

Date Started 3-29-95 Sampler: Type S.S. Dia. 2.0" Water Encountered NONE Project I.D.: 142-45098
 Date Completed 3-29-95 Casing: Length 5.0' Dia. 3.25" Water on Completion NONE
 Surface Elevation 1140.0'± MSL
 Boring No: B-1 Station & Offset 509+50, 135'LT

Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Op (TSF)
				AU-1								11		
	6-10-12	Medium, Moist Gray, Clayey Silt, trace Sand.	5	SS-2	10	8	12	65	5	20	7	13	A-4b	
	8-8-4			SS-3										
	7-9-10		10	SS-4								12		
	2-3-5	Firm, Wet, Brown Silt & Clay, trace sand.	15	SS-5								18	A-6a	1.0
	6-9-11	Stiff, Wet, Brown Clayey silt, trace Sand.	20	SS-6								13	A-4b	2.0
	7-9-11	V. Stiff, Moist, Gray Silt & Clay, trace Sand.	25	SS-7	3	8	13	44	32	28	11	14	A-6a	2.5
1110.0	3-6-7	End of Boring- 30.0'	30	SS-8								15		2.0
		0.5' Asphalt Concrete	35											
		Brown Sand and Gravel (BASE)	40											

Date Started 4-28-95 Sampler: Type S.S. Dia. 2.0" Water Encountered 1134.3 Project I.D.: 142-45098
 Date Completed 4-28-95 Casing: Length 5.0' Dia. 3.25" Water on Completion 1134.8
 Surface Elevation 1138.8
 Boring No: B-2A Station & Offset 520+00, 208' LT

Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Op (TSF)
	1-1-2	Firm, Wet, Blk-Silty Clay, trace Organics (FILL)		SS-1								37	A-6a	1.0
	2-3-3	Stiff, Wet, Brown, Clayey Silt.	5	SS-2								18	A-4b	2.0
	11-11-14			SS-3								17		2.0
	9-10-14	Stiff, Wet, Brown, Silt & Clay, trace Sand.	10	SS-4								13		3.0
1128.8	9-11-10-11		10	SS-5								17	A-6a	2.0
		End of Boring- 10.0'	10											
			15											
			20											
			25											
			30											
			35											
			40											

Date Started 3-29-95 Sampler: Type S.S. Dia. 2.0" Water Encountered 1112.6' Project I.D.: 142-45098
 Date Completed 3-29-95 Casing: Length 5.0' Dia. 3.25" Water on Completion 1097.6'
 Surface Elevation 1125.5'± MSL
 Boring No: B-2 Station & Offset 520+00, 148' LT

Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Op (TSF)
	1-3-7			SS-1								23		
	5-5-5	Med., Moist Gray, Sandy Silt, trace Rock Frags.	5	SS-2								12	A-4a	
	4-4-5	Stiff, Wet, Gray, Silt & Clay.		SS-3								14	A-6a	2.0
	3-5-2	Loose, Wet, Brown fine and Coarse Sand	10	SS-4								11	A-3a	
	4-4-6	Stiff, Wet, Gray Silt & Clay trace Sand.	15	SS-5								15		1.5
	4-5-6		20	SS-6								14	A-6a	2.0
	17-19-11	Dense, Wet, Gray, Gravel and/or Stone Frags. with Sand.	25	SS-7								9	A-1-b	
1095.5	50/2"	Hard, Gray, Sandstone.	30	SS-8								15		
		End of Boring- 30.0'	30											
		0.5' Topsoil	35											
		Firm, Wet, Blk-Silty Clay (FILL)	40											

Date Started 3-29-95 Sampler: Type S.S. Dia. 2.0" Water Encountered 1108.2' Project I.D.: 142-45098
 Date Completed 3-29-95 Casing: Length 5.0' Dia. 3.25" Water on Completion 1108.2'
 Surface Elevation 1120.5'± MSL
 Boring No: B-3 Station & Offset 523+00, 179' RT

Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Op (TSF)
	2-4-7			SS-1								13		2.0
	4-3-4	Stiff, Moist, Gray Clayey Silt, trace Sand.	5	SS-2								15	A-4b	1.0
	3-3-4	Firm, Wet, Gray, Silt & Clay, trace Sand.		SS-3								16		1.0
	3-3-3		10	SS-4								15	A-6a	1.0
	5-9-14	V Stiff, Moist, Gray Clayey Silt, some rock Frags.	15	SS-5	3	5	12	70	10	20	8	9	A-4b	3.0
	9-12-15		20	SS-6								16		3.0
1098.0	50/1"	End of Boring- 22.5'	25	SS-7										
		0.4' Topsoil	30											
		Hard, Gray, Sandstone	35											
			40											



Date Started 4-27-95 Sampler: Type S.S. Dia. 2.0" Water Encountered 1132.2 Project I.D.: 142-45098
 Date Completed 4-27-95 Casing: Length 5.0' Dia. 3.25" Water on Completion 1132.2
 Surface Elevation 1136.2
 Boring No: B-3A Station & Offset 523+00, 204' RT

Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Op (TSF)
	1-1-1-2	Stiff, Wet, Brown, Clayey Silt trace Sand.		SS-1								29	A-4b	0.5
	3-4-7-8		SS-2									16		2.0
	6-7-10-10		SS-3	5								17		2.0
	10-8-9-8		SS-4									14		-
	9-10-14-17		SS-5									11	A-3a	-
1126.2		End of Boring - 10.0'	10											
		9" Topsoil	15											
			20											
			25											
			30											
			35											
			40											

Date Started 3-30-95 Sampler: Type S.S. Dia. 2.0" Water Encountered NONE Project I.D.: 142-45098
 Date Completed 3-30-95 Casing: Length 5.0' Dia. 3.25" Water on Completion NONE
 Surface Elevation 1107.0± MSL
 Boring No: B-5 Station & Offset 545+00, 205' LT

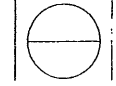
Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Op (TSF)	
	1-2-3	Medium, Moist, Brown, Silty Silt, trace clay trace rock fragments.		SS-1								30		0.5	
	4-5-7		SS-2									19		-	
	5-7-9		SS-3	5		8	16	16	40	20	24	6	16	A-4a	-
	5-10-14		SS-4									15		-	
	7-14-50/1"		SS-5									15		-	
1092.0		End of Boring - 15.0'	15												
		0.4' Topsoil	20												
		Hard, Gray, Sandstone	25												
			30												
			35												
			40												

Date Started 3-30-95 Sampler: Type S.S. Dia. 2.0" Water Encountered NONE Project I.D.: 142-45098
 Date Completed 3-30-95 Casing: Length 5.0' Dia. 3.25" Water on Completion NONE
 Surface Elevation 1113.0± MSL
 Boring No: B-4 Station & Offset 539+00, 204' LT

Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Op (TSF)
	1-2-3	Firm to Stiff, Wet Brown/Gray Silt & Clay trace Sand, trace organics (FILL)		SS-1								26		1.0
	5-6-8		SS-2									15	A-6a (FILL)	3.0
	4-4-8		SS-3	5								18		2.0
	4-2-2		SS-4									27		0.5
	7-14-18	Dense, Moist, Brown Silty Silt, trace rock fragments	10	SS-5							14	A-4a	-	
1093.0	34-50/6"	Hard, Gray, Sandstone	15	SS-6							7		-	
		End of Boring - 20.0'	20											
		0.5' Topsoil	25											
			30											
			35											
			40											

