-348	10/20/05	792870	836960	1	FP-37	120.8	11.8	116.0	12.6	96.0	P	
F-349	10/20/05	793095	836850	1	FP-37	120.8	11.8	115.6	11.4	95.7	P	
F-350	10/20/05	793295	836665	1	FP-37	120.8	11.8	116.4	13.7	96.4	P	
F-351	* 10/20/05	793292	836655	2	FP-37	120.8	11.8	119.3	10.8	98.8	P	
F-352	10/20/05	793118	836840	2	FP-38	121.4	11.4	116.1	9.7	95.6	P	
F-353	10/20/05	792920	836960	2	FP-38	121.4	11.4	116.8	13.6	96.2	P	
F-354	10/21/05	792730	836270	FG	FP-38	121.4	11.4	118.0	10.5	97.2	P	
F-355	10/21/05	792610	836300	FG	FP-38	121.4	11.4	115.2	12.9	94.9	P	Test passed at discretion of QC officer.
F-356	10/21/05	792480	836330	FG	FP-38	121.4	11.4	118.2	12.2	97.4	P	
F-357	10/21/05	792540	836370	FG	FP-38	121.4	11.4	115.1	10.7	94.8	P	Test passed at discretion of QC officer.
F-358	* 10/21/05	792700	836740	FG	FP-38	121.4	11.4	118.8	12.6	97.9	P	
F-359	10/21/05	792810	836360	FG	FP-38	121.4	11.4	117.1	11.3	96.5	P	
F-360	10/21/05	792650	836410	FG	FP-38	121.4	11.4	116.5	10.5	96.0	P	
F-361	* 10/21/05	792580	836450	FG	FP-38	121.4	11.4	115.9	12.3	95.5	P	
F-362	10/21/05	792470	836490	FG	FP-39	120.6	11.3	116.4	12.6	96.5	P	
F-363	10/21/05	792560	836520	FG	FP-39	120.6	11.3	119.2	12.0	98.8	P	
F-364	10/21/05	792785	836430	FG	FP-39	120.6	11.3	119.9	10.9	99.4	P	
F-365	10/25/05	793570	836570	1	FP-39	120.6	11.3	115.8	13.0	96.0	P	
F-366	10/25/05	793425	836540	1	FP-39	120.6	11.3	117.6	11.0	97.5	P	
F-367	10/25/05	793160	836750	1	FP-39	120.6	11.3	115.3	10.6	95.6	P	

Table C.2. Field Compaction Test Results for the GHP-2 Frost Protection Layer: 2005-2006

Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed.
 Max.= Maximum; FG = Finish Grade; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both test endpoints.
 See NOTES and summary statistics at the end of this table.

Compaction Test ID	Date	Location		Lift	Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Comments
		Northing	Easting		Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture (PM)	Percent Compaction		
								Requirements:	PM ≥ Opt. - 2	≥ 95		
F-368	10/25/05	793430	836520	2	FP-39	120.6	11.3	117.9	11.3	97.8	P	
F-369	10/25/05	793560	836555	2	FP-39	120.6	11.3	115.5	11.9	95.8	P	
F-370	10/25/05	792585	836960	3	FP-39	120.6	11.3	117.9	11.3	97.8	P	
F-371	10/25/05	792982	836968	3	FP-39	120.6	11.3	116.2	12.0	96.4	P	
F-372	10/25/05	793155	836793	3	FP-40	120.0	12.1	116.3	12.8	96.9	P	
F-373	10/25/05	792685	836999	3	FP-40	120.0	12.1	115.1	12.4	95.9	P	
F-374	*	10/25/05	793045	3	FP-40	120.0	12.1	116.3	15.0	96.9	P	
F-375	10/25/05	792878	836968	3	FP-40	120.0	12.1	116.6	13.2	97.2	P	
F-376	10/25/05	793208	836709	3	FP-40	120.0	12.1	116.6	13.8	97.2	P	
F-377	10/25/05	792750	836960	3	FP-40	120.0	12.1	116.6	12.9	97.2	P	
F-378	*	10/25/05	793560	3	FP-40	120.0	12.1	117.5	13.4	97.9	P	
F-379	10/25/05	793430	836532	3	FP-40	120.0	12.1	115.7	13.9	96.4	P	
F-380	10/26/05	792290	836905	4	FP-40	120.0	12.1	116.7	11.4	97.3	P	
F-381	10/26/05	792165	836960	4	FP-40	120.0	12.1	116.9	11.9	97.4	P	
F-382	*	10/26/05	792030	4	FP-41	120.4	11.5	115.3	13.7	95.8	P	
F-383	10/26/05	791855	836870	4	FP-41	120.4	11.5	116.0	12.1	96.3	P	
F-384	10/26/05	792455	836740	4	FP-41	120.4	11.5	120.6	12.8	100.2	P	
F-385	10/26/05	792030	837060	4	FP-41	120.4	11.5	117.3	14.4	97.4	P	
F-386	10/26/05	791895	836720	4	FP-41	120.4	11.5	118.2	12.2	98.2	P	
F-387	11/2/05	792550	836975	4	FP-41	120.4	11.5	115.3	13.0	95.8	P	
F-388	11/2/05	792720	836990	4	FP-41	120.4	11.5	115.3	12.8	95.8	P	
F-389	11/2/05	792900	836925	4	FP-41	120.4	11.5	116.1	14.7	96.4	P	
F-390	11/2/05	793015	836910	4	FP-41	120.4	11.5	115.0	15.1	95.5	P	
F-391	11/2/05	793225	836710	4	FP-41	120.4	11.5	115.4	14.4	95.8	P	
F-392	*	11/2/05	793500	4	FP-42	121.0	11.4	115.9	15.6	95.8	P	
F-393	11/2/05	793480	836605	4	FP-42	121.0	11.4	116.4	14.9	96.2	P	
F-394	11/2/05	793320	836565	4	FP-42	121.0	11.4	118.5	11.2	97.9	P	
F-395	11/2/05	793285	836460	4	FP-42	121.0	11.4	116.3	12.9	96.1	P	
F-396	11/2/05	793130	836645	4	FP-42	121.0	11.4	115.6	15.3	95.5	P	
F-397	11/2/05	792210	836810	4	FP-42	121.0	11.4	119.3	11.5	98.6	P	
F-398	*	11/2/05	792665	4	FP-42	121.0	11.4	115.2	15.0	95.2	P	
F-399	11/2/05	793080	836810	4	FP-42	121.0	11.4	115.6	14.0	95.5	P	
F-400	11/2/05	792925	836870	4	FP-42	121.0	11.4	115.6	14.2	95.5	P	
F-401	11/2/05	792705	836900	4	FP-42	121.0	11.4	115.6	11.7	95.5	P	

Table C.2. Field Compaction Test Results for the GHP-2 Frost Protection Layer: 2005-2006

Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed.
 Max.= Maximum; FG = Finish Grade; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both test endpoints.
 See NOTES and summary statistics at the end of this table.

Compaction Test ID	Date	Location		Lift	Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Comments	
		Northing	Easting		Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture (PM)	Percent Compaction			
								Requirements:	PM ≥ Opt. - 2	≥ 95			
F-394D	11/3/05	793280	836350	FG	FP-43	121.4	10.9	115.3	12.8	95.0	P	Duplicate ID (included in frequency)	
F-395D	11/3/05	793150	836270	FG	FP-43	121.4	10.9	116.0	12.6	95.6	P	" "	
F-396D	11/3/05	793260	836360	FG	FP-43	121.4	10.9	115.3	11.7	95.0	P	" "	
F-397D	11/3/05	793176	836450	FG	FP-43	121.4	10.9	116.9	10.5	96.3	P	" "	
F-398D	11/3/05	793080	836500	FG	FP-43	121.4	10.9	120.3	11.6	99.1	P	" "	
F-399D	11/3/05	793020	836420	FG	FP-43	121.4	10.9	119.1	10.8	98.1	P	" "	
F-400D	11/3/05	793050	836310	FG	FP-43	121.4	10.9	118.2	10.9	97.4	P	" "	
F-401D	11/3/05	792840	836450	FG	FP-43	121.4	10.9	117.6	11.6	96.9	P	" "	
F-402	11/3/05	792740	836570	FG	FP-43	121.4	10.9	117.2	12.6	96.5	P		
F-403	11/3/05	792625	836550	FG	FP-43	121.4	10.9	116.8	10.3	96.2	P		
F-404	11/3/05	792550	836670	FG	FP-44	120.4	11.9	115.4	14.2	95.8	P		
F-405	*	11/3/05	792740	836620	FG	FP-44	120.4	11.9	114.9	12.7	95.4	P	
F-406		11/3/05	792880	836620	FG	FP-44	120.4	11.9	115.3	12.7	95.8	P	
F-407		11/3/05	792920	836480	FG	FP-44	120.4	11.9	116.4	12.4	96.7	P	
F-408		11/3/05	793040	836630	FG	FP-44	120.4	11.9	114.9	13.1	95.4	P	
F-409	*	11/4/05	792465	836945	4	FP-24	115.7	14.1	113.6	13.8	98.2	P	
F-410		11/4/05	793165	836660	4	FP-24	115.7	14.1	111.0	12.9	95.9	P	
F-411		11/4/05	793370	836465	4	FP-24	115.7	14.1	110.2	14.4	95.2	P	
F-412		11/4/05	792445	836240	FG	FP-44	120.4	11.9	116.2	12.1	96.5	P	
F-413	*	11/4/05	792180	836332	FG	FP-44	120.4	11.9	121.1	12.7	100.6	P	
F-414		11/7/05	793360	836410	4	FP-44	120.4	11.9	116.1	13.8	96.4	P	
F-415		11/7/05	793440	836500	4	FP-44	120.4	11.9	114.4	16.2	95.0	P	
F-416	*	11/7/05	793580	836575	4	FP-44	120.4	11.9	120.8	11.9	100.3	P	
F-417		11/7/05	793260	836650	FG	FP-45	119.9	12.2	117.9	14.7	98.3	P	
F-418		11/7/05	793150	836760	FG	FP-45	119.9	12.2	118.3	14.0	98.7	P	
F-419		11/7/05	793070	836855	FG	FP-45	119.9	12.2	117.8	13.5	98.2	P	
F-420		11/7/05	792840	836930	FG	FP-45	119.9	12.2	116.6	13.8	97.2	P	
F-421		11/7/05	792590	836980	FG	FP-45	119.9	12.2	116.6	14.9	97.2	P	
F-422		11/7/05	792870	836740	FG	FP-45	119.9	12.2	117.5	12.3	98.0	P	
F-423		11/7/05	792780	836780	FG	FP-45	119.9	12.2	117.3	12.7	97.8	P	
F-424		11/7/05	792550	836790	FG	FP-45	119.9	12.2	116.7	11.4	97.3	P	
F-425		11/7/05	792640	836760	FG	FP-45	119.9	12.2	115.7	13.1	96.5	P	
F-426		11/7/05	792840	836690	FG	FP-45	119.9	12.2	118.4	12.7	98.7	P	
F-427		11/8/05	792440	836960	FG	FP-46	121.9	11.0	116.7	14.5	95.7	P	

Table C.2. Field Compaction Test Results for the GHP-2 Frost Protection Layer: 2005-2006

Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed.
 Max.= Maximum; FG = Finish Grade; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both test endpoints.
 See NOTES and summary statistics at the end of this table.

Compaction Test ID	Date	Location		Lift	Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Comments
		Northing	Easting		Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture (PM)	Percent Compaction		
								Requirements:	PM ≥ Opt. - 2	≥ 95		
F-428	11/8/05	792740	836900	FG	FP-46	121.9	11.0	116.0	12.0	95.2	P	
F-429	11/8/05	793030	836780	FG	FP-46	121.9	11.0	115.1	12.3	94.4	F Comp	Fails Compaction
F-429R	11/9/05	793030	836780	FG	FP-46	121.9	11.0	116.9	13.7	95.9	P	Retest
F-430	11/8/05	793280	836530	FG	FP-46	121.9	11.0	116.9	12.9	95.9	P	
F-431	11/8/05	793280	836430	FG	FP-46	121.9	11.0	118.6	11.3	97.3	P	
F-432	11/8/05	793130	836610	FG	FP-46	121.9	11.0	116.5	12.1	95.6	P	
F-433	* 11/8/05	792950	836820	FG	FP-46	121.9	11.0	118.1	12.3	96.9	P	
F-434	11/8/05	792760	836850	FG	FP-46	121.9	11.0	117.1	12.4	96.1	P	
F-435	11/8/05	792490	836870	FG	FP-46	121.9	11.0	116.0	12.3	95.2	P	
F-436	11/8/05	792380	836940	FG	FP-46	121.9	11.0	117.5	11.4	96.4	P	
F-437	11/8/05	792160	836920	4	FP-47	119.0	12.3	116.5	13.0	97.9	P	
F-438	11/8/05	791950	836940	4	FP-47	119.0	12.3	116.8	12.4	98.2	P	
F-439	* 11/8/05	792110	837020	4	FP-47	119.0	12.3	116.2	13.8	97.6	P	
F-440	11/8/05	792280	837065	4	FP-47	119.0	12.3	113.2	14.4	95.1	P	
F-441	11/9/05	792840	835950	FG	FP-47	119.0	12.3	115.3	12.3	96.9	P	
F-442	11/9/05	792900	836660	FG	FP-47	119.0	12.3	116.2	14.9	97.6	P	
F-443	11/9/05	792810	836090	FG	FP-47	119.0	12.3	115.5	15.2	97.1	P	
F-444	11/9/05	792710	836220	FG	FP-47	119.0	12.3	116.0	14.3	97.5	P	
F-445	11/9/05	792730	835960	FG	FP-47	119.0	12.3	117.9	13.9	99.1	P	
F-446	11/9/05	792610	836040	FG	FP-47	119.0	12.3	119.3	12.7	100.3	P	
F-447	11/9/05	792790	836010	FG	FP-48	119.8	12.1	116.9	16.3	97.6	P	
F-448	* 11/9/05	792720	836060	FG	FP-48	119.8	12.1	114.9	15.4	95.9	P	
F-449	11/9/05	792660	836730	FG	FP-48	119.8	12.1	115.6	14.4	96.5	P	
F-450	11/9/05	792570	836230	FG	FP-48	119.8	12.1	116.2	15.0	97.0	P	
F-451	11/9/05	792500	836120	FG	FP-48	119.8	12.1	116.2	15.5	97.0	P	
F-452	11/9/05	792300	836160	FG	FP-48	119.8	12.1	116.4	12.0	97.2	P	
F-453	11/9/05	792410	836240	FG	FP-48	119.8	12.1	116.4	12.7	97.2	P	
F-454	11/9/05	792300	836340	FG	FP-48	119.8	12.1	115.5	13.5	96.4	P	
F-455	11/10/05	791920	836400	2	FP-48	119.8	12.1	117.8	13.7	98.3	P	
F-456	11/10/05	791840	836410	2	FP-48	119.8	12.1	115.1	12.0	96.1	P	
F-457	11/10/05	791845	836525	2	FP-49	120.1	11.3	119.9	13.0	99.8	P	
F-458	* 11/10/05	791865	836620	2	FP-49	120.1	11.3	118.1	12.8	98.3	P	
F-459	11/10/05	791875	836612	2	FP-49	120.1	11.3	116.4	14.1	96.9	P	
F-460	11/10/05	791835	836690	2	FP-49	120.1	11.3	117.1	12.2	97.5	P	

Table C.2. Field Compaction Test Results for the GHP-2 Frost Protection Layer: 2005-2006

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 Max.= Maximum; FG = Finish Grade; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both test endpoints.
 See NOTES and summary statistics at the end of this table.

