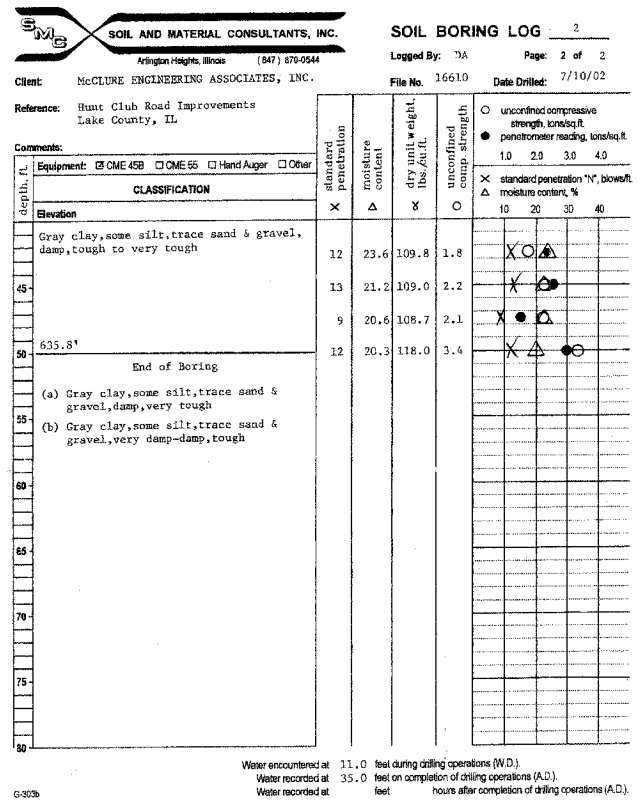
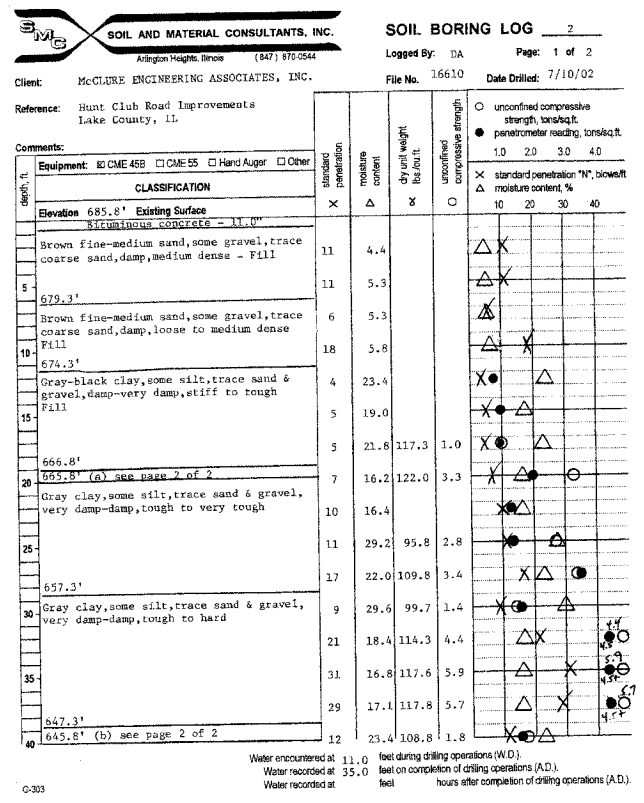


BORING B-1



BORING B-2

General Notes

SAMPLE CLASSIFICATION
Soil sample classification is based on the Unified Soil Classification System, the Standard Practice for Description and Identification of Soils (Visual-Manual Procedure), ASTM D-2488, the Standard Test Method for Classification of Soils for Engineering Purposes, ASTM D-2487 (when applicable), and the modifiers noted below.

CONSISTENCY OF COHESIVE SOILS			RELATIVE DENSITY OF GRANULAR SOILS		
Term	Qu - tons/sq. ft. (unreliable)	N - blows/foot	Term	N - blows/foot	
Very Soft	0.00 - 0.25	0 - 2	Very Loose	0 - 4	
Soft	0.26 - 0.49	3 - 4	Loose	5 - 9	
Stiff	0.50 - 0.99	5 - 8	Medium Dense	10 - 25	
Tough	1.00 - 1.99	9 - 15	Dense	30 - 49	
Very Tough	2.00 - 3.99	16 - 30	Very Dense	50 +	
Hard	4.00 - 7.99	30 +			
Very Hard	8.00 +				

IDENTIFICATION AND TERMINOLOGY

Term	Size Range	Symbol
Boulder	over 8 in.	CF - Continuous Flight Auger
Cobble	3 in. to 8 in.	HS - Hollow Stem Auger
Gravel	1 in. to 3 in.	HA - Hand Auger
-coarse	3/8 in. to 1 in.	RD - Rotary Drilling
-medium	3/8 in. to 1 in.	AX - Rock Core, 1-3/16 in. diameter
-fine	#4 sieve to 3/8 in.	BX - Rock Core, 1-5/8 in. diameter
Sand	#10 sieve to #40 sieve	NX - Rock Core, 2-1/8 in. diameter
-coarse	#40 sieve to #60 sieve	S - Sample Number
-medium	#60 sieve to #200 sieve	T - Type of Sample
-fine	smaller than #200 sieve	J - Jar
Silt	0.002 mm to #200 sieve	AS - Auger Sample
Clay	smaller than 0.002 mm	SS - Split-spoon (2 in. O.D. with 1-3/8 in. I.D.)
		ST - Shelby Tube (2 in. O.D. with 1-7/8 in. I.D.)
		R - Recovery Length, in.
		B - Blows/6 in. interval, Standard Penetration Test (SPT)
		N - Blows/foot to drive 2 in. O.D. split-spoon sampler with 140 lb. hammer falling 30 in., (STP)
		Pen. - Pocket Penetrometer reading, tons/sq. ft.
		W - Water Content, % of dry weight
		Uw - Dry Unit Weight of soil, lbs./cu. ft.
		Qu - Unconfined Compressive Strength, tons/sq. ft.
		Sir - % Strain at Qu
		WL - Water Level
		WD - While Drilling
		AD - After Drilling
		DCI - Dry Cave-in
		WCI - Wet Cave-in
		LL - Liquid Limit, %
		PL - Plastic Limit, %
		PI - Plasticity Index [(LL-PL)]
		LI - Liquidity Index [(W-PL)/PI]

Moisture Condition

Trace	1 - 10
Little	11 - 20
Some	21 - 35
And	36 - 50

Dry
Damp
Very Damp
Saturated

NOTE: See Sheet 1 of 13 for Boring Locations.

BORING LOGS
HUNT CLUB ROAD OVER
MILL CREEK
SECTION 00-00095-II-BR
LAKE COUNTY
STATION 116+60.00
STRUCTURE NO. 049-3072