Date Started 3-30-95 Sampler: Type S.S. Dia. 2.0" Water Encountered 1078.9' Project I.D.: 142-45098
 Date Completed 3-30-95 Casing: Length 5.0' Dia. 3.25" Water on Completion NONE
 Surface Elevation 1092.4± MSL
 Boring No: B-6 Station & Offset 552+00, 194' LT

Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Op (TSF)
	1-1-3	Soft, Wet, Brown, Silty Clay, trace organics (FILL)		SS-1								16		-
	7-5-7		SS-2									24	A-6b (FILL)	-
	7-8-9	Medium, Moist, Brown, Silty Silt, trace Clay.	5	SS-3								17		-
	4-7-13		SS-4									15	A-4a	-
	16-16-18	V. Stiff, Moist, Gray Silt & Clay	10	SS-5	0	12	21	35	22	25	11	15	A-6a	3.0
	7-7-10	Firm, Wet, Gray Decomposed Shale.	15	SS-6								2		-
1067.4	50/5"	Firm, Moist, Gray, Weathered Shale.	20	SS-7								5		-
		End of Boring - 25.0'	25											
		0.3' Topsoil	30											
			35											
			40											



Date Started 3-29-95 Sampler: Type S.S. Dia. 2.0" Water Encountered NONE Project I.D.: 142-45098
 Date Completed 3-29-95 Casing: Length 5.0' Dia. 3.25" Water on Completion NONE
 Surface Elevation 1077.0± MSL
 Boring No: B-7 Station & Offset 603+00, 151' LT

Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
	1-5-6	**		SS-1								14		2.0
	5-6-9	Stiff, Wet, Gray, Silt & Clay trace sand.	5	SS-2								12		2.0
	6-7-8			SS-3								16	A-6a	2.0
	3-5-7		10	SS-4								14		2.0
	2-4-7		15	SS-5								13		2.0
	11-20-31	V. Dense, Moist, Gray, Gravel and/or Sandstone frags. with Sand.	20	SS-6								9		-
	10-14-15		25	SS-7	45	19	31	5	0	-	-	7	A-1-b	-
1047.0	28-35 50/5"	Hard, Gray, Sandstone.	30	SS-8								5		-
		End of Boring- 30.0'												
		0.4' Topsoil	35											
		** Stiff, Moist, Brown, Clayey Silt.	40											

Date Started 3-27-95 Sampler: Type S.S. Dia. 2.0" Water Encountered NONE Project I.D.: 142-45098
 Date Completed 3-27-95 Casing: Length 5.0' Dia. 3.25" Water on Completion NONE
 Surface Elevation 1078.0± MSL
 Boring No: B-8 Station & Offset 613+00, 185' LT

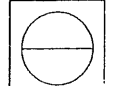
Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
	1-4-6	Stiff, Wet, Brown to Gray Silt & Clay, trace sand		SS-1								18		1.0
	5-7-7			SS-2								13		2.0
	9-8-9		5	SS-3								13	A-6a	2.0
	4-6-8		10	SS-4								14		2.0
	3-6-8		15	SS-5								14		2.0
	3-6-8		20	SS-6								13		2.0
	6-8-10	Dense, Moist, Gray, Gravel and/or Stone Frags. w/ Sand.	25	SS-7								11	A-1-b	-
1048.0	11-15-17		30	SS-8								11		-
		End of Boring- 30.0'												
		0.2' Topsoil	35											
			40											

Date Started 4-27-95 Sampler: Type S.S. Dia. 2.0" Water Encountered NONE Project I.D.: 142-45098
 Date Completed 4-27-95 Casing: Length 5.0' Dia. 3.25" Water on Completion NONE
 Surface Elevation 1091.2
 Boring No: B-7A Station & Offset 630+00, 215' LT

Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
	2-1-2-3	Firm, Wet, Brown, Silt & Clay, trace Organics.		SS-1								23	A-6a (FILL)	0.5
	5-5-5-5	Medium, Wet, Brown, Sandy Silt, trace Clay.	5	SS-2								16		-
	6-7-10-12			SS-3								18		-
	11-12-8-8			SS-4								13	A-4a	-
1081.2	13-11-9-9		10	SS-5								15		-
		End of Boring- 10.0'												
			15											
			20											
			25											
			30											
			35											
			40											

Date Started 4-28-95 Sampler: Type S.S. Dia. 2.0" Water Encountered 1081.2 Project I.D.: 142-45098
 Date Completed 4-28-95 Casing: Length 5.0' Dia. 3.25" Water on Completion NONE
 Surface Elevation 1086.2
 Boring No: B-8A Station & Offset 613+00, 261' LT

Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
	1-2-2-2	Loose, Moist, Brown, Sandy Silt, trace Organics.		SS-1								27	A-4a (FILL)	-
	2-2-3-2			SS-2								22		-
	3-8-6-5		5	SS-3								18	A-4a	-
	2-6-12-13	Medium, Wet, Brown, Fine & Coarse Sand.		SS-4								6	A-3a	-
1076.2	10-11-15-16	V. Stiff, Moist, Brown, Clayey Silt.	10	SS-5								17	A-4b	3.0
		End of Boring- 10.0'												
		Medium, Moist, Brown, Sandy Silt.	15											
			20											
			25											
			30											
			35											
			40											



Date Started 3-23-95 Sampler: Type S.S. Dia. 2.0" Water Encountered NONE Project I.D.: 142-45098
 Date Completed 3-23-95 Casing: Length 5.0' Dia. 3.25" Water on Completion NONE
 Surface Elevation 1084.0± MSL
 Boring No: B-9 Station & Offset 622+00, 200' LT

Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
	2-3-4			SS-1								26		1.0
	3-5-5	Stiff to V. Stiff, Wet Brown to Gray, Clayey Silt, Trace Sand	5	SS-2								14		1.5
	4-4-6			SS-3								21		2.0
	8-10-12		10	SS-4	8	4	13	61	14	23	8	14	A-4b	3.0
	4-8-10		15	SS-5								14		3.0
	5-6-7	Stiff, Wet, Gray, Silt & Clay trace sand.	20	SS-6								15		2.0
	3-6-7		25	SS-7								16	A-6a	2.0
1054.0	4-6-8	End of Boring- 30.0'	30	SS-8								15		2.0
		0.3' Topsoil	35											
		Firm, Wet, Blk-Gray, Silty Clay (FILL)	40											

Date Started 3-20-95 Sampler: Type S.S. Dia. 2.0" Water Encountered NONE Project I.D.: 142-45098
 Date Completed 3-20-95 Casing: Length 5.0' Dia. 3.25" Water on Completion NONE
 Surface Elevation 1089.0± MSL
 Boring No: B-11 Station & Offset 608+00, 289' RT

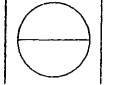
Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
	3-5-7			SS-1								14		2.0
	11-11-8	V. Stiff, Moist, Gray, Silt & Clay, trace sand.	5	SS-2								14		3.0
	5-5-6			SS-3								15	A-6a	2.0
	6-8-9		10	SS-4								18		3.0
	3-5-7		15	SS-5								15		2.0
	3-5-7		20	SS-6								13		2.0
	3-5-10	Medium, Moist, Gray, fine and coarse sand.	25	SS-7	15	10	45	30	0	-	-	5	A-3a	-
1059.0	3-5-9	End of Boring- 30.0'	30	SS-8								10		-
		0.4' Topsoil	35											
		Stiff, Moist, Brown, Clayey Silt	40											