Compaction Test ID	Date	Location		Lift	Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Comments
		Northing	Easting		Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture (PM)	Percent Compaction		
								Requirements:	PM ≥ Opt. - 2	≥ 95		
F-461	11/10/05	791775	836713	2	FP-49	120.1	11.3	116.7	10.6	97.2	P	
F-462	11/10/05	791770	836865	2	FP-49	120.1	11.3	115.5	14.8	96.2	P	
F-463	11/10/05	791935	836640	2	FP-49	120.1	11.3	115.2	14.2	95.9	P	
F-464	11/10/05	791935	836640	2	FP-49	120.1	11.3	115.2	14.2	95.9	P	
F-465	11/10/05	791850	836860	2	FP-49	120.1	11.3	115.7	12.4	96.3	P	
F-466	11/11/05	792660	835875	3	FP-49	120.1	11.3	115.0	11.3	95.8	P	
F-467	11/11/05	792545	835805	3	FP-50	120.0	11.8	116.8	12.4	97.3	P	
F-468	11/11/05	792500	835900	3	FP-50	120.0	11.8	115.4	13.0	96.2	P	
F-469	11/11/05	792430	836010	3	FP-50	120.0	11.8	117.9	12.4	98.3	P	
F-470	11/11/05	792285	836930	3	FP-50	120.0	11.8	116.4	12.7	97.0	P	
F-471	11/11/05	792280	836040	3	FP-50	120.0	11.8	115.2	14.1	96.0	P	
F-472	11/11/05	792250	836130	3	FP-50	120.0	11.8	117.5	12.9	97.9	P	
F-473	11/11/05	792155	836080	3	FP-50	120.0	11.8	115.3	13.7	96.1	P	
F-474	11/11/05	792655	836126	3	FP-50	120.0	11.8	117.4	11.9	97.8	P	
F-475	11/11/05	791940	836150	3	FP-50	120.0	11.8	116.1	11.6	96.8	P	
F-476	11/11/05	792020	836950	3	FP-50	120.0	11.8	119.0	11.4	99.2	P	
F-477	11/11/05	791900	836330	3	FP-51	119.6	12.2	119.5	12.7	99.9	P	
F-478	11/11/05	791970	836430	3	FP-51	119.6	12.2	118.2	13.3	98.8	P	
F-479	*	11/11/05	791880	3	FP-51	119.6	12.2	116.5	13.7	97.4	P	
F-480	4/20/06	792580	835860	4	FP-52	120.6	11.5	109.8	12.9	91.0	F Comp	Fails Compaction
F-480R	4/21/06	792580	835860	4	FP-52	120.6	11.5	113.0	11.8	93.7	F Comp	Retest Fails Compaction
F-480RR	4/21/06	792580	835860	4	FP-52	120.6	11.5	115.5	10.6	95.8	P	Second Retest Passes
F-481	4/21/06	792420	835860	4	FP-52	120.6	11.5	124.1	10.6	102.9	P	
F-482	4/21/06	792340	836040	4	FP-52	120.6	11.5	115.3	10.6	95.6	P	
F-483	4/28/06	792290	836930	5	FP-53	119.4	11.9	113.2	11.4	94.8	F Comp	Fails Compaction
F-483R	5/1/06	792290	836930	5	FP-53	119.4	11.9	116.9	9.0	97.9	F Moist	Retest Fails Moisture
F-483RR	5/2/06	792290	836930	5	FP-53	119.4	11.9	118.3	10.1	99.1	P	Second Retest Passes
F-484	4/28/06	792030	837040	5	FP-53	119.4	11.9	111.9	12.3	93.7	F Comp	Fails Compaction
F-484R	5/1/06	792030	837040	5	FP-53	119.4	11.9	117.0	8.5	98.0	F Moist	Retest Fails Moisture
F-484RR	5/2/06	792030	837040	5	FP-53	119.4	11.9	119.9	12.2	100.4	P	Second Retest Passes
F-485	5/2/06	792415	836850	5	FP-53	119.4	11.9	121.3	11.2	101.6	P	
F-486	*	5/2/06	792275	5	FP-53	119.4	11.9	120.2	10.2	100.7	P	
F-487	5/2/06	792040	836840	5	FP-53	119.4	11.9	116.2	13.5	99.4	P	
F-488	5/2/06	791845	836810	5	FP-53	119.4	11.9	117.5	12.4	98.4	P	

Table C.2. Field Compaction Test Results for the GHP-2 Frost Protection Layer: 2005-2006

Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed.
 Max.= Maximum; FG = Finish Grade; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both test endpoints.
 See NOTES and summary statistics at the end of this table.

Compaction Test ID	Date	Location		Lift	Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Comments
		Northing	Easting		Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture (PM)	Percent Compaction		
								Requirements:	PM ≥ Opt. - 2	≥ 95		
F-489	5/2/06	791865	836740	5	FP-53	119.4	11.9	117.6	11.6	98.5	P	
F-490	5/2/06	792040	836675	5	FP-53	119.4	11.9	113.0	12.2	94.6	F Comp	Fails Compaction - No Retest
F-492	5/2/06	792160	836770	5	FP-53	119.4	11.9	115.6	10.9	96.8	P	
F-493	5/2/06	792290	836720	5	FP-54	120.1	11.8	118.0	11.8	98.3	P	
F-494	5/2/06	792365	836770	5	FP-54	120.1	11.8	118.1	11.1	98.3	P	
F-495	* 5/2/06	792460	836780	5	FP-54	120.1	11.8	116.3	11.8	96.8	P	
F-496	5/2/06	792515	836720	5	FP-54	120.1	11.8	117.3	12.2	97.7	P	
F-497	5/2/06	792435	836690	5	FP-54	120.1	11.8	117.9	11.9	98.2	P	
F-498	5/2/06	792275	836580	5	FP-54	120.1	11.8	114.3	14.5	95.2	P	
F-499	5/2/06	792135	836585	5	FP-54	120.1	11.8	114.3	11.1	95.2	P	
F-500	5/2/06	792125	836530	5	FP-54	120.1	11.8	116.7	11.3	97.2	P	
F-501	5/2/06	792115	836440	5	FP-54	120.1	11.8	115.5	9.8	96.2	P	
F-502	5/3/06	792250	836510	5	FP-54	120.1	11.8	119.1	10.0	99.2	P	
F-503	5/3/06	792445	836590	5	FP-55	117.5	13.2	113.7	12.5	96.8	P	
F-504	* 5/3/06	792450	836510	5	FP-55	117.5	13.2	116.5	13.3	99.1	P	
F-505	5/3/06	792320	836435	5	FP-55	117.5	13.2	119.9	12.5	102.0	P	
F-506	5/3/06	792170	836380	5	FP-55	117.5	13.2	118.1	11.9	100.5	P	
F-507	5/4/06	791750	836765	3	FP-55	117.5	13.2	115.6	13.4	98.4	P	
F-508	5/5/06	791890	836700	3	FP-56	121.4	10.6	121.5	10.4	100.1	P	
F-509	5/5/06	791840	836640	3	FP-56	121.4	10.6	121.5	12.2	100.1	P	
F-510	5/5/06	792035	836500	3	FP-56	121.4	10.6	117.1	12.3	96.5	P	
F-511	5/5/06	791810	836570	3	FP-56	121.4	10.6	116.6	12.6	96.0	P	
F-512	5/5/06	791910	836540	3	FP-56	121.4	10.6	116.6	12.3	96.0	P	
F-513	5/5/06	791810	836475	3	FP-56	121.4	10.6	115.8	15.1	95.4	P	
F-514	5/5/06	793360	836410	3	FP-56	121.4	10.6	116.9	13.9	96.3	P	
F-515	5/5/06	793440	836500	3	FP-56	121.4	10.6	116.9	13.5	96.3	P	
F-516	5/5/06	793575	836560	3	FP-56	121.4	10.6	117.9	11.7	97.1	P	
F-517	* 5/5/06	793605	836660	3	FP-56	121.4	10.6	116.6	10.5	96.0	P	
F-518	5/8/06	792070	836225	4	FP-57	120.5	10.2	115.0	13.1	95.4	P	
F-519	5/8/06	792100	836040	4	FP-57	120.5	10.2	116.1	11.6	96.3	P	
F-520	5/9/06	792080	836320	4	FP-57	120.5	10.2	117.3	12.0	97.3	P	
F-521	5/9/06	792015	836430	4	FP-57	120.5	10.2	116.3	9.6	96.5	P	
F-522	5/9/06	791940	836650	4	FP-57	120.5	10.2	116.2	11.0	96.4	P	
F-523	5/10/06	791830	836920	5	FP-57	120.5	10.2	112.3	7.6	93.2	F C & M	Fails Compaction & Moisture

Table C.2. Field Compaction Test Results for the GHP-2 Frost Protection Layer: 2005-2006

Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed.
 Max.= Maximum; FG = Finish Grade; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both test endpoints.
 See NOTES and summary statistics at the end of this table.

Compaction Test ID	Date	Location			Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Comments
		Northing	Easting	Lift	Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture (PM)	Percent Compaction		
								Requirements:	PM ≥ Opt. - 2	≥ 95		
F-523R	5/11/06	791830	836920	5	FP-57	120.5	10.2	117.4	9.1	97.4	P	Retest
F-524	5/11/06	791950	836650	5	FP-57	120.5	10.2	117.2	10.9	97.3	P	
F-525	5/11/06	792050	836370	5	FP-57	120.5	10.2	116.0	11.5	96.3	P	
F-526	5/16/06	792955	836050	1	FP-52	120.6	11.5	117.8	10.9	97.7	P	
F-527	5/16/06	792870	836125	1	FP-52	120.6	11.5	118.0	10.7	97.8	P	
F-528	5/17/06	792785	836220	1	FP-57	120.5	10.2	112.3	13.2	93.2	F Comp	Fails Compaction
F-528R	5/17/06	792785	836220	1	FP-57	120.5	10.2	115.1	12.1	95.5	P	Retest
F-529	5/17/06	792815	836280	1	FP-58	117.7	13.8	111.2	12.8	94.5	F Comp	Fails Compaction
F-529R	5/17/06	792815	836280	1	FP-58	117.7	13.8	113.9	13.6	96.8	P	Retest
F-530	5/17/06	792880	836215	1	FP-58	117.7	13.8	115.3	12.2	98.0	P	
F-531	5/17/06	792935	836130	1	FP-58	117.7	13.8	113.6	14.8	96.5	P	
F-532	* 5/18/06	792985	836105	1	FP-58	117.7	13.8	112.4	13.5	95.5	P	
F-533	5/18/06	793040	836145	1	FP-59	109.9	15.8	108.2	18.2	98.5	P	
F-534	5/18/06	792995	836185	1	FP-59	109.9	15.8	106.9	19.4	97.3	P	
F-535	5/18/06	792910	836250	1	FP-59	109.9	15.8	110.6	19.2	100.6	P	
F-536	5/18/06	792855	836315	1	FP-59	109.9	15.8	113.0	15.6	102.8	P	
F-537	5/18/06	793060	836210	1	FP-58	117.7	13.8	117.3	14.7	99.7	P	
F-538	5/18/06	793020	836255	1	FP-58	117.7	13.8	117.1	15.5	99.5	P	
F-539	5/18/06	792980	836295	1	FP-58	117.7	13.8	115.2	11.9	97.9	P	
F-540	5/18/06	792905	836355	1	FP-58	117.7	13.8	115.5	15.4	98.1	P	
F-541	* 5/18/06	791960	836500	FG	FP-58	117.7	13.8	113.4	13.6	96.3	P	
F-542	5/18/06	792965	836035	2	FP-59	109.9	15.8	107.4	18.1	97.7	P	
F-543	5/18/06	792895	836110	2	FP-59	109.9	15.8	107.3	18.9	97.6	P	
F-544	5/18/06	792815	836190	2	FP-59	109.9	15.8	106.3	21.3	96.7	P	
F-545	5/18/06	792785	836275	2	FP-58	117.7	13.8	116.5	11.1	99.0	F Moist	Fails Moisture
F-545R	5/19/06	792785	836275	2	FP-58	117.7	13.8	112.6	15.2	95.7	P	Retest
F-546	5/18/06	792865	836230	2	FP-58	117.7	13.8	115.1	10.3	97.8	F Moist	Fails Moisture
F-546R	5/19/06	792865	836230	2	FP-58	117.7	13.8	117.1	15.1	99.5	P	Retest
F-547	5/18/06	792960	836190	2	FP-59	109.9	15.8	109.8	16.9	99.9	P	
F-548	5/18/06	793010	836130	2	FP-59	109.9	15.8	106.0	19.0	96.5	P	
F-549	5/18/06	792870	836445	2	FP--59	109.9	15.8	107.6	18.9	97.9	P	
F-550	5/18/06	792780	836225	3	FP-52	120.6	11.5	115.9	10.4	96.1	P	
F-551	* 5/18/06	792930	836185	3	FP-52	120.6	11.5	115.3	10.6	95.6	P	
F-552	5/18/06	792900	836115	3	FP-52	120.6	11.5	119.7	10.2	99.3	P	

Table C.2. Field Compaction Test Results for the GHP-2 Frost Protection Layer: 2005-2006

Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed.
 Max.= Maximum; FG = Finish Grade; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both test endpoints.
 See NOTES and summary statistics at the end of this table.

Compaction Test ID	Date	Location			Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Comments	
		Northing	Easting	Lift	Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture (PM)	Percent Compaction			
								Requirements:	PM ≥ Opt. - 2	≥ 95			
F-550D	5/19/06	792795	836305	2	FP-60	109.4	16.3	108.0	19.6	98.7	P	Duplicate ID (included in frequency)	
F-551D	5/19/06	792995	836260	2	FP-60	109.4	16.3	104.8	20.6	95.8	P	" "	
F-552D	5/19/06	793075	836195	2	FP-60	109.4	16.3	110.2	16.2	100.7	P	" "	
F-553	5/19/06	792930	836080	3	FP-60	109.4	16.3	105.4	20.1	96.3	P		
F-554	5/19/06	793005	836050	3	FP-60	109.4	16.3	109.2	18.1	99.8	P		
F-555	5/19/06	793015	836275	3	FP-60	109.4	16.3	105.4	16.1	96.3	P		
F-556	*	5/19/06	792950	836195	3	FP-60	109.4	16.3	111.4	17.7	101.8	P	
F-557		5/19/06	792895	836255	3	FP-60	109.4	16.3	109.3	14.4	99.9	P	
F-558		5/19/06	792860	836330	3	FP-60	109.4	16.3	108.0	18.3	98.7	P	
F-559		5/19/06	793015	836125	3	FP-60	109.4	16.3	109.3	17.5	99.9	P	
F-560	*	5/19/06	793120	836175	3	FP-61	110.9	16.3	107.2	18.4	96.7	P	
F-561		5/19/06	792780	836220	4	FP-61	110.9	16.3	105.3	18.9	95.0	P	
F-562		5/19/06	792860	836160	4	FP-61	110.9	16.3	110.5	18.4	99.6	P	
F-563		5/19/06	792945	836060	4	FP-61	110.9	16.3	106.6	18.6	96.1	P	
F-564		5/19/06	793050	836090	4	FP-61	110.9	16.3	110.6	18.1	99.7	P	
F-565		5/19/06	792960	836170	4	FP-61	110.9	16.3	112.2	16.5	101.2	P	
F-566		5/19/06	792870	836215	4	FP-61	110.9	16.3	107.9	14.5	97.3	P	
F-567		5/19/06	792825	836290	4	FP-61	110.9	16.3	109.5	17.5	98.7	P	
F-568		5/19/06	792870	836355	4	FP-61	110.9	16.3	108.7	19.1	98.0	P	
F-569		5/19/06	792945	836330	4	FP-61	110.9	16.3	108.9	16.1	98.2	P	
F-570	*	5/19/06	792920	836270	4	FP-62	110.7	16.6	109.8	15.1	99.2	P	
F-571		5/19/06	792970	836225	4	FP-62	110.7	16.6	110.8	16.6	100.1	P	
F-572		5/19/06	793045	836160	4	FP-62	110.7	16.6	111.6	17.0	100.8	P	
F-573		5/19/06	793060	836240	4	FP-62	110.7	16.6	106.8	15.7	96.5	P	
F-574		5/20/06	792760	836255	FG	FP-62	110.7	16.6	108.7	14.9	98.2	P	
F-575		5/20/06	792840	836220	FG	FP-62	110.7	16.6	106.0	16.7	95.8	P	
F-576		5/20/06	792905	836120	FG	FP-62	110.7	16.6	107.2	19.4	96.8	P	
F-577	*	5/20/06	792940	836165	FG	FP-62	110.7	16.6	107.7	17.3	97.3	P	
F-578		5/20/06	793025	836090	FG	FP-62	110.7	16.6	106.9	19.3	96.6	P	
F-579		5/22/06	792830	836265	FG	FP-62	110.7	16.6	106.8	20.8	96.5	P	
F-580		5/22/06	792960	836210	FG	FP-63	111.1	15.1	108.1	17.7	97.3	P	
F-581		5/23/06	792995	836320	FG	FP-63	111.1	15.1	107.1	15.5	96.4	P	
F-582		5/23/06	793080	836180	FG	FP-63	111.1	15.1	109.0	19.4	98.1	P	
F-583		5/25/06	793570	836560	FG	FP-63	111.1	15.1	111.0	18.2	99.9	P	

Table C.2. Field Compaction Test Results for the GHP-2 Frost Protection Layer: 2005-2006

Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed.
 Max.= Maximum; FG = Finish Grade; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both test endpoints.
 See NOTES and summary statistics at the end of this table.

