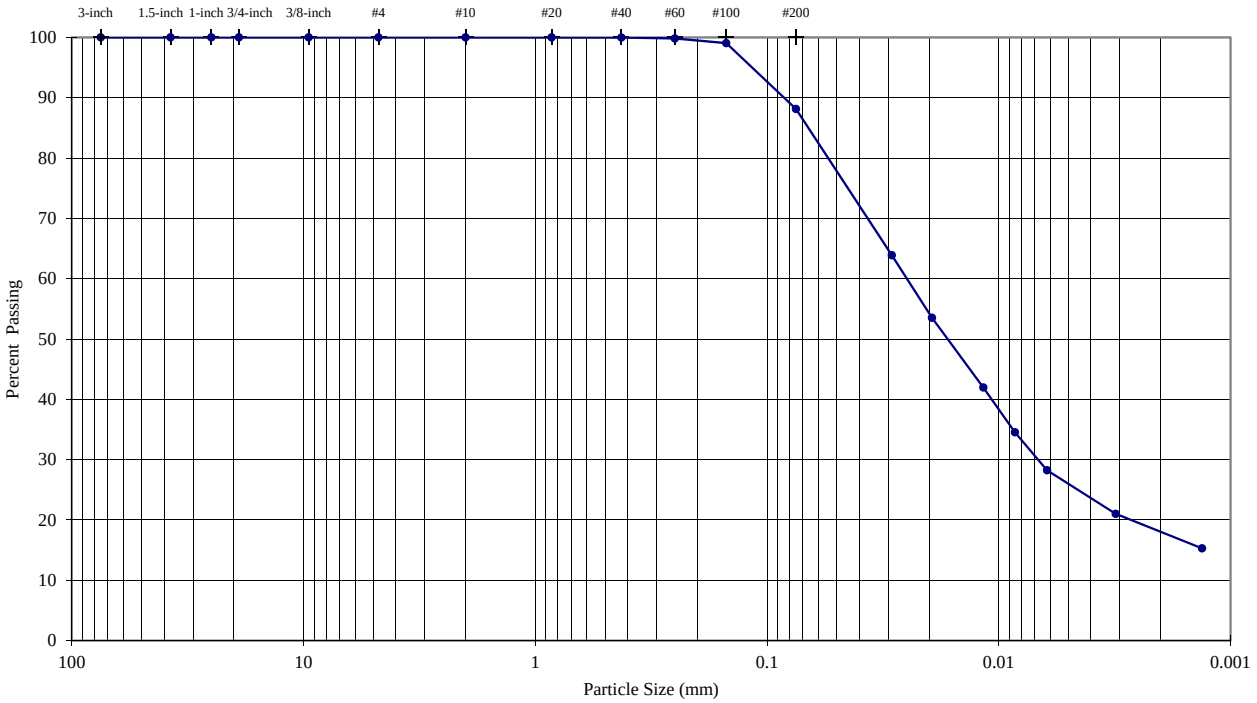
DRAFT

January-18 **1784880**

PARTICLE SIZE DISTRIBUTION & ATTERBERG LIMITS

ASTM D421, D422, D4318

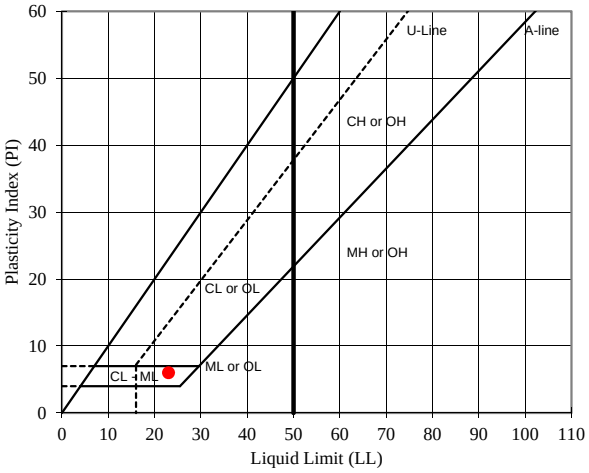
PROJECT NAME: **Highland/Copperwood Project/MI**
SAMPLE ID: **BF9 - Rougher** DEPTH (ft): --
TYPE: **Pail**



Sieve	Particle Size (mm)	% Passing	Description	Percentage
3-inch	75.0	**100.0**		
1.5-inch	37.5	**100.0**	Coarse Gravel	**0.00**
1-inch	25.0	**100.0**		
3/4-inch	19.0	**100.0**		
3/8-inch	9.5	**100.0**	Fine Gravel	**0.00**
#4	4.75	**100.0**		
#10	2.0	**100.0**	Coarse Sand	**0.00**
#20	0.85	**100.0**	Medium Sand	**0.02**
#40	0.425	**100.0**		
#60	0.25	**99.8**		
#100	0.15	**99.1**	Fine Sand	**11.85**
#200	0.075	**88.1**		
	0.029	**63.9**		
	0.019	**53.5**		
	0.012	**42.0**		
	0.009	**34.5**	Silt or Clay Fines	**88.14**
	0.006	**28.2**		
	0.003	**21.0**		
	0.001	**15.3**		

Sieve Analysis (Initial Separation on No. 4 Sieve)

Hydrometer Analysis



USCS Description (ASTM D 2487):

Silty clay, gray, dry

LL	PL	PI	SpG
23	**17**	**6**	**2.81**

As-Received Moisture Content (%): **#DIV/0!**

USCS Group Symbol: CL-ML

Notes: 0 g of particles up to 4.75 mm maximum size were removed from particle size analysis sample prior to testing
Particle size analysis sample mechanically dispersed using Stirring Apparatus A for about 1 minute
Sample prepared for Atterberg Limits testing by the dry method
Material retained on No. 40 sieve removed from Atterberg Limits sample by sieving
Plastic Limit test performed by hand rolling. Method A Liquid Limit test performed using mechanical device

TECH	RD/PRH
DATE	19-Jan-2018
REVIEW	PRH