Date Started 3-23-95 Sampler: Type S.S. Dia. 2.0" Water Encountered NONE Project I.D.: 142-45098
 Date Completed 3-23-95 Casing: Length 5.0' Dia. 3.25" Water on Completion NONE
 Surface Elevation 1089.5± MSL
 Boring No: B-10 Station & Offset 633+00, 149' LT

Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
	1-2-3			SS-1								17	A-6a	0.5
	2-3-6	Firm to Stiff, Wet, Brown Clayey Silt, trace sand.	5	SS-2								14	(FILL)	1.0
	4-7-8			SS-3								15	A-4b	2.0
	5-5-8		10	SS-4								20		2.0
	6-8-9	V. Stiff, Wet, Gray, Silt & Clay, trace sand.	15	SS-5								17		2.0
	7-11-12		20	SS-6								13	A-6a	3.0
	5-8-12		25	SS-7								14		2.5
1059.5	5-7-8	End of Boring- 30.0'	30	SS-8								16		2.0
		0.3' Topsoil	35											
		Soft, Wet, Brown, Silt & Clay (FILL)	40											

Date Started 3-20-95 Sampler: Type S.S. Dia. 2.0" Water Encountered NONE Project I.D.: 142-45098
 Date Completed 3-20-95 Casing: Length 5.0' Dia. 3.25" Water on Completion NONE
 Surface Elevation 1080.0± MSL
 Boring No: B-12 Station & Offset 187' RT

Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
	1-3-5			SS-1								12		2.0
	3-6-7	V. Stiff, Moist, Blk-Gray to Gray, Clayey Silt, trace rock frags, trace sand.	5	SS-2								12		3.0
	6-7-12			SS-3								14		3.0
	5-7-11		10	SS-4								12	A-4b	3.0
	5-8-10		15	SS-5								15		3.0
1060.0	5-13-50/2"	End of Boring- 20.0'	20	SS-6								8		-
		0.2' Topsoil	25											
		Hard, Gray Sandstone	30											
			35											
			40											



Date Started 3-23-95 Sampler: Type S.S. Dia. 2.0" Water Encountered NONE Project I.D.: 142-45098
 Date Completed 3-23-95 Casing: Length 5.0' Dia. 3.25" Water on Completion NONE
 Surface Elevation 1100.7 ± MSL
 Boring No: B-13 Station & Offset 654+00, 149' LT

Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)	
36	2-2-6	V. Stiff to Stiff, Moist Gray, Clayey Silt, trace Sand.	5	SS-1								14		1.0	
	8-18-18		SS-2									13		4.0	
	7-9-9		SS-3									15		4.0	
	2-4-4		SS-4									16		2.0	
	5-7-7		SS-5									13		3.0	
	4-6-7		SS-6			3	5	14	63	15	19	5	14	A-4b	3.0
	4-6-9		SS-7										15		3.0
	1070.7		8-26-15	Dense, Wet, Gray, Sandy Silt, trace Clay.	30	SS-8							14	A-4a	-
		End of Boring- 30.0'													
		0.7' Topsoil	35												
			40												

Date Started 3-20-95 Sampler: Type S.S. Dia. 2.0" Water Encountered NONE Project I.D.: 142-45098
 Date Completed 3-20-95 Casing: Length 5.0' Dia. 3.25" Water on Completion NONE
 Surface Elevation 1104.5 ± MSL
 Boring No: B-15 Station & Offset 675+00, 147' RT

Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)	
38	2-4-7	Stiff, Moist, Brown, Clayey Silt.	5	SS-1								22		1.5	
	3-4-6		SS-2									18	A-4b	2.0	
	4-5-7		SS-3										23	A-6a	2.0
	2-8-13		SS-4										16	A-4b	3.0
	3-5-6		SS-5										17	A-6a	2.0
	4-10-18		SS-6										13		-
	10-13-14		SS-7			6	9	67	18	0	-	-	11	A-3a	-
	1074.5		50/3"	Firm, Gray Weathered Sandstone.	30	SS-8								8	
		End of Boring- 30.0'													
		0.4' Topsoil	35												
			40												

Date Started 3-23-95 Sampler: Type S.S. Dia. 2.0" Water Encountered NONE Project I.D.: 142-45098
 Date Completed 3-23-95 Casing: Length 5.0' Dia. 3.25" Water on Completion NONE
 Surface Elevation 1108.0 ± MSL
 Boring No: B-14 Station & Offset 662+00, 152' LT

Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)	
37	1-2-5	Loose, Wet, Brown, Sandy Silt, trace clay	5	SS-1								19		-	
	3-4-5		SS-2									17	A-4a	-	
	5-8-8		SS-3										14		2.0
	4-4-7		SS-4										15	A-6a	2.0
	4-5-8		SS-5										17		2.0
	4-6-9		SS-6										16		2.5
	5-6-8		SS-7										16		2.0
	1078.0		50/1"	Hard, Gray, Sandstone.	30	SS-8								12	
		End of Boring- 30.0'													
		0.2' Topsoil	35												
			40												

Date Started 3-20-95 Sampler: Type S.S. Dia. 2.0" Water Encountered NONE Project I.D.: 142-45098
 Date Completed 3-20-95 Casing: Length 5.0' Dia. 3.25" Water on Completion NONE
 Surface Elevation 1098.0 ± MSL
 Boring No: B-16 Station & Offset 692+00, 172' RT

Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)	
39		Medium, Moist, Brown, Sandy Silt, trace clay	5	AU-1								13		-	
	2-3-2		SS-2										12		-
	4-5-2		SS-3			6	19	21	38	16	21	8	13	A-4a	-
	10-12-14		SS-4										12		-
	8-13-13		SS-5										10		-
	7-9-12		SS-6										15		-
	7-9-10		SS-7										15		-
	1068.0		9-11-14	V. Stiff, Moist, Gray Silt & Clay, trace Sand.	30	SS-8								12	A-6a
		End of Boring- 30.0'													
		0.9' Asphalt Concrete	35												
		0.5' Sand & Gravel (BASE)	40												



Date Started 3-17-95 Sampler: Type S.S. Dia. 2.0" Water Encountered 1043.5' Project I.D.: 142-45098
 Date Completed 3-17-95 Casing: Length 5.0' Dia. 3.25" Water on Completion 1045.5'
 Surface Elevation 1070.0'± MSL
 Boring No: B-17 Station & Offset 706+00, 671' RT

Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Op (TSF)
				AU-1								11		
	6-6-13	Medium, Moist Brown, Sandy Silt, trace Clay	5	SS-2								14	A-4a	
	5-6-7			SS-3								12		
	4-7-9	Stiff, Wet, Brown, Clayey Silt, trace Sand.	10	SS-4								19	A-4b	2.0
	9-12-15		15	SS-5								14		3.0
	3-3-4	Stiff, Wet, Gray Silty Clay trace Sand.	20	SS-6	3	12	10	38	37	35	16	13	A-6b	1.5
	4-9-25	Dense, Wet, Gray, Coarse and fine Sand.	25	SS-7								14	A-3a	
1040.0	4-8-9	End of Boring- 30.0'	30	SS-8								19		
		0.3' Asphalt Concrete 0.2' Gravel Base	35											
			40											

Date Started 3-21-95 Sampler: Type S.S. Dia. 2.0" Water Encountered 1040.8' Project I.D.: 142-45098
 Date Completed 3-21-95 Casing: Length 5.0' Dia. 3.25" Water on Completion 1043.1'
 Surface Elevation 1059.8'± MSL
 Boring No: B-19 Station & Offset 732+00, 148' RT

Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Op (TSF)
	2-2-4	Medium, Wet, Brown, Sandy Silt, trace Clay, (FILL)	5	SS-1								16	A-4a (FILL)	
	4-8-9			SS-2								18		
	8-3-4	Firm, Wet, Blk-Gray Silty Clay, trace Organics, (FILL)	5	SS-3								17	A-6a (FILL)	1.0
	7-8-9	V. Stiff, Moist, Brown, Clayey Silt, trace Sand.	10	SS-4								15	A-4b	3.0
	10-50/6"	Hard, Brown Sandstone	15	SS-5								14		
1039.8	50/3"	End of Boring- 20.0'	20	SS-6								14		
		0.4' Topsoil	25											
			30											
			35											
			40											

Date Started 3-17-95 Sampler: Type S.S. Dia. 2.0" Water Encountered NONE Project I.D.: 142-45098
 Date Completed 3-17-95 Casing: Length 5.0' Dia. 3.25" Water on Completion NONE
 Surface Elevation 1067.0'± MSL
 Boring No: B-18 Station & Offset 724+00, 174' RT

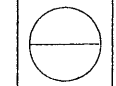
Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Op (TSF)
				AU-1								15		1.0
	2-4-4	Firm, Wet, Blk-Gray, Silty Clay, trace Organics, (FILL)	5	SS-2								18	A-6b (FILL)	1.0
	8-8-9	Medium, Moist, Brown, Sandy Silt, trace Clay.	10	SS-3								12		
	8-10-18			SS-4								12	A-4a	
	6-5-9	V. Stiff, Wet, Brown, Clayey Silt, trace Sand.	15	SS-5								19	A-4b	2.0
	5-6-9		20	SS-6								16		2.0
	25-50/5"	Firm to Hard, Brown, Weathered Sandstone.	25	SS-7								4		
1037.0	50/5"	End of Boring- 30.0'	30	SS-8								6		
		0.5' Asphalt Concrete 0.9' Gravel Base	35											
			40											

Date Started 3-23-95 Sampler: Type S.S. Dia. 2.0" Water Encountered 1048.0' Project I.D.: 142-45098
 Date Completed 3-23-95 Casing: Length 5.0' Dia. 3.25" Water on Completion 1044.5'
 Surface Elevation 1054.0'± MSL
 Boring No: B-20 Station & Offset 744+00, 156' LT

Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Op (TSF)
	1-4-7	Medium, Moist, Brown Sandy Silt.	5	SS-1								12		
	10-10-15			SS-2								11	A-4a	
	8-50/6"	Firm to Hard, Brown to Gray Sandstone.	10	SS-3								12		
	50/2"			SS-4								20		
1039.0	50/3"	End of Boring- 15.0'	15	SS-5								19		
		0.3' Topsoil	20											
			25											
			30											
			35											
			40											

SOIL BORING LOGS

CUY/LAK-271-9.16/0.66



Date Started 3-23-95 Sampler: Type S.S. Dia. 2.0" Water Encountered NONE Project I.D.: 142-45098
 Date Completed 3-23-95 Casing: Length 5.0' Dia. 3.25" Water on Completion NONE
 Surface Elevation 1039.4 ± MSL
 Boring No: B-21 Station & Offset 755+00, 197' LT

Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
1029.4	1-2-2	Medium, Wet, Brown, Sandy Silt, trace Clay.	5	SS-1								37		
	4-5-5			SS-2									12	A-4g
	42-50/5	Firm to Hard, Brown, Weathered Sandstone.	5	SS-3								10		
	50/2"	End of Boring- 10.0'	10	SS-4								9		
		0.7' Topsoil	15											
			20											
			25											
			30											
			35											
			40											

Date Started 3-23-95 Sampler: Type S.S. Dia. 2.0" Water Encountered NONE Project I.D.: 142-45098
 Date Completed 3-23-95 Casing: Length 5.0' Dia. 3.25" Water on Completion NONE
 Surface Elevation 1030.2 ± MSL
 Boring No: B-23 Station & Offset 6+00, 162' RT

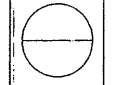
Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
1020.2	1-3-3	Firm, Wet, Brown, Silt & Clay, trace Sand.	5	SS-1								14		1.0
	2-4-5			SS-2								23	A-6g	1.0
	50/4"	Hard, Brown, Sandstone.	5	SS-3								8		
	50/2"	End of Boring- 10.0'	10	SS-4								8		
		0.3' Topsoil	15											
			20											
			25											
			30											
			35											
			40											

Date Started 3-23-95 Sampler: Type S.S. Dia. 2.0" Water Encountered NONE Project I.D.: 142-45098
 Date Completed 3-23-95 Casing: Length 5.0' Dia. 3.25" Water on Completion NONE
 Surface Elevation 1036.0 ± MSL
 Boring No: B-22 Station & Offset 758+00, 158' RT

Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
1026.0	1-3-6	Stiff, Wet, Blk-Gray, Silt & Clay, trace Organics. (FILL)	5	SS-1	8	7	20	28	37	33	12	15		1.0
	4-5-6			SS-2								24	A-6g (FILL)	2.0
	6-7-8	Stiff, Wet, Brown, Silt & Clay	5	SS-3								12	A-6g	2.0
	50/2"	Hard, Gray, Sandstone.	10	SS-4								6		
		End of Boring- 10.0'	15											
		0.4' Topsoil	20											
			25											
			30											
			35											
			40											

Date Started 3-17-95 Sampler: Type S.S. Dia. 2.0" Water Encountered 869.2' Project I.D.: 142-45098
 Date Completed 3-17-95 Casing: Length 5.0' Dia. 3.25" Water on Completion 867.0'
 Surface Elevation 873.9 ± MSL
 Boring No: B-24 Station & Offset 44+00, 141' RT

Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
858.9	1-8-6	Medium, Moist, Brown, Sandy Silt, trace Clay.	5	SS-1								22		1.0
	3-5-6			SS-2								12	A-4g	
	12-50/3"	Firm to Hard, Brown to Gray, Weathered Sandstone to Sandstone.	5	SS-3								6		
	50/6"	End of Boring- 15.0'	10	SS-4								14		
		0.6' Topsoil	15	SS-5								7		
			20											
			25											
			30											
			35											
			40											



Date Started 3-17-95 Sampler Type S.S. Dia. 2.0" Water Encountered 881.8' Project I.D.: 142-45098
 Date Completed 3-17-95 Casing Length 5.0' Dia. 3.25" Water on Completion 868.6'
 Surface Elevation 887.3± MSL
 Boring No. B-25 Station & Offset 49+00, 195' RT

Elev.	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class	Op (TSF)
		Loose, Wet, Brown to Gray, Sandy Silt.		AU-1								21		
	1-1-2			SS-2								20	A-4a	
	3-4-5	Loose, Saturated, gray fine and coarse sand.	5	SS-3								19		
	4-5-4		10	SS-4	35	37	21	7	0			24	A-3a	
	7-9-12	Stiff, Wet, Gray, Silt & Clay trace sand.	15	SS-5								16	A-6a	2.0
	8-14-29	Firm, Gray, Weathered Shale.	20	SS-6								11		
862.3	13-50/4'	End of Boring - 25.0'	25	SS-7								7		
			30											
			35											
			40											

Date Started: 2-26-97 Sampler Type S.S. Dia. 2.0" Water Encountered 1111.0 Project I.D.: 142-65158
 Date Completed: 2-26-97 Casing Length 5.0' Dia. 3.25" Water on Completion 1111.0 CUY-271-9.16/0.66
 Surface Elevation 1134.0' MSL
 Boring No. B-27 Station & Offset 512+00, 195' RT