Compaction Test ID	Date	Location		Lift	Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Comments
		Northing	Easting		Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture (PM)	Percent Compaction		
								Requirements:	PM ≥ Opt. - 2	≥ 95		
F-584	5/25/06	793410	836500	FG	FP-64	117.2	13.3	115.0	12.1	98.1	P	
F-585	5/25/06	791970	836185	4	FP-63	111.1	15.1	106.8	14.5	96.1	P	
F-586	5/25/06	791920	836340	4	FP-63	111.1	15.1	107.2	22.0	96.5	P	
F-587	5/30/06	793240	836560	FG	FP-64	117.2	13.3	113.5	13.0	96.8	P	
F-588	5/30/06	793145	836660	FG	FP-64	117.2	13.3	113.1	12.3	96.5	P	
F-589	* 5/31/06	791830	836370	4	FP-64	117.2	13.3	113.1	14.0	96.5	P	
F-590	5/31/06	791835	836520	4	FP-63	111.1	15.1	113.5	13.8	102.2	P	
F-591	5/31/06	791770	836730	4	FP-63	111.1	15.1	112.3	17.2	101.1	P	
F-592	6/1/06	792255	836020	4	FP-64	117.2	13.3	114.9	13.0	98.0	P	
F-593	6/7/06	792570	835865	FG	FP-65	121.1	12.0	110.4	13.3	91.2	F Comp	Fails Compaction
F-593R	6/21/06	792570	835865	FG	FP-65	121.1	12.0	115.1	11.1	95.0	P	Retest
F-594	6/7/06	792530	835990	FG	FP-65	121.1	12.0	112.4	13.2	92.8	F Comp	Fails Compaction
F-594R	6/21/06	792530	835990	FG	FP-65	121.1	12.0	115.3	11.8	95.2	P	Retest
F-595	6/7/06	792440	835950	FG	FP-65	121.1	12.0	112.1	11.7	92.6	F Comp	Fails Compaction
F-595R	6/21/06	792440	835950	FG	FP-65	121.1	12.0	119.7	11.3	98.8	P	Retest
F-596	6/7/06	792340	836055	FG	FP-65	121.1	12.0	113.9	14.9	94.1	F Comp	Fails Compaction
F-596R	6/21/06	792340	836055	FG	FP-65	121.1	12.0	116.2	11.7	96.0	P	Retest
F-597	6/8/06	792216	835970	FG	FP-65	121.1	12.0	111.2	8.6	91.8	F C & M	Fails Compaction & Moisture
F-597R	* 6/21/06	792210	835970	FG	FP-65	121.1	12.0	116.0	13.9	95.8	P	Retest
F-598	6/8/06	792245	836105	FG	FP-65	121.1	12.0	105.1	11.8	86.8	F Comp	Fails Compaction
F-598R	6/23/06	792245	836405	FG	FP-65	121.1	12.0	115.2	12.6	95.1	P	Retest
F-599	6/8/06	792070	836055	FG	FP-65	121.1	12.0	111.5	13.0	92.1	F Comp	Fails Compaction
F-599R	6/23/06	792070	836055	FG	FP-65	121.1	12.0	119.6	12.3	98.8	P	Retest
F-600	6/8/06	792440	835855	FG	FP-65	121.1	12.0	114.6	13.7	94.6	F Comp	Fails Compaction
F-600R	6/23/06	792440	835855	FG	FP-65	121.1	12.0	115.3	14.6	95.2	P	Retest
F-601	6/8/06	792065	836170	FG	FP-65	121.1	12.0	111.5	13.3	92.1	F Comp	Fails Compaction
F-601R	6/23/06	792065	836170	FG	FP-65	121.1	12.0	119.1	12.4	98.3	P	Retest
F-602	6/13/06	791745	836865	FG	FP-65	121.1	12.0	115.0	12.4	95.0	P	
F-603	6/13/06	791770	836660	FG	FP-66	121.5	12.0	115.7	14.2	95.2	P	
F-604	6/15/06	792260	836940	4	FP-66	121.5	12.0	121.2	13.2	99.8	P	
F-605	6/15/06	792040	836955	4	FP-66	121.5	12.0	117.4	11.8	96.6	P	
F-606	6/15/06	791845	836620	FG	FP-66	121.5	12.0	116.3	10.8	95.7	P	
F-607	6/15/06	791810	836410	FG	FP-63	111.1	15.1	111.8	15.7	100.6	P	
F-608	6/15/06	791940	836445	FG	FP-63	111.1	15.1	110.2	16.4	99.2	P	

Table C.2. Field Compaction Test Results for the GHP-2 Frost Protection Layer: 2005-2006

Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed.
 Max.= Maximum; FG = Finish Grade; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both test endpoints.
 See NOTES and summary statistics at the end of this table.

Compaction Test ID	Date	Location		Lift	Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Comments
		Northing	Easting		Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture (PM)	Percent Compaction		
								Requirements:	PM ≥ Opt. - 2	≥ 95		
F-609	6/15/06	792010	836265	FG	FP-66	121.5	12.0	115.7	11.9	95.2	P	
F-610	6/15/06	791860	836280	FG	FP-66	121.5	12.0	119.9	13.1	98.7	P	
F-611	6/15/06	791960	836090	FG	FP-66	121.5	12.0	122.6	11.2	100.9	P	
F-612	6/16/06	791910	836515	FG	FP-66	121.5	12.0	117.2	13.9	96.5	P	
F-613	6/16/06	791776	836475	FG	FP-66	121.5	12.0	116.5	12.2	95.9	P	
F-614	* 6/16/06	791995	836350	FG	FP-66	121.5	12.0	116.7	12.4	96.0	P	
F-615	6/16/06	791910	836170	FG	FP-67	121.3	11.4	115.2	11.1	95.0	P	
F-616	6/20/06	792060	836240	FG	FP-67	121.3	11.4	115.6	12.0	95.3	P	
F-617	6/23/06	792210	836055	FG	FP-67	121.3	11.4	116.1	12.7	95.7	P	
F-618	6/29/06	793330	836310	FG	FP-68	114.5	14.2	110.3	15.6	96.3	P	
F-619	6/30/06	793220	836205	FG	FP-68	114.5	14.2	116.2	14.1	101.5	P	
F-620	6/30/06	793090	836070	FG	FP-68	114.5	14.2	112.9	14.9	98.6	P	
F-621	6/30/06	792860	835895	FG	FP-68	114.5	14.2	112.2	15.2	98.0	P	
F-622	7/19/06	792170	836660	FG	FP-52	120.6	11.5	116.7	14.0	96.8	P	
F-623	7/19/06	791785	836970	FG	FP-52	120.6	11.5	115.1	11.7	95.4	P	
F-624	7/25/06	791740	836955	FG	FP-68	114.5	14.2	109.6	13.5	95.7	P	
F-625	* 7/28/06	791780	836960	FG	FP-68	114.5	14.2	111.4	16.2	97.3	P	
F-626	7/31/06	791860	837015	FG	FP-68	114.5	14.2	111.6	15.6	97.5	P	

Field density and moisture tests were taken using a nuclear density gauge. The gauge was field standardized at each test location and was correlated by a Sand Cone Test at a frequency of one for every nine nuclear gauge tests. Field rock corrections were performed at each compaction test location.

37 tests failed compaction (only); 19 tests failed moisture (only), and 5 tests failed both endpoints. Only one of the failed compaction tests (F-490) was not re-tested. None of the failed tests was included in the frequency or summary statistics.

Total Number of Tests (N): 636 (N reflects passing tests only)
 Total Quantities placed: 309,230 cubic yards (CY)
 Frequency: 1: 486 CY Meets the required frequency of 1: 500 CY.

average:	114.6	13.1	97.1
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minimum:	104.8	9.1	94.8
maximum:	124.1	22.0	102.9
standard deviation:	3.1	2.1	1.6
# Failed:	NA	24	42
# Retested:	NA	24	41

Table C.3. Standard Proctor Test Results for the GHP-2 Frost Protection Layer

Date	Laboratory Standard Proctor		
	Proctor ID	Maximum Dry Density (lbs/cu ft)	Optimum Moisture (%)
8/23/05	FP-1	117.2	13.0
9/22/05	FP-2	118.7	11.7
9/15/05	FP-3	118.4	11.9
9/15/05	FP-4	118.2	11.4
8/29/05	FP-5	119.8	11.5
9/22/05	FP-6	118.9	11.8
9/22/05	FP-7	120.0	11.8
9/14/05	FP-8	119.6	12.2
9/22/05	FP-9	120.0	11.8
9/24/05	FP-10	119.9	11.6
9/26/05	FP-11	113.5	14.9
9/26/05	FP-12	114.4	14.8
9/14/05	FP-13	114.0	15.4
9/27/05	FP-14	113.5	14.3
9/26/05	FP-15	115.7	13.8
9/26/05	FP-16	117.1	13.0
9/29/05	FP-17	118.9	12.6
9/28/05	FP-18	115.2	14.2
9/29/05	FP-19	117.4	13.5
10/3/05	FP-20	117.2	13.0
9/30/05	FP-21	118.6	12.0
10/8/05	FP-22	118.0	12.9
10/4/05	FP-23	119.4	12.5
10/8/05	FP-24	115.7	14.1
10/8/05	FP-25	118.9	12.9
9/30/05	FP-26	118.4	12.3
9/28/05	FP-27	116.5	13.4
10/11/05	FP-28	117.9	11.6
10/12/05	FP-29	118.0	12.9
10/12/05	FP-30	118.0	12.8
10/4/05	FP-31	117.5	13.5
10/12/05	FP-32	120.0	12.0
10/13/05	FP-33	118.5	12.8
10/14/05	FP-34	119.0	12.4
10/14/05	FP-35	119.5	12.3
10/13/05	FP-36	119.4	12.8
10/18/05	FP-37	120.8	11.8
10/18/05	FP-38	121.4	11.4
10/19/05	FP-39	120.6	11.3
10/18/05	FP-40	120.0	12.1
10/19/05	FP-41	120.4	11.5
10/18/05	FP-42	121.0	11.4
10/19/05	FP-43	121.4	10.9
10/20/05	FP-44	120.4	11.9
10/20/05	FP-45	119.9	12.2
11/3/05	FP-46	121.9	11.0
11/3/05	FP-47	119.0	12.3
11/7/05	FP-48	119.8	12.1
11/10/05	FP-49	120.1	11.3

Table C.3. Standard Proctor Test Results for the GHP-2 Frost Protection Layer

Date	Laboratory Standard Proctor		
	Proctor ID	Maximum Dry Density (lbs/cu ft)	Optimum Moisture (%)
11/10/05	FP-50	120.0	11.8
9/28/05	FP-51	119.6	12.2
4/20/06	FP-52	120.6	11.5
4/25/06	FP-53	119.4	11.9
4/20/06	FP-54	120.1	11.8
5/1/06	FP-55	117.5	13.2
5/5/06	FP-56	121.4	10.6
4/20/06	FP-57	120.5	10.2
5/9/06	FP-58	117.7	13.8
5/17/06	FP-59	109.9	15.8
5/15/06	FP-60	109.4	16.3
5/15/06	FP-61	110.9	16.3
5/18/06	FP-62	110.7	16.6
5/20/06	FP-63	111.1	15.1
5/22/06	FP-64	117.2	13.3
6/6/06	FP-65	121.1	12.0
6/8/06	FP-66	121.5	12.0
6/15/06	FP-67	121.3	11.4
6/28/06	FP-68	114.5	14.2

<i>count:</i>	68	68
<i>average:</i>	118.1	12.7

minimum: 109.4 10.2
maximum: 121.9 16.6
standard deviation: 3.0 1.4

Total cubic yards placed: 309,230
Proctor Frequency: 1: 4548 cubic yards placed
Total number of Field tests: 636
Frequency (vs. Field): 1: 9.4

The September 2003 reclamation plan specified a testing frequency of one Proctor test for every 10 or 15 field tests, depending on the variability of soils. As demonstrated herein, frost protection cover soils were homogenous and Umetco exceeded the testing frequency requirements.

