Minnesota Department of Transportation Geotechnical Section

Boring Log Descriptive Terminology (English Units)



USER NOTES, ABBREVIATIONS AND DEFINITIONS - Additional information available in Geotechnical Manual.

This boring was made by ordinary and conventional methods and with care deemed adequate for the Department's design purposes. Since this boring was not taken to gather information relating to the construction of the project, the data noted in the field and recorded may not necessarily be the same as that which a contractor would desire. While the Department believes that the information as to the conditions and materials reported is accurate, it does not warrant that the information is necessarily complete. This information has been edited or abridged and may not reveal all the information which might be useful or of interest to the contractor. Consequently, the Department will make available at its offices, the field logs relating to this boring.

Since subsurface conditions outside each borehole are unknown, and soil, rock and water conditions cannot be relied upon to be consistent or uniform, no warrant is made that conditions adjacent to this boring will necessarily be the same as or similar to those shown on this log. Furthermore, the Department will not be responsible for any interpretations, assumptions, projections or interpolations made by contractors, or other users of this log.

Water levels recorded on this log should be used with discretion since the use of drilling fluids in borings may seriously distort the true field conditions. Also, water levels in cohesive soils often take extended periods of time to reach equilibrium and thus reflect their true field level. Water levels can be expected to vary both seasonally and yearly. The absence of notations on this log regarding water does not necessarily mean that this boring was dry or that the contractor will not encounter subsurface water during the course of construction.

WATER MEASUREMENT

AB	After Bailing
AC	After Completion
AF	After Flushing
w/C	with Casing
w/M	with Mud
WSD	While Sampling/Drilling
w/AUG	with Hollow Stem Auger

MISCELLANEOUS

NA	Not Applicable
w/	with
w/o	with out
sat	saturated

	ING OPERATIONS
-	Augered
	Core Drilled
DBD	Disturbed by Drilling
DBJ	Disturbed by Jetting
PD	Plug Drilled
ST	Split Tube (SPT test) heet No. 3.0 March 2003 G:geotech/Public/Forms \INDEX30.doc

TW	Thinwall (Shelby Tube)
WS	Wash Sample
NSR	No Sample Retrieved
WH	Weight of Hammer
WR	Weight of Rod
Mud	Drilling Fluids in Sample
CS	Continuous Sample

SOIL/CORE TESTS

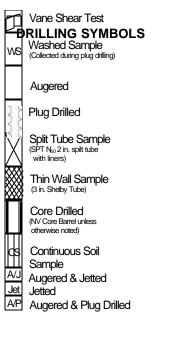
SPT N₆₀.....ASTM D1586 Modified Blows per foot with 140 lb. hammer and a standard energy of 210 ft-lbs. This energy represents 60% of the potential energy of the system and is the average energy provided by a Rope & Cathead system. Moisturo Conton

MC	.Moisture Content
СОН	.Cohesion
?	.Sample Density
LL	.Liquid Limit
PI	.Plasticity Index
F	.Phi Angle
REC	.Percent Core Recovered
RQD	.Rock Quality Description
(Percent of total	core interval consisting of
unbroken pieces	4 inches or longer)
ACL	.Average Core Length
(Average length inches long)	of core that is greater than 4

Core BreaksNumber of natural core breaks per 2-foot interval.

DISCONTINUITY SPACING

Fractures	Distance	Bedding
Very Close	<2 inches	Very Thin
Close	2-12 inches	Thin
Mod. Close	12-36 inches	Medium
Wide	>36 inches	Thick



RELATIVE DENSITY

Compactness - Granular Soils	<u>BPF</u>
very loose	0-4
loose	5-10
medium dense	11-24
dense	25-50
very dense	>50
Consistency - Cohesive Soils	<u>BPF</u>
very soft	0-1
soft	2-4
firm	5-8
etiff	0-15

tirm	5-8
stiff	9-15
very stiff	16-30
hard	31-60
very hard	> 60

COLOR

blk	Black	wht	White
grn	Green	brn	Brown
orng	Orange	yel	Yellow
dk	Dark	lt	Light
IOS	Iron Oxid	e Stained	-

GRAIN SIZE /PLASTICITY

VFVery Fine	pl Plastic
FFine	slplSlightly
CrCoarse	Plastic

SOIL/ROCK TERMS

C	Clay	Lmst	Limestone
L	Loam	Sst	Sandstone
S	Sand	Dolo	Dolostone
Si	Silt	w x	weathered
G	Gravel (No. 10	Sieve to 3	3 inches)
Bldr	Boulder (over 3	3 inches)	
Т	till (unsorted, i	nonstratifie	ed glacial
deposits)			-

Mn/DOT Triangular Textural Soil Classification System