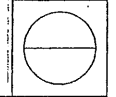
Elev	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% Clay	L.L.	P.I.	W.C.	SHTL Class	Op (TSF)
1134.0				SS-1								27		0.5
1133.2	1-1-1	V. Stiff, Wet, Brown to Gray, Clayey SILT, Trace Sand, Trace Rock fragments.		SS-2								14		2.5
	4-6-8		5	SS-3								19		3.0
	3-6-9		10	SS-4	5	8	15	72	0	20	5	15	A-4b	3.5
	4-9-13		15	SS-5								14		3.0
	5-8-10		20	SS-6								15		3.0
	4-4-7		25	SS-7								14		2.0
1108.0		V/Dense, Moist, Gray, GRAVEL and/or Stone Frags. W/Sand.	25	SS-8								11	A-1-b	
1104.0	20-35-40	End of Boring - 30.0'	30											
		9" Topsoil	35											

Date Started: 3-20-97 Sampler Type S.S. Dia. 2.0" Water Encountered 1120.5 Project I.D.: 142-65158
 Date Completed: 3-20-97 Casing Length 5.0' Dia. 3.25" Water on Completion 1120.5 CUY-271-9.16/0.66
 Surface Elevation 1125.0' MSL
 Boring No. B-26 Station & Offset 531+30, 220' LT

Elev	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% Clay	L.L.	P.I.	W.C.	SHTL Class	Op (TSF)
1125.0				SS-1								18		1.0
1124.5	1-2-2	Firm, Wet, Black & Gray, Sandy SILT, Trace Organics.		SS-2								29	Fill	1.0
	4-3-2-1		5	SS-3								33		1.0
1119.0	2-3-3-4		10	SS-4								17		2.5
	3-5-6-10	V/Stiff, Wet, Brown, Sandy SILT, Trace Rock Frags	10	SS-5	17	8	29	42	4	26	8	16	A-4a	3.0
	6-13-15-16		15	SS-6								14		3.0
1113.0	14-15-14-16		20	SS-7								14		2.0
	14-12-12-10		25	SS-8								15	A-6a	3.0
	11-13-14-16	Stiff, Wet, Gray, SILT & CLAY.	30	SS-9								15		3.0
1107.0	7-8-10-12	End of Boring - 18.0'	35											
		6" Topsoil												

Date Started: 2-27-97 Sampler Type S.S. Dia. 2.0" Water Encountered None Project I.D.: 142-65158
 Date Completed: 2-27-97 Casing Length 5.0' Dia. 3.25" Water on Completion None CUY-271-9.16/0.66
 Surface Elevation 1144.0' MSL
 Boring No. B-28 Station & Offset 517+50, 203' RT

Elev	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% Clay	L.L.	P.I.	W.C.	SHTL Class	Op (TSF)
1144.0				SS-1								16		1.0
1143.7	1-2-3	V. Stiff, Wet, Brown to Gray, Clayey SILT, Trace Sand, Trace Rock fragments.		SS-2								14		4.0
	10-15-17		5	SS-3								14	A-4b	3.0
	8-9-11		10	SS-4								15		3.0
1132.0	5-8-10		15	SS-5								17		3.0
	5-7-8	V/Stiff, Wet, Gray, SILT & Clay, Trace Sand.	20	SS-6								15	A-6a	3.0
	6-8-10		25	SS-7	5	7	12	61	15	31	12	16		2.5
	5-7-10		30	SS-8								15		3.5
1114.0	8-10-13	End of Boring - 30.0'	35											
		4" Topsoil												



Date Started: 3-19-97 Sampler Type S.S. Dia. 2.0" Water Encountered None Project I.D.: 142-65158
 Date Completed: 3-19-97 Casing Length 5.0' Dia. 3.25" Water On Completion None CUY-271-9.16/0.66
 Boring No. B-22 Station & Offset 536±50.218' LT Surface Elevation 1124.0' MSL Cuyahoga & Lake Counties

Elev	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)	
1124.0	1-2-3	Stiff to V/Stiff, Wet, Brown to Gray, Sandy SILT, Trace Rock fragments.	5	SS-1								16		1.0	
	6-8-11		5	SS-2									17	A-4a	2.0
	11-14-15			SS-3									16		3.0
	10-14-17			SS-4									15		3.0
	4-7-8			SS-5									16		2.5
	4-4-3			SS-6									12		1.0
1101.0	50/2.5"		Firm, Gray, Sandstone.	25	SS-7								8		
1099.0		End of Boring - 25.0'													
		4" Topsoil	30												
			35												

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Date Started: 2-25-97 Sampler Type S.S. Dia. 2.0" Water Encountered None Project I.D.: 142-65158
 Date Completed: 2-25-97 Casing Length 5.0' Dia. 3.25" Water On Completion None CUY-271-9.16/0.66
 Boring No. B-31 Station & Offset 606±00.287' LT Surface Elevation 1090.0' MSL Cuyahoga & Lake Counties

Elev	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)	
1090.0	1-0-1	14" Topsoil		SS-1								27		--	
1088.8	3-4-3	V/Stiff, Wet, Brown, Clayey SILT, Trace Sand.	5	SS-2								15		1.5	
			5	ST-3									18	A-4b	1.5
	5-9-12		10	SS-4									15		3.0
	4-6-7		15	SS-5									8		2.5
	4-7-10		20	SS-6									12		3.0
	3-2-9		25	SS-7									15		2.0
1062.0	7-10-18		Dense, Moist, Gray, Fine SAND	30	SS-8								13	A-3	--
1060.0			End of Boring - 30.0'												
			35												

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Date Started: 2-25-97 Sampler Type S.S. Dia. 2.0" Water Encountered 1057.9 Project I.D.: 142-65158
 Date Completed: 2-25-97 Casing Length 5.0' Dia. 3.25" Water On Completion 1057.9 CUY-271-9.16/0.66
 Boring No. B-30 Station & Offset 560±00.194' LT Surface Elevation 1084.0' MSL Cuyahoga & Lake Counties

Elev	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)	
1084.0	1-1-2	V/Stiff, Wet, Brown, Clayey SILT, Trace Sand.	5	SS-1								32		0.5	
1083.7	7-7-12		5	SS-2								17		3.0	
	4-8-11			SS-3									14	A-4b	3.0
1076.0	6-18-10	Med. Gray Sandstone	10	SS-4								14		--	
1074.0	4-9-13	V/Stiff, Wet, Gray, Clayey SILT, Trace Sand.	15	SS-5								15		3.0	
			20	ST-6									13	A-4b	3.0
			25	SS-7									12		3.0
1059.0	2-3-13		Dense, Wet, Gray, GRAVEL and/or Stone Frag w/ Sand.	30	SS-8	34	44	20	2	0	--	--	10	A-1-b	3.0
1064.0	6-10-11	End of Boring - 30.0'													
		4" Topsoil	35												

21

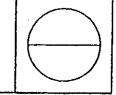
Date Started: 2-25-97 Sampler Type S.S. Dia. 2.0" Water Encountered None Project I.D.: 142-65158
 Date Completed: 2-25-97 Casing Length 5.0' Dia. 3.25" Water On Completion None CUY-271-9.16/0.66
 Boring No. B-32 Station & Offset 641±00.147' LT Surface Elevation 1094.0' MSL Cuyahoga & Lake Counties

Elev	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
1093.7	1-3-5	V/Stiff, Wet, Brown, Sandy SILT, Trace Rock Fragments.	5	SS-1								21	Fill	0.5
1092	12-12-9		5	SS-2	4	17	31	46	2	22	7	14		3.0
				ST-3									13	A-4a
1086	7-8-9	V/Stiff, Wet, Brown Clayey SILT, Trace Sand.	10	SS-4								15	A-4b	3.0
	7-9-11		15	SS-5									14	
1079	5-8-10	V/Stiff, Wet, Gray, SILT & CLAY, Trace Sand.	20	SS-6								14	A-6a	3.0
	6-8-11		25	SS-7									15	
1064	7-9-12	End of Boring - 30.0'										18		2.5
		4" Topsoil	35											
		** Soft, wet, Brown, Sandy SILT, Trace Organics.												