Table C.4. Sand-Cone Correlation Documentation for the GHP No. 2 Frost Protection

Date	Compaction Test ID	Nuclear Gauge Test		Sand-Cone Compaction Tests		Sand-Cone Correlation Results	
		In-Place Wet Unit Weight (pcf)	Moisture Content (%)	In-Place Wet Unit Weight (pcf)	Moisture Content (%)	Wet Unit Weight Variation (%)	Moisture Content Variation (%)
9/15/05	F-4	128.9	13.8	131.3	10.5	1.9	-3.3
9/22/05	F-11	125.3	8.7	124.8	8.3	-0.4	-0.4
9/22/05	F-17	127.6	9.7	128.0	8.4	0.3	-1.3
9/22/05	F-22	125.7	10.4	127.4	9.4	1.4	-1.0
9/22/05	F-33	130.0	10.5	131.3	8.4	1.0	-2.1
9/22/05	F-42	129.4	13.6	131.2	11.2	1.4	-2.4
9/22/05	F-47	132.2	11.5	133.8	9.0	1.2	-2.5
9/24/05	F-55	130.9	12.0	129.3	10.6	-1.2	-1.4
9/24/05	F-60	132.7	13.8	131.2	12.5	-1.1	-1.3
9/24/05	F-71	127.9	11.6	128.7	10.7	0.6	-0.9
9/24/05	F-83	129.9	12.2	131.1	11.0	0.9	-1.2
9/26/05	F-90	127.4	11.6	126.4	10.9	-0.8	-0.7
9/27/05	F-110	126.4	15.3	131.2	13.3	3.8	-2.0
9/27/05	F-117	124.0	13.1	125.1	12.1	0.9	-1.0
9/28/05	F-133	125.9	14.5	128.9	13.2	2.4	-1.3
9/28/05	F-135	124.0	13.1	126.5	11.5	2.0	-1.6
9/29/05	F-148	131.1	17.4	132.0	15.9	0.7	-1.5
9/29/05	F-154	128.2	13.2	131.8	11.2	2.8	-2.0
9/29/05	F-156	129.6	13.6	132.2	14.1	2.0	0.5
9/29/05	F-161	127.2	10.5	125.5	9.4	-1.3	-1.1
9/30/05	F-167	126.9	11.6	128.6	9.6	1.3	-2.0
10/3/05	F-177	126.6	12.6	123.9	11.2	-2.1	-1.4
10/7/05	F-194	131.2	12.8	129.8	11.2	-1.1	-1.6
10/8/05	F-204	132.1	12.7	133.9	11.8	1.4	-0.9
10/11/05	F-219	130.6	12.3	132.2	11.1	1.2	-1.2
10/11/05	F-222	129.8	16.8	130.2	15.1	0.3	-1.7
10/12/05	F-238	131.3	13.3	135.0	11.4	2.8	-1.9
10/12/05	F-244	132.4	12.4	131.4	11.4	-0.8	-1.0
10/13/05	F-259	126.2	10.8	126.2	10.1	0.0	-0.7
10/13/05	F-266	128.7	11.1	133.5	10.5	3.7	-0.6
10/13/05	F-277	130.4	15.3	133.2	12.6	2.1	-2.7
10/14/05	F-287	133.0	12.1	135.5	11.2	1.9	-0.9
10/14/05	F-293	132.6	13.4	133.3	11.8	0.5	-1.6
10/17/05	F-306	131.9	12.3	133.5	12.1	1.2	-0.2
10/17/05	F-311	127.6	11.3	132.2	9.8	3.6	-1.5
10/17/05	F-314	125.7	11.4	126.8	10.2	0.9	-1.2
10/18/05	F-320	133.3	15.2	135.6	16.3	1.7	1.1
10/19/05	F-336	134.0	12.6	134.9	11.4	0.7	-1.2
10/19/05	F-342	133.6	12.1	135.2	10.2	1.2	-1.9
10/20/05	F-351	132.2	10.8	133.8	11.6	1.2	0.8
10/21/05	F-358	133.8	12.6	131.4	11.2	-1.8	-1.4
10/21/05	F-361	130.1	12.3	130.3	10.2	0.2	-2.1
10/25/05	F-374	133.8	15.0	135.1	13.4	1.0	-1.6
10/25/05	F-378	131.7	13.4	133.9	11.8	1.7	-1.6
10/26/05	F-382	131.0	13.7	132.5	12.1	1.1	-1.6
11/2/05	F-392	134.0	15.6	137.0	15.5	2.2	-0.1
11/2/05	F-398	132.5	15.0	131.3	13.5	-0.9	-1.5
11/3/05	F-405	128.3	12.9	131.9	12.5	2.8	-0.4
11/4/05	F-409	129.3	13.8	133.1	12.2	2.9	-1.6
11/4/05	F-413	136.5	12.7	135.7	11.3	-0.6	-1.4
11/7/05	F-416	135.1	11.9	136.8	14.0	1.3	2.1
11/8/05	F-433	132.6	12.3	138.2	12.6	4.2	0.3
11/8/05	F-439	132.2	13.8	134.2	12.7	1.5	-1.1
11/9/05	F-448	132.6	15.4	133.0	13.7	0.3	-1.7
11/10/05	F-458	133.3	12.8	134.8	10.8	1.1	-2.0

Table C.4. Sand-Cone Correlation Documentation for the GHP No. 2 Frost Protection

Date	Compaction Test ID	Nuclear Gauge Test		Sand-Cone Compaction Tests		Sand-Cone Correlation Results	
		In-Place Wet Unit Weight (pcf)	Moisture Content (%)	In-Place Wet Unit Weight (pcf)	Moisture Content (%)	Wet Unit Weight Variation (%)	Moisture Content Variation (%)
11/11/05	F-479	132.5	12.4	132.1	11.2	-0.3	-1.2
5/2/06	F-486	132.6	10.3	139.0	11.2	4.8	0.9
5/2/06	F-495	130.1	11.8	136.1	10.3	4.6	-1.5
5/3/06	F-504	133.5	12.5	134.8	10.6	1.0	-1.9
5/5/06	F-517	128.9	10.5	132.3	9.5	2.6	-1.0
5/18/06	F-532	127.6	13.5	127.5	11.2	-0.1	-2.3
5/18/06	F-541	128.8	13.6	130.7	10.7	1.5	-2.9
5/18/06	F-551	127.6	10.6	126.9	10.2	-0.5	-0.4
5/19/06	F-556	130.4	17.1	132.6	16.3	1.7	-0.8
5/19/06	F-560	126.8	18.4	131.7	16.6	3.9	-1.8
5/19/06	F-570	126.4	15.1	125.3	14.5	-0.9	-0.6
5/20/06	F-577	126.3	17.3	127.3	16.3	0.8	-1.0
5/31/06	F-589	132.0	12.2	135.7	10.5	2.8	-1.7
6/16/06	F-614	131.2	12.4	131.0	11.8	-0.2	-0.6
6/21/06	F-597R	132.1	13.9	132.1	12.2	0.0	-1.7
7/28/06	F-625	129.5	16.2	127.5	17.2	-1.5	1.0

pcf - pounds per cubic foot

<i>Number of sand-cone tests:</i>	71	
<i>average percent variation (on absolute value):</i>	1.5	1.4
<i>standard deviation:</i>	1.1	0.6

Note:

For the GHP No. 2 Frost Protection, a sand-cone correlation test was performed for every ten nuclear gauge tests. Correlations were deemed acceptable if the average of ten nuclear test results vs. sand cone test results comparisons met the following criteria:

sand-cone method wet density: +/- 3%
sand-cone method moisture content: +/- 2%

As indicated above, these criteria were met even for discrete results (vs. running average).

Table C.5. Soil Classification Test Results for the GHP-2 Frost Protection Layer

Date Sampled	Gradation Sample ID	PARTICLE SIZE ANALYSIS											Atterberg Sample ID	Atterberg Limits		Unified Soil Classification
		Seive Size (% Passing)												Liquid Limit	Plastic Index	
		3"	1 1/2"	3/4"	3/8"	#4	#8	#16	#30	#50	#100	#200				
														Plan Requirements: SC and/or SC-SM		
8/23/05	FP-1	100	97.6	97	96.3	93.8	90.0	81.0	64.9	48.3	34.2	23.4	FP-1	30	15	SC
9/15/05	F-4			100.0	98.6	97.4	93.2	83.5	66.7	50.4	38.4	25.6	F-4	30	12	SC
9/20/05	F-6		100	99.1	96	94.6	90.8	82.1	64.9	47.3	33.6	23.1	F-6	29	12	SC
9/22/05	FP-2		100	99.7	98	97.1	94.6	89.1	80.0	69.0	56.1	37.2	FP-2	33	17	SC
9/15/05	FP-3	100	100	98.7	98	96.2	92.7	85.0	66.7	48.7	33.9	24.6	FP-3	30	13	SC
9/15/05	FP-4		100	93.4	91.8	89.3	84.8	75.1	58.7	42.5	30.3	20.9	FP-4	31	15	SC
8/29/05	FP-5		100	94.8	88.5	85.1	79.4	68.9	53.1	39.4	31.6	24.3	FP-5	29	13	SC
9/22/05	F-10	100	98	97.1	93.7	92.3	87.6	77.4	57.4	38.1	26.6	20.9	F-10	28	11	SC
9/22/05	F-12	100	98	95.5	91.3	89.4	85.5	77.3	60.7	44.4	32.1	23.5	F-12	30	14	SC
9/22/05	F-14		100	96.6	93	91.4	87.0	77.6	60.2	43.5	30.9	22.4	F-14	31	16	SC
9/22/05	F-16	100	94	91.3	90	88.8	84.4	75.7	58.6	41.9	29.7	21.5	F-16	30	15	SC
9/22/05	F-20		100	97.8	95.2	93.3	89.0	80.3	62.8	45.7	32.7	25.0	F-20	30	15	SC
9/22/05	F-22		100	99.4	98	96.1	93.4	84.6	67.5	49.9	36.2	27.8	F-22	32	17	SC
9/22/05	F-24	100	96	95	92.0	90.5	86.6	78.5	60.5	43.6	31.6	23.1	F-24	28	13	SC
9/22/05	F-26	100	97	95.0	93.1	92.0	88.9	81.5	64.9	48.6	36.2	27.2	F-26	31	16	SC
9/22/05	F-30	100	97.2	95.6	93.0	91.4	87.3	78.6	61.3	44.6	31.7	23.3	F-30	30	15	SC
9/22/05	F-32		100.0	99.1	97.0	95.0	91.6	83.5	67.3	50.8	38.6	28.5	F-32	30	15	SC
9/22/05	F-34		100.0	100	97.8	95.0	91.3	83.2	67.1	50.9	37.9	28.6	F-34	30	15	SC
9/22/05	F-36		100.0	98.4	96	93.8	90.6	82.3	65.5	48.6	35.6	26.5	F-36	29	13	SC
9/22/05	F-40		100	98.8	96.1	93.9	90.1	81.3	64.0	47.5	34.7	26.1	F-40	29	15	SC
9/22/05	F-42		100	97.7	96.5	95.1	91.8	83.2	65.7	48.4	35.4	26.3	F-42	31	15	SC
9/22/05	F-44		100	98.6	97.0	95.4	91.4	82.4	65.2	48.4	35.5	25.5	F-44	29	14	SC
9/22/05	F-46		100	99.5	98.5	97	93.0	85.2	69.2	53.1	40.7	32.4	F-46	32	17	SC
9/22/05	FP-6	100	99	97.3	95.5	92.2	88.1	79.9	63.0	46.2	32.4	23.0	FP-6	29	11	SC
9/22/05	FP-7		100	97	95.2	92.1	88.5	79.6	61.6	44.5	30.7	21.7	FP-7	29	12	SC
9/14/05	FP-8	100	96	96	94.1	90.9	85.1	72.9	54.9	40.0	30.6	24.0	FP-8	31	19	SC
9/22/05	FP-9	100	98	96.6	94.5	92.4	88.4	79.7	61.4	43.5	29.2	21.2	FP-9	28	11	SC
9/24/05	F-50		100	98.1	95.2	93.1	893.0	80.5	63.2	46.5	33.4	24.0	F-50	29	12	SC
9/24/05	F-52	100	98	97.5	94.6	92.9	88.9	80.0	63.0	46.6	33.9	24.8	F-52	32	17	SC
9/24/05	F-54		100	97.2	95.2	93.2	89.4	80.4	62.3	44.4	31.9	23.5	F-54	30	14	SC
9/24/05	F-56	100	99	96.8	94.8	92.6	89.3	81.0	64.3	47.5	34.7	25.6	F-56	30	14	SC
9/24/05	F-60	100	98	96.2	93.5	91.4	87.7	79.5	63.4	47.4	34.7	25.3	F-60	30	14	SC
9/24/05	F-62		100	99.6	97	95.9	92.0	83.6	66.5	49.4	37.2	26.2	F-62	31	15	SC
9/24/05	F-64		100	97.4	94.7	92.5	88.5	79.8	62.5	45.5	32.3	23.5	F-64	29	14	SC
9/24/05	F-66		100	99	96.2	95.0	91.2	82.2	65.1	48.8	35.6	25.6	F-66	32	17	SC
9/24/05	F-70		100	99.8	98.1	96.6	93.2	84.3	66.0	48.2	35.4	26.1	F-70	31	16	SC
9/24/05	F-72		100	98	94.3	92.1	87.6	78.2	60.3	43.8	32.1	24.1	F-72	32	18	SC
9/24/05	F-74	100	94	91	89.0	87.0	83.6	75.7	59.8	44.2	30.9	21.7	F-74	31	17	SC
9/24/05	F-76	100	98	93.9	91.4	89.3	83.8	73.4	53.0	35.3	24.6	19.0	F-76	30	14	SC
9/24/05	F-80	100	98	93.4	89.4	87.1	83.6	75.6	61.3	46.8	35.7	27.3	F-80	33	17	SC
9/25/05	F-82		100	97.0	92.9	91.2	86.9	78.0	602.0	43.1	30.5	23.0	F-82	30	14	SC
9/24/05	FP-10		100	98.3	95.0	94.3	92.5	87.7	78.5	66.5	53.3	35.5	FP-10	33	16	SC
9/26/05	FP-11		100	99.5	99.4	95.6	88.0	73.5	56.1	44.6	37.1	27.5	FP-11	37	19	SC

Table C.5. Soil Classification Test Results for the GHP-2 Frost Protection Layer

Date Sampled	Gradation Sample ID	PARTICLE SIZE ANALYSIS											Atterberg Sample ID	Atterberg Limits		Unified Soil Classification
		Seive Size (% Passing)												Liquid Limit	Plastic Index	
		3"	1 1/2"	3/4"	3/8"	#4	#8	#16	#30	#50	#100	#200				
														Plan Requirements: SC and/or SC-SM		
9/26/05	F-84			100.0	99.6	98.6	96.9	93.0	84.8	74.7	60.6	48.6	F-84	37	21	SC
9/26/05	F-86		100	99.0	97.4	95.6	91.7	83.6	66.9	50.2	37.2	28.7	F-86	30	14	SC
9/26/05	F-90		100	98.0	95.6	94.1	90.2	81.4	64.4	47.6	34.2	25.0	F-90	30	14	SC
9/26/05	F-96		100	97	92.9	91.2	87.0	77.4	60.2	43.0	31.1	21.5	F-96	28	11	SC
9/26/05	F-98		100	99	96.3	94.8	90.7	82.6	64.1	45.8	32.4	23.8	F-98	28	12	SC
9/26/05	F-100			100.0	99.4	98.4	95.0	87.1	70.0	51.9	37.3	26.2	F-100	29	13	SC
9/26/05	F-102		100	97.6	95.9	94.0	90.1	80.9	63.9	46.7	34.5	25.1	F-102	29	13	SC
9/26/05	FP-12		100	99.5	99.4	94.0	85.0	70.7	54.9	44.2	36.3	27.6	FP-12	37	21	SC
9/14/05	FP-13		100	97.2	93.9	89.6	83.0	73.1	63.9	56.2	51.2	44.9	FP-13	39	25	SC
9/27/05	FP-14		100	99.8	99.3	98.1	96.4	91.8	83.0	71.5	57.8	39.5	FP-14	34	18	SC
9/27/05	F-106			100.0	98.0	97.7	95.0	89.2	78.4	66.9	53.4	40.1	F-106	37	22	SC
9/27/05	F-108			100.0	98.6	97.8	95.5	90.1	81.1	70.4	56.9	39.6	F-108	34	20	SC
9/27/05	F-110			100.0	99.8	98.8	96.3	91.1	81.0	68.9	53.2	37.5	F-110	35	21	SC
9/27/05	F-112		100	99.5	99.0	97.3	94.6	87.6	75.0	62.0	51.7	30.2	F-112	33	17	SC
9/27/05	F-116		100	99.1	98.4	97.1	94.7	90.0	82.1	70.6	55.9	37.4	F-116	32	17	SC
9/27/05	F-118				100.0	99.4	97.1	92.0	82.2	69.6	54.7	37.3	F-118	35	19	SC
9/27/05	F-122			100.0	98.9	97.1	93.5	87.5	77.9	67.9	53.2	36.4	F-122	34	20	SC
9/27/05	F-126			100.0	99.9	99.9	98.8	96.4	91.5	82.2	68.8	48.5	F-126	36	22	SC
9/27/05	F-128			100.0	99.9	98.5	96.6	93.3	87.6	81.4	72.3	53.9	F-128	37	21	SC
9/26/05	FP-15			100.0	99.9	99.5	97.4	91.6	73.7	49.2	32.0	23.2	FP-15	31	13	SC
9/26/05	FP-16		100	98.6	96.3	96.1	95.2	92.7	86.3	73.6	57.6	39.0	FP-16	32	26	SC
9/28/05	F-130	100	98	98.4	97.6	96.7	93.8	88.6	78.6	65.0	47.1	32.2	F-130	31	15	SC
9/28/05	F-132		100.0	99.1	97.7	95.6	90.2	80.4	65.8	50.7	36.9	24.2	F-132	31	15	SC
9/28/05	F-136			100.0	98.5	96.0	89.3	78.4	63.3	50.0	36.1	24.5	F-136	32	17	SC
9/28/05	F-138		100.0	99.6	98.1	96.0	89.7	78.3	61.8	50.1	39.0	27.5	F-138	38	23	SC
9/28/05	F-140			100.0	99.9	98.9	96.2	89.8	72.3	49.9	31.4	21.2	F-140	29	11	SC
9/29/05	FP-17		100	100	98.8	96.7	91.2	80.0	66.0	53.1	39.8	25.8	FP-17	33	17	SC
9/28/05	FP-18		100	99.5	99.1	97.6	95.7	90.0	78.7	64.5	46.8	32.2	FP-18	32	17	SC
9/29/05	F-144			100.0	99.6	99.0	97.5	93.3	82.2	66.6	48.4	31.8	F-144	31	14	SC
9/29/05	F-146			100.0	98.8	95.8	89.3	72.9	49.5	33.8	22.9	15.2	F-146	NP	NP	SM
9/29/05	F-148			100.0	99.7	98.4	95.4	88.5	77.1	65.3	51.4	32.6	F-148	32	15	SC
9/29/05	F-150		100	98.9	97.1	94.5	89.5	78.8	63.5	51.1	42.4	33.1	F-150	36	21	SC
9/29/05	F-154		100	96.3	93.8	91.1	84.9	73.2	57.8	46.6	38.2	29.4	F-154	36	27	SC
9/29/05	F-158		100	98.8	94.8	94.0	90.4	82.0	95.4	48.6	36.6	26.5	F-158	28	13	SC
9/29/05	F-160		100	99.0	95.6	93.6	89.8	81.4	63.6	46.5	33.6	25.2	F-160	29	11	SC
9/29/05	FP-19		100.0	99.7	98.9	96.8	92.0	83.3	68.1	54.3	41.2	30.1	FP-19	33	18	SC
9/30/05	F-162		100	99.1	96.9	95.0	90.8	81.9	68.4	57.4	45.3	32.0	F-162	35	20	SC
9/30/05	F-164		100	98.9	97.8	95.4	90.3	80.0	67.8	56.7	44.6	30.5	F-164	34	19	SC
9/30/05	F-166		100	97.5	94.2	92.0	88.6	80.4	63.1	46.0	32.7	24.3	F-166	29	10	SC
9/30/05	F-170			100.0	99.5	98.0	94.2	83.6	61.6	41.1	29.4	21.3	F-170	29	11	SC
9/30/05	F-172		100	96.0	93.5	91.7	88.2	80.7	65.0	49.3	36.2	27.4	F-172	32	14	SC
10/3/05	FP-20		100.0	95.7	93.4	91.7	88.2	78.5	60.6	43.9	32.6	22.2	FP-20	31	12	SC
10/3/05	F-174		100	98.6	97.6	96.8	94.4	90.0	80.0	66.9	50.9	35.2	F-174	34	20	SC

Table C.5. Soil Classification Test Results for the GHP-2 Frost Protection Layer

Date Sampled	Gradation Sample ID	PARTICLE SIZE ANALYSIS Seive Size (% Passing)											Atterberg Sample ID	Atterberg Limits		Unified Soil Classification
		3"	1 1/2"	3/4"	3/8"	#4	#8	#16	#30	#50	#100	#200		Liquid Limit	Plastic Index	
														<i>Plan Requirements:</i>		SC and/or SC-SM
10/3/05	F-176			100.0	98.4	96.5	90.9	78.7	57.5	39.0	27.5	20.0	F-176	31	16	SC
10/3/05	F-178			100.0	99.2	96.9	92.3	82.0	63.9	45.8	32.4	22.7	F-178	26	9	SC
10/3/05	F-180			100.0	98.8	98.0	95.7	88.5	74.1	58.5	45.3	31.9	F-180	30	14	SC
10/3/05	F-184		100	99.6	98.4	97.1	92.9	82.8	63.7	47.7	35.1	25.8	F-184	33	17	SC
10/7/05	F-186		100	99.3	98.4	96.7	91.5	79.3	57.6	37.3	25.0	16.9	F-186	39	12	SC
10/7/05	F-188			100.0	99.7	99.0	96.0	87.5	67.7	44.6	29.0	19.4	F-188	NP	NP	SM
9/30/05	FP-21		100	99.7	98.6	95.5	90.4	80.5	65.1	51.2	40.5	28.3	FP-21	32	16	SC
10/8/05	FP-22			100.0	99.5	98.7	94.1	83.7	60.2	39.9	26.1	18.5	FP-22	NP	NP	SM
10/4/05	FP-23	100	99	95.7	93.2	89.1	84.2	74.4	54.0	34.0	22.3	16.3	FP-23	NP	NP	SM
10/8/05	F-192		100.0	99.0	98.6	97.5	94.5	86.0	63.8	39.2	23.5	16.5	F-192	NP	NP	SM
10/8/05	F-194		100	99.7	98.4	95.8	88.1	73.2	45.3	25.0	16.6	12.3	F-194	NP	NP	SM
10/8/05	F-196		100	99.3	97.8	96.2	94.0	84.9	62.8	39.8	24.8	16.8	F-196	NP	NP	SM
10/8/05	F-198			100.0	99.5	98.4	94.6	86.2	66.0	41.6	24.6	17.0	F-198	NP	NP	SM
10/8/05	F-202			100.0	99.7	98.7	95.3	86.5	67.8	46.3	31.6	21.9	F-202	28	13	SC
10/8/05	F-204			100.0	98.3	84.7	86.5	70.1	43.9	26.1	17.9	13.1	F-204	NP	NP	SM
10/8/05	F-206			100.0	99.6	98.7	95.3	84.6	55.4	34.1	22.8	16.3	F-206	30	14	SC
10/8/05	F-208			100.0	99.1	95.7	88.6	73.6	45.0	26.5	18.0	13.4	F-208	32	17	SC
10/8/05	FP-24			100.0	99.8	98.6	96.1	89.5	74.2	54.0	38.6	26.3	FP-24	30	12	SC
10/8/05	FP-25		100	99.9	99.0	96.2	90.1	75.8	48.5	30.2	20.3	15.2	FP-25	30	16	SC
10/11/05	F-212		100	95.3	88.8	88.0	85.3	79.4	65.1	49.9	40.7	36.7	F-212	NP	NP	SM
10/11/05	F-214		100	99.6	96.3	93.2	86.4	74.5	58.2	35.0	22.4	15.9	F-214	NP	NP	SM
10/11/05	F-216		100.0	97.9	94.9	92.2	85.8	68.4	43.7	25.3	16.5	11.3	F-216	NP	NP	SP-SM
10/11/05	F-218		100.0	98.9	96.1	937.0	87.5	74.3	50.9	32.9	23.1	17.4	F-218	29	12	SC
10/11/05	F-222		100	98.6	96.2	93.8	89.2	80.7	64.8	52.6	43.0	32.7	F-222	34	16	SC
10/12/05	F-226		100	99.2	95.1	91.4	83.5	66.0	39.6	21.9	13.0	6.8	F-226	NP	NP	SP-SM
9/30/05	FP-26		100.0	99.6	98.6	97.2	93.4	82.7	61.7	42.0	29.1	19.3	FP-26	30	11	SC
9/28/05	FP-27	100	99	96.9	93.9	89.9	94.2	71.8	49.8	28.5	17.5	11.4	FP-27	NP	NP	SC
10/11/05	FP-28		100	98.0	95.0	92.4	87.7	77.2	57.1	39.7	27.9	21.2	FP-28	32	16	SC
10/12/05	F-228	100	96.3	94.4	90.7	88.5	82.5	70.7	51.8	35.7	28.3	23.9	F-228	29	14	SC
10/12/05	F-230		100.0	92.1	88.7	85.1	78.8	67.5	47.8	30.1	20.6	15.6	F-230	28	14	SC
10/12/05	F-234	100	97	95.0	91.5	88.9	84.1	74.9	55.8	38.0	27.8	21.9	F-234	31	16	SC
10/12/05	F-236	100	98.5	96.2	94.6	93.3	89.8	79.8	59.8	37.8	23.6	16.3	F-236	NP	NP	SM
10/12/05	F-238		100.0	98	96.1	94.4	90.3	81.9	63.0	44.5	31.7	24.8	F-238	32	21	SC
10/12/05	F-240		100	99.2	98.0	96.2	90.6	78.6	57.2	37.5	26.0	18.8	F-240	28	17	SC
10/12/05	F-244	100	98	97.4	94.0	90.7	84.1	71.3	48.3	29.5	19.8	15.2	F-244	26	9	SC
10/12/05	F-246		100.0	99.4	98.6	97.6	94.1	83.2	60.3	37.7	25.5	17.9	F-246	NP	NP	SM
10/12/05	F-248		100.0	98.9	94.9	91.2	84.9	72.3	50.6	32.7	21.8	16.4	F-248	27	9	SC
10/12/05	F-250		100	99.6	99.2	98.6	92.7	87.8	67.1	46.4	33.9	23.9	F-250	31	11	SC
10/12/05	F-254		100	98.6	97.4	96.0	92.0	80.3	57.8	35.3	22.3	15.5	F-254	27	8	SC
10/12/05	F-256			100.0	99.8	98.0	95.6	88.7	70.5	46.8	27.9	19.6	F-256	33	17	SC
10/12/05	FP-29		100	99.1	98.7	97.3	93.3	83.8	62.8	42.0	27.9	19.9	FP-29	29	11	SC
10/12/05	FP-30	100	99.0	98.1	97.4	96.5	94.3	87.1	67.1	44.5	28.2	20.3	FP-30	NP	NP	SM
10/4/05	FP-31		100	96.7	94.7	91.7	87.1	77.5	56.4	35.6	23.1	16.7	FP-31	NP	NP	SM

Table C.5. Soil Classification Test Results for the GHP-2 Frost Protection Layer

Date Sampled	Gradation Sample ID	PARTICLE SIZE ANALYSIS											Atterberg Sample ID	Atterberg Limits		Unified Soil Classification
		Seive Size (% Passing)												Liquid Limit	Plastic Index	
		3"	1 1/2"	3/4"	3/8"	#4	#8	#16	#30	#50	#100	#200				
														Plan Requirements: SC and/or SC-SM		
10/13/05	F-258		100	95.2	92.5	91.6	87.3	75.2	50.3	27.6	17.1	11.5	F-258	NP	NP	SM
10/13/05	F-260		100	97.7	94.7	91.5	86.3	76.6	58.9	41.5	30.7	24.1	F-260	33	15	SC
10/13/05	F-264		100.0	98.3	92.4	85.8	77.2	62.8	41.6	27.3	19.2	14.5	F-264	29	13	SC
10/13/05	F-266		100	99.3	96.2	93.0	85.0	68.8	45.0	30.1	21.5	14.9	F-266	31	15	SC
10/13/05	F-268		100	99.3	97.7	95.0	89.7	77.4	53.7	35.7	25.2	18.1	F-268	30	12	SC
10/13/05	F-270		100	99.2	99.0	98.6	96.5	88.3	64.7	39.0	22.3	15.6	F-270	NP	NP	SM
10/13/05	F-274		100	99.3	98.3	97.2	95.2	88.5	67.1	36.7	22.5	15.0	F-274	NP	NP	SM
10/13/05	F-278	100	97.0	92.7	88.5	85.4	77.9	63.0	39.5	23.4	15.9	11.3	F-278	NP	NP	SM
10/13/05	F-280		100	99.0	96.9	95.2	89.2	76.8	56.4	41.4	31.8	25.3	F-280	32	15	SC
10/12/05	FP-32		100	97.7	94.9	92.3	96.6	73.9	53.3	34.3	24.3	18.2	FP-32	29	15	SC
10/13/05	FP-33	100	99.7	98.5	96.6	94.9	90.8	81.3	57.9	34.4	20.7	14.9	FP-33	30	12	SC
10/14/05	F-282		100	99.4	97.9	95.9	923.0	83.9	65.6	46.8	34.1	26.5	F-282	31	18	SC
10/14/05	F-284			100.0	97.3	93.6	85.7	70.6	50.9	35.9	27.3	21.0	F-284	34	17	SC
10/14/05	F-288		100	99.2	98.2	96.0	89.0	74.6	54.5	39.7	30.8	24.0	F-288	33	18	SC
10/14/05	F-290	100	96	93.1	90.7	87.8	81.6	71.0	54.8	39.0	27.6	19.7	F-290	28	9	SC
10/14/05	F-292			100.0	99.8	98.8	96.7	89.9	75.4	56.4	39.2	25.9	F-292	30	15	SC
10/14/05	F-294	100	97.0	94.7	92.0	89.4	85.5	76.9	59.8	42.9	29.5	21.0	F-294	28	12	SC
10/14/05	F-298			100.0	99.8	99.2	97.3	91.1	76.6	57.5	37.9	26.8	F-298	29	11	SC
10/14/05	F-300		100.0	99.6	98.9	97.0	92.8	81.7	57.9	38.2	25.8	18.5	F-300	29	11	SC
10/14/05	FP-34		100	99.4	98.5	94.8	88.6	75.0	54.2	36.6	26.6	19.5	FP-34	30	12	SC
10/17/05	F-302		100	97	93.8	88.5	81.7	67.5	44.6	27.5	18.7	14.0	F-302	NP	NP	SM
10/17/05	F-304	100	96	96	93.3	90.7	84.0	72.0	503.0	31.8	21.9	16.9	F-304	26	9	SC
10/17/05	F-306		100	98.6	96.2	93.9	88.1	75.4	53.2	32.3	21.8	15.6	F-306	NP	NP	SM
10/17/05	F-308		100.0	95.4	89.6	86.8	80.7	69.0	50.1	31.2	20.4	14.8	F-308	28	11	SC
10/17/05	F-312			100.0	97.4	95.2	87.8	73.0	49.0	31.7	21.5	16.1	F-312	28	11	SC
10/17/05	F-314		100	97.5	95.2	93.5	90.0	81.0	62.9	39.9	26.0	18.3	F-314	27	10	SC
10/14/05	FP-35	100	99	96.7	94.0	90.4	83.2	68.2	45.3	28.0	18.8	13.7	FP-35	NP	NP	SM
10/18/05	F-316		100	98.9	98.1	97.1	949.0	86.3	63.2	39.4	23.1	16.0	F-316	NP	NP	SM
10/18/05	F-318	100	98	98	96.4	94.7	90.3	79.0	56.9	35.4	23.0	15.4	F-318	NP	NP	SM
10/18/05	F-320		100	96.6	93.3	89.4	81.0	67.0	45.2	27.3	17.9	13.1	F-320	NP	NP	SM
10/18/05	F-324		100	98.9	98.1	97.2	94.7	87.0	67.2	41.9	25.1	18.2	F-324	NP	NP	SM
10/13/05	FP-36	100	98	96.4	95.5	94.7	84.5	72.8	49.6	31.9	21.5	15.9	FP-36	29	13	SC
10/18/05	FP-37	100	98	88.9	79.9	77.1	71.6	60.3	41.7	25.8	17.5	11.8	FP-37	30	15	SW-SC
10/19/05	F-326		100	97.0	94.1	91.6	87.6	78.6	58.9	35.5	22.1	15.9	F-326	NP	NP	SM
10/19/05	F-328			100	98.9	97.5	92.2	81.1	59.4	40.1	27.3	20.1	F-328	28	16	SC
10/19/05	F-330		100	97.1	92.7	89.3	82.5	68.5	44.4	24.9	17.1	12.6	F-330	NP	NP	SM
10/19/05	F-334		100	95	89.5	86.5	80.4	67.3	45.6	27.4	20.0	14.2	F-334	27	10	SC
10/19/05	F-336		100	98.2	96.1	94.4	89.6	76.1	52.8	34.0	23.6	16.6	F-336	NP	NP	SM
10/19/05	F-338	100	98	92.8	88.0	84.9	78.5	66.1	46.6	19.9	21.2	15.7	F-338	28	11	SC
10/19/05	F-340	100	99	92.4	87.0	83.8	77.7	65.2	43.7	26.0	17.6	13.1	F-340	NP	NP	SM
10/18/05	FP-38	100	98	94	89.6	82.6	74.1	59.4	38.1	23.3	15.6	11.9	FP-38	33	17	SW-SC
10/20/05	F-344		100	99	98.1	96.2	92.0	81.4	60.9	42.3	29.6	22.0	F-344	29	14	SC
10/20/05	F-346	100	99	95.2	92.4	89.9	83.1	67.8	45.9	29.6	21.5	16.1	F-346	27	12	SC