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SOIL BORING LOGS

CUY/LAK-271-9.16/0.66



Date Started: 2-25-97 Sampler Type S.S. Dia. 2.0" Water Encountered None Project I.D.: 142-65158
 Date Completed: 2-25-97 Casing Length 5.0' Dia. 3.25" Water On Completion None CUY-271-9.16/0.66
 Boring No. B-33 Station & Offset 670+00.147' LT Surface Elevation 1106' MSL Cuyahoga & Lake Counties

Elev	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
1106.0														
1105.7	2-3-4	Firm, Wet, Brown, Clayey SILT, Trace Organics.	5	SS-1								16	Fill	1.0
1101.0	8-7-6		5	SS-2								23	Fill	2.0
	7-9-9	V/Stiff, Wet, Brown, Sandy SILT, Trace Rock Fragments.	10	SS-3								16		3.0
1094.0	11-9-10		10	SS-4								19	A-4a	3.0
	11-18-24	V/Stiff, Wet, Brown, Clayey SILT, Trace Sand.	15	SS-5								15	A-4b	4.50
1089.0	15-14-13	Med., Wet, Brown, GRAVEL and/or Stone frags. w/ Sand.	20	SS-6								12		--
	17-21-21		25	SS-7								10	A-1-b	--
1077.0	27-50/3"	Firm, Brown, Sandstone.	30	SS-8								11		--
1076.0		End of Boring - 30.0'	30											
		3" Topsoil	35											

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Date Started: 2-24-97 Sampler Type S.S. Dia. 2.0" Water Encountered None Project I.D.: 142-65158
 Date Completed: 2-24-97 Casing Length 5.0' Dia. 3.25" Water On Completion None CUY-271-9.16/0.66
 Boring No. B-35 Station & Offset 698+00.109' RT Surface Elevation 1097' MSL Cuyahoga & Lake Counties

Elev	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
1097.0														
1096.0				ALL-1								10		--
				SS-2								13	A-4a	3.0
1091.0	7-10-13	V/Stiff, Wet, Brown, Sandy SILT, Trace Rock frags.	5	SS-2										
		Med. Wet, Brown, Gravel and/or Stone Frags.	5	SS-3	65	20	15	0	0	--	--	13	A-1a	--
1088.0	17-9-11		10	SS-4										
	12-13-15	V/Stiff, Moist, Brown to Gray, sandy SILT, Trace Rock fragments.	15	SS-5										
	9-10-10		20	SS-6										
	14-16-27		25	SS-7										
	12-13-13		30	SS-8										
1087.0	13-15-16		30											
		End of Boring - 30.0'	30											
		12" Asphalt Concrete 8" Fine Sand Base	35											

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SOIL BORING LOGS

Date Started: 2-26-97 Sampler Type S.S. Dia. 2.0" Water Encountered None Project I.D.: 142-65158
 Date Completed: 2-26-97 Casing Length 5.0' Dia. 3.25" Water On Completion None CUY-271-9.16/0.66
 Boring No. B-34 Station & Offset 683+00.147' RT Surface Elevation 1104.0' MSL Cuyahoga & Lake Counties

Elev	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
1104.0														
1102.0	1-1-3	Firm, Wet, Brown, Clayey SILT, Trace Organics.	5	SS-1								15	Fill	1.0
	3-4-4		5	SS-2								14		2.0
1096.0	2-2-4	V/Stiff, Wet, Brown, Sandy SILT, Trace Rock Fragments.	10	SS-3								17	A-4a	1.0
	5-6-9		10	SS-4								17	A-4b	3.0
	5-11-16	V/Stiff, Wet, Brown, Clayey SILT, Trace Sand.	15	SS-5	8	10	18	58	6	29	9	15	A-6a	4.0
1088.0	4-6-9	Stiff, Wet, Gray, SILT & Clay, Trace Sand.	20	SS-6								16		2.0
	4-10-20		25	SS-7								14		3.0
1077.0		Firm, Brown, Sandstone.	30	SS-8								4		--
1074.0	50/2"	End of Boring - 30.0'	30											
			35											

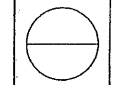
25

Date Started: 2-24-97 Sampler Type S.S. Dia. 2.0" Water Encountered None Project I.D.: 142-65158
 Date Completed: 2-24-97 Casing Length 5.0' Dia. 3.25" Water On Completion None CUY-271-9.16/0.66
 Boring No. B-36 Station & Offset C, Ramp B-6, Sta. 5+50.18' RT Surface Elevation 1089' MSL Cuyahoga & Lake Counties

Elev	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
1089.0														
1088.0				ALL-1								16		1.0
1086.0		Firm, wet, Brown, Clayey SILT		SS-2								12	A-4b	4.0
	12-13-14		5	SS-3								11	A-4a	4.0
	19-15-18	V/Stiff, Moist, Brown to Gray, sandy SILT, Trace Rock fragments.	10	SS-4								11		4.50+
	13-19-26		15	SS-5								11		4.50+
	12-10-50/6"		20	SS-6								11		4.0
	10-15-18		25	SS-7								13		4.0
	8-12-16		30	SS-8								12		4.0
1059.0	15-20-21		30											
		End of Boring - 30.0'	30											
		5" Asphalt Concrete 8" Sand & Gravel Base.	35											

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CUY/LAK-271-9.16/0.66



Date Started: 2-24-97 Sampler Type S.S. Dia. 2.0" Water Encountered 1039.3 Project I.D.: 142-65158
 Date Completed: 2-24-97 Casing Length 5.0' Dia. 3.25" Water On Completion 1036.3 CUY-271-9.16/0.66
 Boring No. B-37 Station & Offset 739+00.147' RT Surface Elevation 1051' MSL Cuyahoga & Lake Counties

Elev	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
1050.7	1-4-9	Stiff, Wet, Black & Gray, Clayey SILT, Trace Organics.	5	SS-1								18		2.0
1046.0	3-3-8			SS-2								31	FIH	1.0
1043.0	7-10-10	V/Soft, Wet, Brown, Clayey SILT, Trace Sand.		SS-3								14	A-4b	3.0
1037.0	5-5-6	Med., Wet, Brown, Fine SAND, Some Silt.	10	SS-4	5	30	60	5	0			23	A-3	
1037.0	50/3"	Firm, Brown, SANDSTONE.	15	SS-5								20		
1031.0	50/0.5"		20	SS-6								21		
		End of Boring - 20.0'	25											
		4" Topsoil	25											

Date Started: 2-24-97 Sampler Type S.S. Dia. 2.0" Water Encountered 1028.4 Project I.D.: 142-65158
 Date Completed: 2-24-97 Casing Length 5.0' Dia. 3.25" Water On Completion 1028.4 CUY-271-9.16/0.66
 Boring No. B-39 Station & Offset C₁ Ramp C. Sta. 15+00.77' RT Surface Elevation 1018.0' MSL Cuyahoga & Lake Counties

Elev	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
1018.0	1-1-3		5	SS-1	10	6	24	60	0	22	6	23	A-4b	1.0
1016.0	17-50/4"	Firm, Brown, SANDSTONE.		SS-2								19		
	50/4.5"			SS-3								9		
1008.0	50/6"			SS-4								11		
		End of Boring - 10.0'	10											
		5" Topsoil	15											
		** Firm, Wet, Brown, Clayey, SILT.	20											

Date Started: 2-24-97 Sampler Type S.S. Dia. 2.0" Water Encountered 1028.4 Project I.D.: 142-65158
 Date Completed: 2-24-97 Casing Length 5.0' Dia. 3.25" Water On Completion 1028.4 CUY-271-9.16/0.66
 Boring No. B-38 Station & Offset 758+00.194' LT Surface Elevation 1037.0' MSL Cuyahoga & Lake Counties

Elev	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
1037.0	1-4-4	V/Soft, Wet, Brown, Clayey SILT, Trace Sand.	5	SS-1								40		1.0
1030.9	4-8-8			SS-2								16	A-4b	2.5
1027.0	3-50/5"	Firm, Brown, SANDSTONE.		SS-3								15		
1027.0	50/2"		10	SS-4							14			
		End of Boring - 10.0'	15											
		* 11" Topsoil	15											

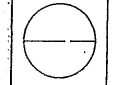
Date Started: 2-27-97 Sampler Type S.S. Dia. 2.0" Water Encountered None Project I.D.: 142-65158
 Date Completed: 2-27-97 Casing Length 5.0' Dia. 3.25" Water On Completion None CUY-271-9.16/0.66
 Boring No. B-40 Station & Offset 55+00.226' RT Surface Elevation 891.0' MSL Cuyahoga & Lake Counties

Elev	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
891.0	2-3-2	Firm to V/Soft, Wet, Brown, Sandy SILT, Trace Rock fragments.	5	SS-1								22		1.0
890.8	5-8-8			SS-2								15		3.0
	7-8-9			SS-3								16	A-4a	3.0
	8-9-17			SS-4								15		3.0
876.0	5-10-12	V/Soft, Wet, Gray, Clayey SILT, Trace Rock Fragments.	15	SS-5								15		3.5
	6-7-9		20	SS-6								16	A-4b	2.5
	5-6-10		25	SS-7								16		2.5
861.0	7-9-12		30	SS-8								14		3.0
		End of Boring - 30.0'	35											
		3" Topsoil	35											

CALCULATED
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VK

SOIL BORING LOGS

CUY/LAK-271-9.16/0.66



Date Started: 2-26-97 Sampler Type S.S. Dia. 2.0" Water Encountered 1047.7 Project I.D.: 142-65158
 Date Completed: 2-26-97 Casing Length 5.0' Dia. 3.25" Water On Completion 1043 CUY-271-9.16/0.66
 Boring No. B-41 Station & Offset 566+00.154' LT Surface Elevation 1071.0' MSL Cuyahoga & Lake Counties

Elev	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
1071.0												9		
1069.6				ALL-1								11		3.0
	8-8-9	V/Stiff, Wet, Brown to Gray, Clayey SILT, Trace Sand, Trace Rock fragments.	5	SS-2								16	A-4b	2.5
	4-7-7		10	SS-3								17		2.0
	3-4-6		15	SS-4								21		2.0
	4-5-7		20	SS-5	2	8	17	73	0	26	7	14		2.0
			25	ST-6								12		4.0
1045.0					SS-7							7	A-1-b	
1041.0			Dense, Moist, Gray, GRAVEL and/or Stone Frags. W/Sand	30	SS-8									
			End of Boring - 30.0'											
		8" Asphalt Concrete 8" Sand & Gravel Base.	35											

Date Started: 2-26-97 Sampler Type S.S. Dia. 2.0" Water Encountered None Project I.D.: 142-65158
 Date Completed: 2-26-97 Casing Length 5.0' Dia. 3.25" Water On Completion None CUY-271-9.16/0.66
 Boring No. B-43 Station & Offset C, Cedar Road Entrance Ramp, 4100. Surface Elevation 1081.0' MSL Cuyahoga & Lake Counties

Elev	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
1081.0												16	Fill	1.0
1080.8				SS-1								13		3.0
1079.0		Firm, Wet, Brown, Sandy SILT.		SS-2								11		3.0
	11-12-11	V/Stiff, Wet, Gray, Clayey SILT, Trace Sand.	5	SS-3								14	A-4b	2.0
	11-11-10		10	SS-4								14		3.0
	5-6-9		15	SS-5								17		2.0
1064.0					SS-6	4	6	10	55	25	31	12	A-6a	2.0
	4-6-7		20	SS-7								15		2.0
	5-7-9		25	SS-8								16	A-4b	3.5
1054.0			V/Stiff, Wet, Gray, Clayey SILT, Trace Sand.											
1051.0			8-9-14	30										
		End of Boring - 30.0'												
		3" Topsoil	35											

Date Started: 2-25-97 Sampler Type S.S. Dia. 2.0" Water Encountered None Project I.D.: 142-65158
 Date Completed: 2-25-97 Casing Length 5.0' Dia. 3.25" Water On Completion None CUY-271-9.16/0.66
 Boring No. B-42 Station & Offset 576+00.200' LT Surface Elevation 1069.0' MSL Cuyahoga & Lake Counties

Elev	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
1069.0												17		0.5
1068.8				SS-1								15		3.0
956.0		V/Stiff, Wet, Brown, Sandy SILT, Trace Rock fragments.	5	SS-2								16	A-4a	3.0
	6-6-8	V/Stiff, Wet, Gray, Clayey SILT, Trace Sand	10	SS-3								13		3.0
	5-7-8		15	ST-4								13		3.0
			20	SS-5								13		3.0
1054.0					SS-6							15	A-4b	4.0
	7-8-11		25	SS-7								11	A-3a	
1045.0			Dense, Wet, Gray, FINN & COARSE SAND		SS-8							16	A-4b	4.0
1042.0			V/Stiff, Wet, Gray, Clayey SILT.											
1039.0			11-17-21	30										
		End of Boring - 30.0'												
		4" Topsoil	35											

Date Started: 2-27-97 Sampler Type S.S. Dia. 2.0" Water Encountered None Project I.D.: 142-65158
 Date Completed: 2-27-97 Casing Length 5.0' Dia. 3.25" Water On Completion None CUY-271-9.16/0.66
 Boring No. B-44 Station & Offset 62+00.196' LT Surface Elevation 958.0' MSL Cuyahoga & Lake Counties

Elev	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
958.0												30	Fill	0.5
957.7				SS-1								16		2.5
956.0		V/Stiff, Wet, Brown, Clayey SILT, Trace Sand.	5	SS-2								17	A-4b	4.0
	4-7-10	Firm, Brown, Weathered SHALE.	10	SS-3	0	12	23	61	4	25	7	11		1.0
949.0					SS-4							7		1.0
	7-10-13		15	SS-5								7		1.0
944.5														
943.0			Firm, Gray Sandstone.											
			End of Boring - 20.0'											
			3" Topsoil	20										
			Soft, wet, Black and Gray, Silty Clay, trace Organics.	25										
			30											
			35											

CALCULATED
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SOIL BORING LOGS

CUY/LAK-271-9.16/0.66

12/14



Date Started: 3-19-97 Sampler Type S.S. Dia. 2.0" Water Encountered None Project I.D.: 142-65158
 Date Completed: 3-19-97 Casing Length 5.0' Dia. 3.25" Water On Completion None CUY-271-9.16/0.66
 Boring No. B-45 Station & Offset 72+00.202' LT Surface Elevation 952.0' MSL Cuyahoga & Lake Counties