Table C.5. Soil Classification Test Results for the GHP-2 Frost Protection Layer

Date Sampled	Gradation Sample ID	PARTICLE SIZE ANALYSIS											Atterberg Sample ID	Atterberg Limits		Unified Soil Classification
		Seive Size (% Passing)												Liquid Limit	Plastic Index	
		3"	1 1/2"	3/4"	3/8"	#4	#8	#16	#30	#50	#100	#200				
														Plan Requirements: SC and/or SC-SM		
10/20/05	F-348			100.0	99.1	98.4	94.2	84.6	65.4	45.8	30.1	21.9	F-348	NP	NP	SM
10/20/05	F-350			100.0	98.7	97.0	92.2	79.9	58.9	40.2	28.7	20.3	F-350	30	12	SC
10/19/05	FP-39		100	99.0	95.7	92.7	85.6	71.5	49.8	32.4	23.5	17.0	FP-39	30	12	SC
10/21/05	F-354	100	98	96.8	94.0	92.4	88.5	79.6	56.7	34.2	23.3	17.7	F-354	NP	NP	SM
10/21/05	F-356		100	100	98.8	98.1	93.5	82.5	61.6	40.7	26.5	19.6	F-356	28	12	SC
10/21/05	F-358		100	99.3	98.4	96.6	92.8	81.8	62.8	43.5	30.7	20.5	F-358	28	9	SC
10/21/05	F-360			100.0	99.8	98.0	93.7	83.1	61.3	40.6	285.6	19.7	F-360	NP	NP	SM
10/21/05	F-362		100	97.5	93.6	89.2	83.7	71.7	53.6	38.7	30.0	23.0	F-362	33	19	SC
10/18/05	FP-40	100	99	96.8	93.3	89.7	84.4	72.0	48.0	30.7	20.5	15.5	FP-40	32	18	SC
10/25/05	F-366	100	97	95.0	91.4	87.5	81.9	71.9	51.7	33.7	23.9	18.6	F-366	30	15	SC
10/25/05	F-368			100.0	98.9	97.3	88.9	71.5	45.2	28.6	18.9	14.1	F-368	NP	NP	SM
10/25/05	F-370		100	99.7	97.9	95.2	89.3	76.5	51.2	33.0	22.9	17.4	F-370	29	8	SC
10/25/05	F-374		100	99.5	99.3	97.5	92.5	78.8	53.5	32.7	21.8	15.4	F-374	NP	NP	SM
10/25/05	F-376			100.0	98.9	96.8	88.6	71.6	46.7	30.6	21.0	16.1	F-376	28	8	SC
10/25/05	F-378	100	98.3	95	89.7	86.8	81.0	69.4	48.6	31.4	21.7	16.9	F-378	32	17	SC
10/19/05	FP-41		100	98.2	94.4	91.0	85.1	73.5	52.2	32.6	21.1	16.2	FP-41	29	13	SC
10/26/05	F-380		100.0	99	97.2	94.1	89.8	79.1	60.8	41.4	29.1	19.7	F-380	28	12	SC
10/26/05	F-384		100	93.0	88.7	85.7	79.5	68.6	50.1	35.2	26.7	21.3	F-384	32	17	SC
10/26/05	F-386		100.0	96	90.4	87.3	79.8	65.0	43.5	29.1	23.9	17.3	F-386	30	11	SC
10/18/05	FP-42		100.0	97.7	93	89.6	83.9	70.7	49.8	32.5	23.1	16.8	FP-42	29	12	SC
11/2/05	F-388		100.0	98.9	98	96.9	93.3	83.7	65.2	45.0	31.6	23.4	F-388	28	12	SC
11/2/05	F-390			100.0	100	98.7	958.0	86.8	68.0	46.1	31.9	22.8	F-390	NP	NP	SM
11/2/05	F-394	100.0	98.2	94.8	91	88.0	82.5	72.0	54.2	39.3	29.5	23.5	F-394	33	17	SC
11/2/05	F-396		100.0	99.3	97	96.0	91.4	81.3	63.5	45.0	33.3	25.0	F-396	30	12	SC
11/2/05	F-398		100.0	98.4	95	91.9	86.2	76.2	58.5	42.8	32.2	25.2	F-398	34	16	SC
11/2/05	F-400		100.0	97.6	95	92.7	88.3	78.1	60.4	43.5	32.5	24.3	F-400	32	17	SC
10/19/05	FP-43		100.0	96.2	92	88.8	83.0	71.1	49.6	30.7	20.3	15.2	FP-43	29	14	SC
10/20/05	FP-44	100.0	99.6	96.7	94	91.7	87.3	78.1	60.5	44.3	32.7	25.4	FP-44	33	18	SC
11/3/05	F-396D		100.0	95.4	89	96.6	80.9	70.9	54.0	39.7	30.5	23.7	F-396D	30	16	SC
11/3/05	F-398D	100.0	98.0	94.7	91	87.8	81.9	70.4	52.3	35.9	25.7	19.4	F-398D	32	19	SC
11/3/05	F-400D		100.0	99.2	95	93.2	87.3	75.6	57.4	41.7	31.8	24.9	F-400D	34	15	SC
11/3/05	F-402		100.0	95.3	90	86.4	78.0	64.7	44.7	30.1	21.8	17.5	F-402	33	19	SC
11/3/05	F-408		100.0	97.4	93	89.3	82.4	70.4	51.6	35.6	25.8	20.0	F-408	30	17	SC
11/4/05	F-410			100.0	99	98.5	95.4	86.7	65.1	40.8	23.9	16.0	F-410	NP	NP	SM
11/4/05	F-412	100.0	98.6	94.0	90	87.1	80.5	67.0	46.3	31.3	23.6	18.1	F-412	34	20	SC
10/20/05	FP-45		100.0	98.5	97	93.8	89.8	79.2	58.9	36.8	24.3	17.6	FP-45	NP	NP	SM
11/7/05	F-414		100.0	97.3	93	89.2	83.4	83.3	55.8	40.1	31.2	25.7	F-414	33	19	SC
11/7/05	F-416	100.0	97.3	91.1	86	82.1	74.5	61.4	43.1	28.4	20.5	15.9	F-416	31	15	SC
11/7/05	F-420		100.0	99.3	97	87.5	82.6	73.8	60.9	50.1	42.0	34.8	F-420	41	22	SC
11/7/05	F-422	100.0	92.8	90.9	87	82.5	77.2	68.6	55.6	45.0	37.3	30.4	F-422	39	22	SC
11/7/05	F-424		100.0	94.6	89	85.8	79.8	69.1	51.9	37.4	29.0	22.5	F-424	34	19	SC
11/7/05	F-426		100.0	97.0	92	89.6	83.9	74.2	58.1	44.0	34.8	28.4	F-426	37	22	SC
11/3/05	FP-46		100.0	97.4	95	90.4	83.9	70.5	49.0	32.7	23.1	17.8	FP-46	32	18	SC

Table C.5. Soil Classification Test Results for the GHP-2 Frost Protection Layer

Date Sampled	Gradation Sample ID	PARTICLE SIZE ANALYSIS											Atterberg Sample ID	Atterberg Limits		Unified Soil Classification
		Seive Size (% Passing)												Liquid Limit	Plastic Index	
		3"	1 1/2"	3/4"	3/8"	#4	#8	#16	#30	#50	#100	#200				
														Plan Requirements: SC and/or SC-SM		
11/3/05	FP-47		100.0	98.6	96	95.4	92.2	82.7	60.6	37.5	24.8	17.3	FP-47	NP	NP	SM
11/8/05	F-430	100.0	99.0	97.4	95	92.7	87.7	74.9	52.9	34.4	25.0	18.4	F-430	29	13	SC
11/8/05	F-432		100.0	98.5	94	91.2	84.7	71.6	51.9	34.6	25.7	19.3	F-432	31	18	SC
11/8/05	F-434		100.0	94.7	88	84.8	77.3	65.2	45.9	32.3	24.0	19.4	F-434	34	20	SC
11/8/05	F-436	100.0	98.1	94.0	89	86.0	79.2	64.7	42.8	27.1	19.4	15.6	F-436	30	14	SC
11/8/05	F-440		100.0	96.7	93	91.4	86.0	72.0	46.9	27.8	18.5	13.9	F-440	31	15	SC
11/7/05	FP-48		100.0	98.1	95	91.9	84.7	69.8	47.3	29.6	20.8	15.3	FP-48	28	13	SC
11/9/05	F-442	100.0	96.5	93.0	89	88.1	82.6	71.7	54.5	38.9	29.8	22.8	F-442	33	19	SC
11/9/05	F-444		100.0	95.8	91	86.8	80.1	66.5	46.5	30.6	22.5	17.0	F-444	31	16	SC
11/9/05	F-446	100.0	97.3	93.9	91	89.0	84.4	74.7	54.4	34.7	23.8	18.4	F-446	29	16	SC
11/9/05	F-450		100.0	97.8	93	89.5	80.9	65.1	43.3	26.5	18.3	13.5	F-450	30	12	SC
11/9/05	F-452		100.0	99.4	95	93.6	87.9	77.2	58.9	42.5	31.7	24.9	F-452	32	17	SC
11/9/05	F-454		100.0	96.0	92	88.8	74.4	58.0	43.9	33.7	29.9	26.9	F-454	33	17	SC
11/10/05	FP-49		100.0	99.9	97	96.5	88.9	76.2	54.7	36.2	25.2	18.4	FP-49	29	14	SC
11/10/05	F-456		100.0	99.8	99	97.2	93.1	83.2	62.7	42.5	27.9	20.5	F-456	28	12	SC
11/10/05	F-460		100.0	98.6	95	93.3	87.9	75.8	55.3	37.5	27.2	20.6	F-460	30	15	SC
11/10/05	F-462		100.0	98.8	96	93.9	90.0	80.1	57.7	36.8	23.0	16.1	F-462	NP	NP	SM
11/10/05	F-464		100.0	99.0	97	95.4	91.2	81.6	58.9	37.9	23.9	16.8	F-464	NP	NP	SM
11/10/05	FP-50		100.0	98.5	96	95.2	91.0	81.1	60.0	39.9	26.2	19.9	FP-50	29	13	SC
9/28/05	FP-51	100.0	99.5	988.0	98	95.6	87.5	70.4	47.7	31.7	22.2	15.3	FP-51	29	12	SC
11/11/05	F-466		100.0	97.9	94	91.0	85.9	75.7	57.0	41.6	31.4	24.9	F-466	32	18	SC
11/11/05	F-470		100.0	97.7	94	91.6	86.5	75.4	57.7	42.4	32.5	25.4	F-470	34	16	SC
11/11/05	F-472		100.0	97.9	94	90.2	84.2	72.0	50.0	31.8	21.9	17.0	F-472	27	9	SC
11/11/05	F-474	100.0	97.0	95.7	92	87.1	79.9	65.4	44.4	27.3	18.8	13.4	F-474	28	11	SC
11/11/05	F-476			100.0	96	93.4	87.2	73.5	50.4	31.5	22.0	16.5	F-476	28	12	SC
4/20/06	FP-52			100.0	98	97.5	96.2	93.4	63.3	42.8	27.8	19.2	FP-52	28	12	SC
4/21/06	F-480RR		100.0	98.6	98	96.5	92.9	85.5	66.1	44.1	29.7	17.3	F-480RR	39	25	SC
4/21/06	F-482	100.0	98.9	96.3	94	89.7	84.3	74.0	54.3	37.0	26.2	21.0	F-482	31	19	SC
4/25/06	FP-53	100.0	96.7	91.6	82	78.3	73.7	63.2	47.0	32.9	27.9	19.4	FP-53	31	17	SC
4/20/06	FP-54	100.0	96.5	94.2	93	89.9	82.2	69.6	49.3	33.2	24.1	19.2	FP-54	30	18	SC
5/2/06	F-483RR		100.0	97.7	95	92.4	87.0	75.0	56.5	40.3	31.3	25.4	F-483RR	33	21	SC
5/2/06	F-485		100.0	98.4	97	94.4	91.1	86.5	75.1	60.4	49.1	41.1	F-485	36	26	SC
5/2/06	F-487				100	99.3	96.3	89.0	74.0	58.6	45.9	36.5	F-487	34	21	SC
5/2/06	F-489			100.0	100	99.4	96.8	89.3	70.1	49.1	32.1	22.8	F-489		NP	SM
5/2/06	F-491	100.0	96.4	93.9	92	89.4	85.2	76.8	61.0	46.7	36.1	28.9	F-491	32	18	SC
5/2/06	F-495			100.0	100	98.1	94.5	84.8	64.6	43.3	28.8	20.2	F-495		NP	SM
5/2/06	F-497		100.0	99.4	99	96.3	93.1	84.0	64.0	44.0	29.0	21.0	F-497	28	11	SC
5/2/06	F-499		100.0	94.1	90	87.9	83.4	76.6	60.0	42.4	30.4	22.1	F-499	31	18	SC
5/2/06	F-501	100.0	93.9	87.6	82	79.4	77.2	72.0	62.6	52.3	43.8	31.7	F-501	37	24	SC
5/1/06	FP-55	100.0	88.9	86.3	83	81.9	78.9	71.4	52.3	30.2	17.4	12.1	FP-55		NP	SW-SM
5/3/06	F-505	100.0	94.3	92.6	91	89.3	86.3	78.7	58.3	32.2	18.5	12.7	F-505		NP	SM
5/4/06	F-507		100.0	99.3	98	96.2	91.5	79.3	55.2	34.3	24.3	15.7	F-507	31	15	SC
5/5/06	FP-56		100.0	95.9	94	90.2	84.4	74.8	51.7	33.7	23.4	17.0	FP-56	26	9	SC

Table C.5. Soil Classification Test Results for the GHP-2 Frost Protection Layer

Date Sampled	Gradation Sample ID	PARTICLE SIZE ANALYSIS												Atterberg Sample ID	Atterberg Limits		Unified Soil Classification
		Seive Size (% Passing)													Liquid Limit	Plastic Index	
		3"	1 1/2"	3/4"	3/8"	#4	#8	#16	#30	#50	#100	#200					
															Plan Requirements: SC and/or SC-SM		
5/5/06	F-511		100.0	99.1	98	95.9	91.9	82.6	63.1	43.9	29.8	22.5	F-511		NP	SM	
5/5/06	F-513	100.0	88.8	86.7	84	81.7	78.3	70.0	54.1	37.9	26.7	19.1	F-513	28	12	SC	
5/5/06	F-515			100.0	100	99.4	98.2	87.3	68.3	46.4	28.6	19.5	F-515		NP	SM	
5/5/06	F-517	100.0	97.0	93.1	89	86.5	84.7	77.8	64.7	42.9	28.0	21.0	F-517	29	11	SC	
4/20/06	FP-57		100.0	95.5	94	91.9	86.9	76.6	59.1	43.1	32.3	24.8	FP-57	31	18	SC	
5/9/06	F-521			100.0	98	97.2	94.1	85.0	64.0	38.4	24.4	17.3	F-521		NP	SM	
5/11/06	F-523R			100.0	100	98.9	95.9	86.8	65.0	39.3	26.2	16.8	F-523R		NP	SM	
5/11/06	F-525		100.0	94.1	89	88.1	85.0	75.0	55.1	33.1	21.0	14.0	F-525		NP	SM	
5/16/06	F-527	100.0	95.0	94.9	92	87.9	80.7	67.6	50.1	37.1	28.6	22.8	F-527	33	18	SC	
5/9/06	FP-58	100.0	89.7	87.1	84	82.2	79.6	71.1	50.9	29.7	19.1	13.4	FP-58		NP	SM	
5/17/06	F-529R		100.0	99.0	97	95.3	90.8	81.4	60.2	40.3	28.6	22.4	F-529R	31	16	SC	
5/17/06	F-530		100.0	97.6	95	91.8	84.2	69.4	48.4	29.5	20.6	15.6	F-530	29	11	SC	
5/17/06	FP-59		100.0	99.4	97	96.5	95.7	94.0	84.7	69.6	55.3	44.1	FP-59	37	24	SC	
5/18/06	F-535		100.0	99.6	99	97.9	96.7	94.8	83.1	65.7	51.7	43.6	F-535	41	26	SC	
5/18/06	F-537		100.0	98.6	96	93.2	86.6	73.1	55.0	41.0	32.3	25.1	F-537	33	19	SC	
5/18/06	F-539		100.0	98.4	98	96.2	92.9	84.3	62.2	41.5	30.9	25.5	F-539	33	18	SC	
5/18/06	F-541	100.0	97.1	93.9	90	85.4	77.3	62.5	43.3	28.4	20.8	15.0	F-541	30	13	SC	
5/18/06	F-543	100.0	100.0	99.7	98	97.6	95.9	91.4	81.6	68.8	59.1	45.1	F-543	34	19	SC	
5/18/06	F-545		100.0	94.4	92	90.5	84.5	71.4	49.4	29.9	19.8	14.6	F-545		NP	SM	
5/18/06	F-547		100.0	98.8	98	97.5	96.0	93.2	82.3	67.3	54.9	44.9	F-547	40	27	SC	
5/18/06	F-549				100	99.9	99.3	97.1	89.4	74.3	59.9	40.5	F-549	36	20	SC	
5/18/06	F-551		100.0	97.2	93	89.6	84.7	75.4	57.8	42.9	33.1	26.9	F-551	33	18	SC	
5/15/06	FP-60		100.0	98.4	98	97.4	96.8	95.0	85.5	69.9	56.5	44.4	FP-60	37	22	SC	
5/15/06	FP-61		100.0	99.5	99	97.9	96.9	94.8	82.1	64.9	55.6	45.6	FP-61	37	23	SC	
5/18/06	FP-62		100.0	99.0	99	97.6	96.5	94.1	80.4	63.7	53.4	44.2	FP-62	41	26	SC	
5/18/06	F-552D		100.0	98.9	97	96.5	96.0	94.5	84.9	70.2	59.4	49.9	F-552D	36	22	CL	
5/19/06	F-554			100.0	99	98.2	97.3	94.8	83.1	67.4	56.2	47.8	F-554	40	27	SC	
5/19/06	F-556		100.0	98.8	98	97.6	97.0	95.0	80.9	62.1	48.3	37.2	F-556	34	19	SC	
5/19/06	F-558	100.0	96.4	95.1	94	93.6	92.9	90.9	80.4	65.9	55.8	47.5	F-558	41	27	SC	
5/19/06	F-562		100.0	99.3	99	97.9	96.3	91.9	82.5	70.8	61.8	51.3	F-562	36	23	CL	
5/19/06	F-545R		100.0	96.9	95	92.6	89.1	78.9	54.4	30.0	19.8	14.8	F-545R		NP	SM	
5/19/06	F-546R		100.0	96.0	93	89.2	83.0	70.0	49.6	31.3	21.6	15.4	F-546R		NP	SM	
5/19/06	F-566			100.0	99	98.8	97.3	93.4	82.2	67.1	55.1	44.8	F-566	38	24	SC	
5/19/06	F-568			100.0	100	99.6	98.9	96.3	88.6	78.9	66.0	52.6	F-568	35	22	CL	
5/19/06	F-572	100.0	97.0	95.8	95	94.1	91.9	87.8	76.1	59.9	48.4	37.6	F-572	34	23	SC	
5/20/06	F-574	100.0	97.2	96.6	96	94.7	93.1	91.0	77.1	66.0	51.0	41.4	F-574	40	27	SC	
5/20/06	F-576		100.0	97.8	97	96.1	95.2	93.0	79.5	61.6	54.6	42.3	F-576	41	28	SC	
5/20/06	F-578			100.0	99	96.9	93.2	85.8	70.7	54.0	42.6	29.5	F-578	37	23	SC	
5/20/06	FP-63			100.0	100	99.6	98.8	96.2	81.2	62.1	51.1	41.6	FP-63	39	23	SC	
5/23/06	F-582		100.0	99.0	98	97.7	97.1	95.7	86.8	75.1	65.7	58.7	F-582	41	28	CL	
5/22/06	FP-64			100.0	98	96.3	94.6	80.3	56.5	31.5	18.0	12.0	FP-64		NP	SM	
5/25/06	F-584		100.0	97.0	95	92.6	86.2	76.0	63.1	52.8	42.6	28.2	F-584	37	20	SC	
5/25/06	F-586		100.0	99.4	98	95.9	92.4	84.4	68.7	52.0	40.6	30.9	F-586	35	20	SC	

Table C.5. Soil Classification Test Results for the GHP-2 Frost Protection Layer

Date Sampled	Gradation Sample ID	PARTICLE SIZE ANALYSIS											Atterberg Sample ID	Atterberg Limits		Unified Soil Classification
		Seive Size (% Passing)												Liquid Limit	Plastic Index	
		3"	1 1/2"	3/4"	3/8"	#4	#8	#16	#30	#50	#100	#200		Plan Requirements: SC and/or SC-SM		
5/30/06	F-588		100.0	99.3	99	97.1	93.0	84.0	66.4	49.2	40.2	32.9	F-588		NP	SM
5/31/06	F-590		100.0	99.3	97	93.2	88.8	76.0	59.0	46.6	37.5	30.7	F-590	34	20	SC
6/1/06	F-592			100.0	95	93.8	85.9	72.7	49.2	32.0	21.1	15.1	F-592		NP	SM
6/6/06	FP-65			100.0	99	97.5	92.6	82.8	65.5	48.5	36.6	26.9	FP-65	29	12	SC
6/8/06	FP-66		100.0	98.1	97	95.0	90.9	80.7	61.8	42.6	29.3	20.5	FP-66		NP	SM
6/15/06	F-607		100.0	97.7	96	94.0	89.1	79.2	60.0	40.5	29.4	23.4	F-607	30	18	SC
6/15/06	F-609		100.0	98.3	96	93.4	87.9	77.9	59.6	42.5	31.7	25.5	F-609	31	18	SC
6/15/06	F-611	100.0	98.4	97.1	95	92.5	88.0	77.0	57.3	39.0	30.5	22.4	F-611	30	19	SC
6/15/06	FP-67		100.0	97.5	95	92.6	87.8	77.7	60.2	43.9	33.9	26.1	FP-67	33	18	SC
6/16/06	F-613		100.0	93.2	90	87.1	82.0	72.9	57.7	42.9	32.5	25.2	F-613	34	20	SC
6/16/06	F-615			100.0	98	97.3	93.7	85.1	64.5	42.4	27.4	19.9	F-615		NP	SM
6/21/06	F-594R		100.0	98.1	95	92.0	85.7	73.0	54.2	38.8	29.6	21.7	F-549R	34	22	SC
6/23/06	F-596R	100.0	98.2	95.3	92	90.3	84.8	73.4	53.3	37.3	27.3	20.7	F-596R	33	20	SC
6/23/06	F-598R	100.0	96.1	94.7	92	90.5	86.8	78.7	61.8	44.5	32.0	25.0	F-598R	29	13	SC
6/23/06	F-600R	100.0	96.4	94.0	92	89.2	84.5	73.1	54.3	38.0	29.3	22.7	F-600R	32	19	SC
6/23/06	F-617		100.0	97.8	95	92.6	87.4	76.7	59.2	42.7	32.1	24.3	F-617	30	17	SC
6/28/06	FP-68		100.0	99.4	99	97.9	96.5	92.1	81.7	67.7	55.1	42.4	FP-68	36	19	SC
6/30/06	F-621			100.0	99	98.3	97.0	92.2	81.1	66.0	54.0	43.0	F-621	36	23	SC
7/19/06	F-623			100.0	99	98.3	96.0	89.0	74.1	56.0	42.0	32.4	F-623	35	21	SC
7/28/06	F-625		100.0	98.3	98	97.0	95.0	89.1	76.1	60.4	48.1	38.2	F-625	37	24	SC

averages: 100.0 99.2 100.4 98.2 98.5 99.2 79.2 64.2 43.8 33.9 23.9

Unified Soil Classification Summary

Type	Defined	Number (%)	
SC	Clayey Sand	256	79.0%
SM	Silty Sand	58	17.9%
CL	Lean Clay	5	1.5%
SP-SM	Poorly-Graded Sand w/ Silt	2	0.6%
SW-SC	Well-Graded Sand w/ Clay	2	0.6%
SW-SM	Well-Graded Sand w/ Silt	1	0.3%

Total Number of Tests (N): 324

average:	31.8	16.3
minimum:	26.0	8.0
maximum:	41.0	28.0
standard deviation:	3.3	4.4

62, or 19% of results, were Non-Plastic

Total Quantities placed: 309,230

Testing Frequency: 1: 954 CY

(Frequency meets the 1:1000 requirement.)

Appendix D

Table D.1. Daily Quantities and Quality Control Test Frequencies for the GHP-2 Toe Apron (2006)

Note: This table lists only those days that fill was placed and/or testing performed. CY = Cubic Yards; NG = Nuclear Gauge (test), i.e., field compaction test.

Testing Frequency Requirements:

Field Compaction Tests: 1: 1000 CY

Proctors: 1: 5000 CY

Sand-Cones: 1:10 NG tests

Date	Total Quantities Placed		Field Compaction Test Frequency			Proctor Test Frequency			Sand-Cone Test Frequency		
	Daily Yardage	Cumulative Yardage	Daily Tests Performed	Cumulative No. of Tests	Ratio (per CY)	Daily Tests Performed	Cumulative No. of Tests	Ratio (per CY)	Daily Tests Performed	Cumulative No. of Tests	Ratio (/NG tests)
7/14/06	210	210	1	1	--	1	1	--		0	--
7/15/06	0	210		1	--		1	--		0	--
7/16/06	0	210		1	--		1	--		0	--
7/17/06	189	399		1	1: 399		1	1: 399		0	--
7/18/06	714	1,113		1	1: 1113		1	1: 1113		0	--
7/19/06	1,029	2,142		1	1: 2142		1	1: 2142		0	--
7/20/06	3,822	5,964	3	4	1: 1491		1	1: 5964		0	--
7/21/06	0	5,964		4	1: 1491		1	1: 5964		0	--
7/22/06	0	5,964		4	1: 1491		1	1: 5964		0	--
7/23/06	0	5,964		4	1: 1491		1	1: 5964		0	--
7/24/06	2,079	8,043	3	7	1: 1149		1	1: 8043		0	--
7/25/06	1,911	9,954	3	10	1: 995	1	2	1: 4977		0	--
7/26/06	1,134	11,088	3	13	1: 853		2	1: 5544	1	1	1: 13
7/27/06	1,926	13,014		13	1: 1001		2	1: 6507		1	1: 13
7/28/06	966	13,980	4	17	1: 822	1	3	1: 4660		1	1: 17
7/29/06	0	13,980		17	1: 822		3	1: 4660		1	1: 17
7/30/06	0	13,980		17	1: 822		3	1: 4660		1	1: 17
7/31/06	1,134	15,114		17	1: 889		3	1: 5038		1	1: 17
8/1/06	1,302	16,416	7	24	1: 684	1	4	1: 4104	1	2	1: 12
8/2/06	0	16,416		24	1: 684		4	1: 4104		2	1: 12
8/3/06	0	16,416	6	30	1: 547	1	5	1: 3283	1	3	1: 10
8/4/06	1,008	17,424	6	36	1: 484		5	1: 3485	1	4	1: 9
8/5/06	0	17,424		36	1: 484		5	1: 3485		4	1: 9
8/6/06	0	17,424		36	1: 484		5	1: 3485		4	1: 9
8/7/06	1,281	18,705	6	42	1: 445		5	1: 3741	1	5	1: 8
8/8/06	1,365	20,070	3	45	1: 446	1	6	1: 3345		5	1: 9
8/9/06	798	20,868	4	49	1: 426		6	1: 3478		5	1: 10
8/10/06	1,575	22,443	3	52	1: 432	1	7	1: 3206		5	1: 10

Table D.1. Daily Quantities and Quality Control Test Frequencies Frequencies for the GHP-2 Toe Apron (2006)

Note: This table lists only those days that fill was placed and/or testing performed. CY = Cubic Yards; NG = Nuclear Gauge (test), i.e., field compaction test.

Testing Frequency Requirements:

Field Compaction Tests: 1: 1000 CY

Proctors: 1: 5000 CY

Sand-Cones: 1:10 NG tests

Date	<u>Total Quantities Placed</u>		<u>Field Compaction Test Frequency</u>			<u>Proctor Test Frequency</u>			<u>Sand-Cone Test Frequency</u>		
	Daily Yardage	Cumulative Yardage	Daily Tests Performed	Cumulative No. of Tests	Ratio (per CY)	Daily Tests Performed	Cumulative No. of Tests	Ratio (per CY)	Daily Tests Performed	Cumulative No. of Tests	Ratio (/NG tests)
8/11/06	315	22,758		52	1: 438		7	1: 3251		5	1: 10
8/12/06	210	22,968		52	1: 442		7	1: 3281		5	1: 10
8/13/06	0	22,968		52	1: 442		7	1: 3281		5	1: 10
8/14/06	1,617	24,585	6	58	1: 424		7	1: 3512	1	6	1: 10
8/15/06	957	25,542	2	60	1: 426		7	1: 3649		6	1: 10
8/16/06	921	26,463	4	64	1: 413	1	8	1: 3308	1	7	1: 9

Table D.2. Field Compaction Test Results for the GHP No. 2 Toe Apron

Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed. Max. = Maximum; SG = Subgrade; FG = Finish Grade; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both test endpoints.