Elev	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
952.0														
951.8				AU-1								24		--
	4 - 9 - 7	Stiff, Wet, Brown, Sandy SILT, Trace Rock Fragments.	5	SS-2								20	A-4a	2.0
				SS-3								17		2.5
944.0	6 - 9 - 12	Firm, Brown, SANDSTONE		SS-4								11		--
942.0	50/2"	End of Boring - 10.0'												
		3" Gravel	15											
			20											
			25											
			30											
			35											

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Date Started: 2-24-97 Sampler Type S.S. Dia. 2.0" Water Encountered None Project I.D.: 142-65158
 Date Completed: 2-24-97 Casing Length 5.0' Dia. 3.25" Water On Completion None CUY-271-9.16/0.66
 Boring No. B-47 Station & Offset 73+00.214' RT Surface Elevation 953' MSL Cuyahoga & Lake Counties

Elev	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
953.0														
951.5	1 - 1 - 1	1.5' Topsoil		SS-1								24		0.5
		V/Stiff, Wet, Brown Sandy SILT, Trace Clay.	5	SS-2								18	A-4a	4.0
948.0	5-7-50/3"			SS-3								14		
	8-14-30	Firm, Brown to Gray Weathered SHALE.		SS-4								9		--
942.5	10-15-35			SS-5								8		--
942.0	50/1"	End of Boring - 11.0'												
		Hard, Gray, SANDSTONE.	15											
			20											
			25											
			30											
			35											

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Date Started: 2-25-97 Sampler Type S.S. Dia. 2.0" Water Encountered None Project I.D.: 142-65158
 Date Completed: 2-25-97 Casing Length 5.0' Dia. 3.25" Water On Completion None CUY-271-9.16/0.66
 Boring No. B-46 Station & Offset 69+00.222' RT Surface Elevation 966.0' MSL Cuyahoga & Lake Counties

Elev	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
966.0														
963.0	1 - 4 - 4	Firm, Wet, Black and Gray, Silty Clay, trace Organics, trace Gravel.		SS-1								72	Fill	0.5
			5	SS-2	8	12	20	45	15	27	11	23		1.0
961.0	3 - 8 - 5	Med. Wet, Brown, Fine SAND, some Silt.		SS-3								8	A-3	--
958.0	18-14-19			SS-4								12		--
	12-15-17	Soft, Brown to Gray, Weathered SHALE.	10											
				SS-5								7		--
950.0	7 - 9 - 47			SS-6								9		--
948.5	50/2"	Firm, Gray, Sandstone.												
		End of Boring - 17.5'												
		8" Topsoil	20											
			25											
			30											
			35											

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Date Started: 2-26-97 Sampler Type S.S. Dia. 2.0" Water Encountered 1074.7' Project I.D.: 142-65158
 Date Completed: 2-26-97 Casing Length 5.0' Dia. 3.25" Water On Completion 1064.4' CUY-271-9.16/0.66
 Boring No. B-48 Station & Offset 55+00.180' RT Surface Elevation 1086.0' MSL Cuyahoga & Lake Counties

Elev	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)
1086.0														
1085.5	1 - 2 - 2			SS-1								24	Fill	0.5
1084.0		V/Stiff, Wet, Brown, Sandy SILT, Trace Rock fragments.	5	SS-2								17		2.0
	5 - 7 - 9			SS-3	14	16	30	40	0	24	6	15	A-4a	3.0
1078.0	7-10-12			SS-4								13		3.0
	6-10-11	V/Stiff, Wet, Gray, Clayey SILT, Trace Sand.	10											
				SS-5								16	A-4b	2.0
	5-8-10		15											
				SS-6								19		3.0
1064.0	7-11-12		20											
		Med. Wet, Gray, Sandy SILT, Trace Gravel, Trace Clay.	25	SS-7								12	A-4a	3.0
1057.5	50/1"	Hard, Gray, Sandstone.		SS-8								9		--
1056.0		End of Boring - 30.0'												
		6" Topsoil	35											
		Soft, wet, Brown Silty CLAY, Trace Red Brick.												

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CALCULATED
AV
CHECKED
VK

SOIL BORING LOGS

CUY/LAK-271-9.16/0.66



Date Started: 2-27-97 Sampler Type S.S. Dia. 2.0" Water Encountered None Project I.D: 142-65158
 Date Completed: 2-27-97 Casing Length 5.0' Dia. 3.25" Water On Completion None CUY-271-9.16/0.66
 Boring No. B-49 Station & Offset 58+00.209' LT Surface Elevation 876.0' MSL Cuyahoga & Lake Counties

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Elev	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)	
876.0															
875.8	1-2-2	Soft, Wet, Black & Brown Silty CLAY, Trace Organics.	5	SS-1								27	Fill	0.5	
				SS-2									25		1.0
871.0	4-5-6	Loose, Wet, Brown, Fine SAND, Trace Silt.		SS-3									16	A-3	--
867.0	5-3-4			SS-4									17		3.0
	4-6-9	V/Stiff, Wet, Brown to Gray, Clayey SILT, Trace Sand.		SS-5									10		3.0
	6-6-9			SS-6									9	A-4b	3.0
	5-7-9			SS-7									13		3.0
	6-7-10			SS-8									18		3.0
846.0	7-8-14	End of Boring - 30.0' - 3" Topsoil	30												

Date Started: 2-27-97 Sampler Type S.S. Dia. 2.0" Water Encountered None Project I.D: 142-65158
 Date Completed: 2-27-97 Casing Length 5.0' Dia. 3.25" Water On Completion None CUY-271-9.16/0.66
 Boring No. B-51 Station & Offset C₁ Ramp A, 12+00.145' RT Surface Elevation 835.0' MSL Cuyahoga & Lake Counties

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Elev	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)	
835.0															
834.0	1-1-2	V/Stiff, Wet, Brown, Clayey SILT, Trace Sand.	5	SS-1								43		0.5	
	4-5-8			SS-2									17		3.0
	6-10-14			SS-3									17	A-4b	3.0
825.5	6-9-13	Soft to Firm, Brown to Gray, Weathered SHALE.	10	SS-4								17		--	
	17-50/3"		15	SS-5								14		--	
815.0	45-50/1"	End of Boring - 20.0' - 12" Topsoil	20	SS-6								6		--	

Date Started: 2-24-97 Sampler Type S.S. Dia. 2.0" Water Encountered 834.4 Project I.D: 142-65158
 Date Completed: 2-24-97 Casing Length 5.0' Dia. 3.25" Water On Completion 834.4 CUY-271-9.16/0.66
 Boring No. B-50 Station & Offset C₁ Ramp A, 22+00.67' RT Surface Elevation 848.0' MSL Cuyahoga & Lake Counties

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Elev	Std. pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class	Qp (TSF)	
848.0															
847.0	1-1-2	V/Stiff, Wet, Brown, Clayey SILT, Trace Sand.	5	SS-1								25		0.5	
	4-6-10			SS-2									17	A-4b	3.0
841.0	3-6-7	Med., Wet, Brown, FINE and COARSE SAND.		SS-3									16		3.0
	5-9-12		10	SS-4	8	29	45	18	0	--	--	19	A-3a	--	
835.9	50/6"	Firm Gray, Weathered SHALE.	15	SS-5								7		--	
833.0		End of Boring - 15.0' - 12" Topsoil	20												