Compaction Test ID	Date	Location		Lift	Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Remarks
		Northing	Easting		Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture	Percent Compaction		
								Requirements:	NA	≥ 95		
T-1	6/27/06	792545	835770	SG	TT-1	116.4	13.3	116.3	11.4	99.9	P	
T-2	6/27/06	792050	836030	SG	TT-1	116.4	13.3	113.8	11.3	97.8	P	
T-3	6/27/06	791850	836215	SG	TT-1	116.4	13.3	115.0	15.3	98.8	P	
T-4	6/27/06	791705	836760	SG	TT-1	116.4	13.3	112.9	13.2	97.0	P	
T-5	6/30/06	793025	835960	SG	TT-1	116.4	13.3	115.9	14.6	99.6	P	
T-6	6/30/06	793570	836480	SG	TT-1	116.4	13.3	120.1	12.3	103.2	P	
T-7	* 7/7/06	792660	835780	SG	TT-1	116.4	13.3	112.3	13.6	96.5	P	
T-9	7/17/06	791810	836290	SG	TT-3	119.3	13.0	111.4	15.0	93.4	F Comp	Fails Compaction
T-9R	7/18/06	791810	836290	SG	TT-3	119.3	13.0	113.3	10.4	95.0	P	
T-9R2	7/18/06	791810	836290	SG	TT-3	119.3	13.0	114.3	14.1	95.8	P	
T-19	7/26/06	791710	836900	SG	TT-4	118.5	13.8	121.1	8.2	102.2	P	
T-23	7/27/06	793220	836135	SG	TT-4	118.5	13.8	118.2	9.6	99.7	P	
T-24	7/27/06	793380	836280	SG	TT-4	118.5	13.8	113.5	9.8	95.8	P	
T-29	7/31/06	791590	836960	SG	TT-5	119.5	12.8	116.6	11.5	97.6	P	
T-62	8/10/06	793790	836630	SG	TT-9	122.2	11.2	123.0	10.1	100.7	P	
								Requirements:	PM ≥ Opt. - 2	≥ 95		
T-8	7/14/06	792260	835890	1	TT-3	119.3	13.0	112.3	10.3	94.1	F C & M	Fails Compaction & Moisture
T-8R	7/18/06	792260	835890	1	TT-3	119.3	13.0	112.4	13.6	94.2	F Comp	Retest fails compaction.
T-8R2	7/18/06	792260	835890	1	TT-3	119.3	13.0	114.4	11.9	95.9	P	Second retest passes.
T-10	7/20/06	791960	836080	1	TT-3	119.3	13.0	113.6	15.2	95.2	P	
T-11	7/20/06	792110	835998	1	TT-3	119.3	13.0	115.0	14.2	96.4	P	
T-12	7/20/06	791790	836360	2	TT-3	119.3	13.0	114.4	12.0	95.9	P	
T-13	7/24/06	792245	835920	2	TT-3	119.3	13.0	113.3	14.8	95.0	P	
T-14	7/24/06	791830	836260	3	TT-3	119.3	13.0	115.6	12.3	96.9	P	
T-15	7/24/06	792020	836050	3	TT-3	119.3	13.0	113.3	10.9	95.0	P	
T-16	7/25/06	792180	835950	3	TT-3	119.3	13.0	113.6	13.3	95.2	P	
T-17	7/25/06	791900	836135	4	TT-4	118.5	13.8	113.3	14.2	95.6	P	
T-18	7/25/06	791785	836380	4	TT-4	118.5	13.8	113.3	13.5	95.6	P	
T-20	7/26/06	792000	836065	4	TT-4	118.5	13.8	111.9	11.0	94.4	F C & M	Fails Compaction & Moisture
T-20R	7/27/06	792000	836065	4	TT-4	118.5	13.8	112.8	11.8	95.2	P	Retest passes.
T-21	* 7/26/06	792160	835960	4	TT-3	119.3	13.0	118.0	9.0	98.9	F Moist	Fails Moisture
T-21R	7/27/06	792160	835960	4	TT-3	119.3	13.0	114.1	11.6	95.6	P	Retest passes.
T-22	7/26/06	792360	835860	4	TT-4	118.5	13.8	114.5	13.8	96.6	P	
T-25	7/28/06	792455	835810	1	TT-5	119.5	12.8	116.6	10.8	97.6	P	
T-26	7/28/06	792650	835780	1	TT-5	119.5	12.8	116.9	10.8	97.8	P	
T-27	7/28/06	792880	835850	1	TT-5	119.5	12.8	115.0	10.8	96.2	P	
T-28	7/28/06	793170	836085	1	TT-4	118.5	13.8	113.2	12.2	95.5	P	
T-30	8/1/06	792570	835760	2	TT-5	119.5	12.8	113.9	12.0	95.3	P	
T-31	8/1/06	792650	835825	2	TT-5	119.5	12.8	116.4	11.5	97.4	P	

Table D.2. Field Compaction Test Results for the GHP No. 2 Toe Apron

Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed. Max. = Maximum; SG = Subgrade; FG = Finish Grade; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both test endpoints.

Compaction Test ID	Date	Location			Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Remarks
		Northing	Easting	Lift	Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture	Percent Compaction		
								Requirements:	NA	≥ 95		
T-32 *	8/1/06	792775	835890	2	TT-5	119.5	12.8	117.1	13.0	98.0	P	
T-33	8/1/06	793030	835970	2	TT-5	119.5	12.8	114.0	11.9	95.4	P	
T-34	8/1/06	793210	836190	2	TT-5	119.5	12.8	115.7	12.7	96.8	P	
T-35	8/1/06	793375	836300	1	TT-5	119.5	12.8	117.4	12.5	98.2	P	
T-36	8/1/06	793605	836510	1	TT-6	119.9	12.9	115.1	15.2	96.0	P	
T-37 *	8/3/06	792530	835780	3	TT-6	119.9	12.9	116.6	12.6	97.2	P	
T-38	8/3/06	792645	835770	3	TT-6	119.9	12.9	116.8	12.3	97.4	P	
T-39	8/3/06	792910	835860	3	TT-7	117.8	14.0	116.5	14.5	98.9	P	
T-40	8/3/06	792095	836030	3	TT-7	117.8	14.0	114.9	16.8	97.5	P	
T-41	8/3/06	793425	836350	2	TT-7	117.8	14.0	115.2	13.1	97.8	P	
T-42	8/3/06	793630	836530	2	TT-6	119.9	12.9	117.7	13.2	98.2	P	
T-43	8/4/06	793145	836070	3	TT-6	119.9	12.9	117.9	12.3	98.3	P	
T-44	8/4/06	793295	836230	3	TT-7	117.8	14.0	114.1	14.3	96.9	P	
T-45 *	8/4/06	793465	836350	3	TT-7	117.8	14.0	115.7	12.3	98.2	P	
T-46	8/4/06	793580	836490	3	TT-7	117.8	14.0	112.7	13.9	95.7	P	
T-47	8/4/06	792505	835800	4	TT-6	119.9	12.9	116.0	11.2	96.7	P	
T-48	8/4/06	792660	835820	4	TT-6	119.9	12.9	114.7	11.9	95.7	P	
T-49	8/7/06	792860	835850	4	TT-7	117.8	14.0	114.0	14.4	96.8	P	
T-50	8/7/06	793020	835950	4	TT-6	119.9	12.9	114.9	11.1	95.8	P	
T-51	8/7/06	793170	836095	4	TT-6	119.9	12.9	116.0	11.7	96.7	P	
T-52 *	8/7/06	793290	836220	4	TT-7	117.8	14.0	114.4	13.4	97.1	P	
T-53	8/7/06	793480	836380	4	TT-7	117.8	14.0	117.6	13.2	99.8	P	
T-54	8/7/06	791690	836690	1	TT-6	119.9	12.9	120.1	11.0	100.2	P	
T-55	8/8/06	792640	835760	FG	TT-8	121.4	12.2	116.6	11.0	96.0	P	
T-56	8/8/06	792930	835880	FG	TT-8	121.4	12.2	116.1	11.3	95.6	P	
T-57	8/8/06	793245	836150	FG	TT-8	121.4	12.2	122.7	12.7	101.1	P	
T-58	8/9/06	793415	836350	FG	TT-8	121.4	12.2	118.9	10.9	97.9	P	
T-59	8/9/06	793580	836480	FG	TT-8	121.4	12.2	115.8	14.5	95.4	P	
T-60	8/9/06	793620	836515	FG	TT-8	121.4	12.2	118.2	11.8	97.4	P	
T-61	8/9/06	791700	836850	1	TT-8	121.4	12.2	115.2	12.6	94.9	P	
T-63	8/10/06	792070	836005	FG	TT-9	122.2	11.2	117.1	13.5	95.8	P	
T-64	8/10/06	791680	836790	FG	TT-9	122.2	11.2	117.8	11.5	96.4	P	
T-65	8/10/06	791850	836200	FG	TT-9	122.2	11.2	118.2	11.3	96.7	P	
T-66	8/14/06	791680	836770	2	TT-9	122.2	11.2	116.0	13.2	94.9	P	Test passed by QC officer.
T-67	8/14/06	791510	837050	1	TT-9	122.2	11.2	118.0	12.2	96.6	P	
T-68 *	8/14/06	791400	837085	2	TT-9	122.2	11.2	119.8	11.7	98.1	P	
T-69	8/14/06	791650	836950	3	TT-9	122.2	11.2	122.8	9.6	100.5	P	
T-70	8/14/06	793875	836650	1	TT-9	122.2	11.2	122.2	9.8	100.0	P	
T-71	8/14/06	793780	836620	2	TT-9	122.2	11.2	124.3	9.5	101.7	P	

Table D.2. Field Compaction Test Results for the GHP No. 2 Toe Apron

Note: R denotes Re-Test sample. To facilitate review, re-tests are shown directly under the corresponding failed test result (note dates). * Indicates that Sand-Cone Correlation performed. Max.= Maximum; SG = Subgrade; FG = Finish Grade; P = Pass; F Comp = Fails Compaction; F Moist = Fails Moisture; F C & M = Fails both test endpoints.

Compaction Test ID	Date	Location			Laboratory Standard Proctor			Field Compaction Tests			Pass/Fail	Remarks
		Northing	Easting	Lift	Proctor ID	Max. Dry Density (lbs/cu ft)	Optimum Moisture (%)	Dry Density (lbs/cu ft)	Percent Moisture	Percent Compaction		
								Requirements:	NA	≥ 95		
T-70D	8/15/06	791550	836970	4	TT-9	122.2	11.2	117.0	12.4	95.7	P	
T-71D	8/15/06	793820	836630	3	TT-9	122.2	11.2	118.7	9.5	97.1	P	
T-72	8/16/06	793890	836650	4	TT-10	117.7	12.5	122.6	10.8	104.2	P	
T-73	8/16/06	791710	836560	FG	TT-10	117.7	12.5	118.6	12.3	100.8	P	
T-74	8/16/06	791415	837050	FG	TT-10	117.7	12.5	116.4	10.6	98.9	P	
T-75	8/16/06	793850	836635	FG	TT-10	117.7	12.5	118.1	12.0	100.3	P	

Note:

Field density and moisture tests were taken using a nuclear density gauge. The gauge was field standardized at each test location and was correlated by a Sand Cone Test at a frequency of one for every ten nuclear gauge tests.

<i>Total Number of Tests (N):</i>	64	N reflects passing tests for Finish Grade only
<i>Total Quantities placed:</i>	26,463	cubic yards (CY)
<i>Frequency:</i>	1: 413 CY	meets the required frequency of 1:500 CY.
<i>average:</i>	116.4	12.4 97.2
<i>minimum:</i>	112.7	9.5 94.9
<i>maximum:</i>	124.3	16.8 104.2
<i>standard deviation:</i>	2.6	1.5 1.9

Table D.3. Sand-Cone Correlation Documentation for the GHP-2 Toe Apron

Date	Compaction Test ID	<u>Nuclear Gauge Test</u>		<u>Sand-Cone Compaction Tests</u>		<u>Sand-Cone Correlation Results</u>	
		In-Place Wet Unit Weight (pcf)	Moisture Content (%)	In-Place Wet Unit Weight (pcf)	Moisture Content (%)	Wet Unit Weight Variation (%)	Moisture Content Variation (%)
7/7/06	T-7	128.9	12.9	130.0	10.9	0.9	-2.0
7/26/06	T-21	128.6	9.0	125.6	7.6	-2.3	-1.4
8/1/06	T-32	132.3	13.0	130.7	11.3	-1.2	-1.7
8/3/06	T-37	131.3	12.6	131.6	10.1	0.2	-2.5
8/4/06	T-45	129.9	12.3	132.7	11.5	2.2	-0.8
8/7/06	T-52	129.7	13.4	129.4	12.6	-0.2	-0.8
8/14/06	T-68	133.8	11.7	140.4	11.4	4.9	-0.3
8/16/06	T-75	132.4	12.0	134.5	9.7	1.4	-0.9

pcf - pounds per cubic foot

<i>Number of sand-cone tests:</i>	8	
<i>average percent variation (on absolute value):</i>	1.7	1.3
<i>standard deviation:</i>	1.5	0.7

Note:

For the GHP No. 2 toe, a sand-cone correlation test was performed for every ten nuclear gauge tests. Correlations were deemed acceptable if the average of ten nuclear test results vs. sand cone test results comparisons met the following criteria:

sand-cone method wet density: +/- 3%
sand-cone method moisture content: +/- 2%

As indicated above, these criteria were met even for discrete results (vs. running average).

Table D.3. Sand-Cone Correlation Documentation for the GHP-2 Toe Apron

Date	Compaction Test ID	<u>Nuclear Gauge Test</u>		<u>Sand-Cone Compaction Tests</u>		<u>Sand-Cone Correlation Results</u>	
		In-Place Wet Unit Weight (pcf)	Moisture Content (%)	In-Place Wet Unit Weight (pcf)	Moisture Content (%)	Wet Unit Weight Variation (%)	Moisture Content Variation (%)
7/7/06	T-7	128.9	12.9	130.0	10.9	0.9	-2.0
7/26/06	T-21	128.6	9.0	125.6	7.6	-2.3	-1.4
8/1/06	T-32	132.3	13.0	130.7	11.3	-1.2	-1.7
8/3/06	T-37	131.3	12.6	131.6	10.1	0.2	-2.5
8/4/06	T-45	129.9	12.3	132.7	11.5	2.2	-0.8
8/7/06	T-52	129.7	13.4	129.4	12.6	-0.2	-0.8
8/14/06	T-68	133.8	11.7	140.4	11.4	4.9	-0.3
8/16/06	T-75	132.4	12.0	134.5	9.7	1.4	-0.9

pcf - pounds per cubic foot

<i>Number of sand-cone tests:</i>	8	
<i>average percent variation (on absolute value):</i>	1.7	1.3
<i>standard deviation:</i>	1.5	0.7

Note:

For the GHP No. 2 toe, a sand-cone correlation test was performed for every ten nuclear gauge tests. Correlations were deemed acceptable if the average of ten nuclear test results vs. sand cone test results comparisons met the following criteria:

sand-cone method wet density: +/- 3%
sand-cone method moisture content: +/- 2%

As indicated above, these criteria were met even for discrete results (vs. running average).