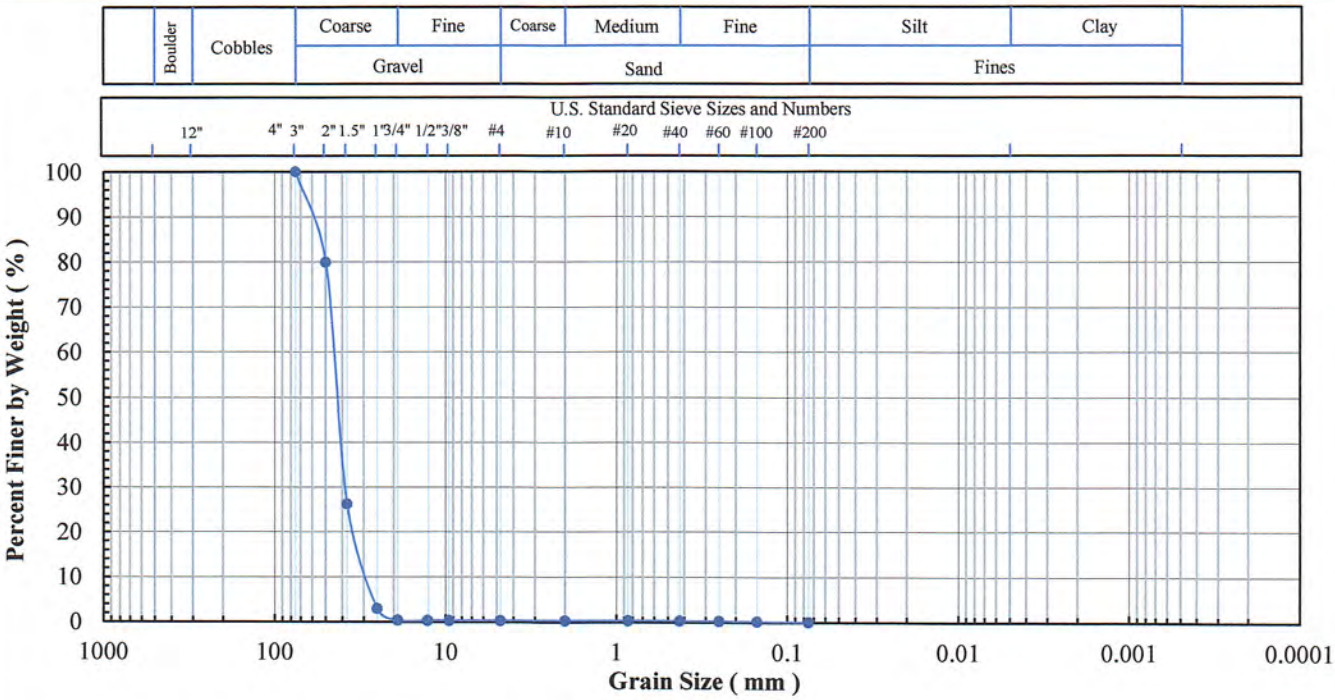
Excel Geotechnical Testing, Inc.
"Excellence in Testing"
953 Forrest Street, Roswell, Georgia 30075
Tel: (770) 910 7537 Fax: (770) 910 7538

Project Name:	JED Cell 10 Construction
Project No:	636
Client Sample ID:	#4 Stone
Lab Sample No:	14C119

ASTM C 136, D 422, D 854, D 1140, D 2216, D 2487, D 4318

SOIL INDEX PROPERTIES

Grain Size, Spec. Gravity, Moist. Content, Eng. Classification, Atterberg Limits

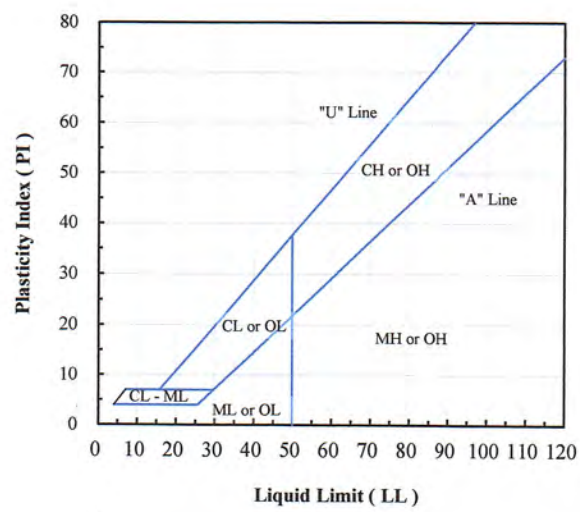


Sieve No.	Size (mm)	% Finer
3"	75	100.0
2"	50	79.9
1.5"	37.5	26.2
1"	25	3.0
3/4"	19	0.4
1/2"	12.7	0.4
3/8"	9.5	0.4
#4	4.75	0.4
#10	2.00	0.4
#20	0.850	0.4
#40	0.425	0.3
#60	0.250	0.3
#100	0.150	0.2
#200	0.075	0.1

Hydrometer Particle Diameter (mm)	% Finer

Gravel (%):	99.6
Sand (%):	0.3
Fines (%):	0.1
Silt (%):	
Clay (%):	

Coeff. Unif. (Cu):	
Coeff. Curv. (Cc):	



Client Sample ID.	Lab Sample No:	Moisture Content (%)	Fines Content < No. 200 (%)	Atterberg Limits LL (-)	PL (-)	PI (-)	Engineering Classification
#4 Stone	14C119		0.1				

Note(s):

5-1-14
NSR

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RIGID WALL PERMEABILITY TEST [1]

ASTM D 2434 *

Project Name:	JED Cell 10 Construction
Project Number:	636
Client Name:	Brantley Engineering
Site Sample ID:	#4 Stone
Lab Sample Number:	14C119
Material Type:	NA
Specified Value (cm/sec):	NA
Date Tested:	4/11/2014

Specimen Number	Specimen Initial Conditions					Permeant Liquid [4]	Gradient Range	Hydraulic [5] Conductivity
	Spec. Prep. [2] (-)	Spec. Length (cm)	Spec. Diameter (cm)	Dry Unit Weight (pcf)	Moisture Content[3] (%)		(-)	(cm/s)
1	R	30.7	23.0	86.2	0.0	DTW	0.002 - 0.007	2.2E+1

Notes:

1. Constant head test procedures were followed during the testing.
2. Remolded specimen was formed by tamping the soil in 5 layers, each approximately 6.0 cm, utilizing moderate compaction energy.
3. A moisture content of 0.0% indicates that the sample was air/oven dried before being tested.
4. Type of permeant liquid: TW = Tap Water, DTW = Deaired Tap Water, DDI = Deaired Deionized Water
5. Burette readings are commonly unstable for high permeability materials and the permeability measurements are some what inaccurate.

* Deviations:

Laboratory temperature at 22±3 °C.
Test specimen final conditions are not presented.
The entire sample was used (i.e., particles larger than 3/4 in. Seive, if any, were not removed).

5-01-14
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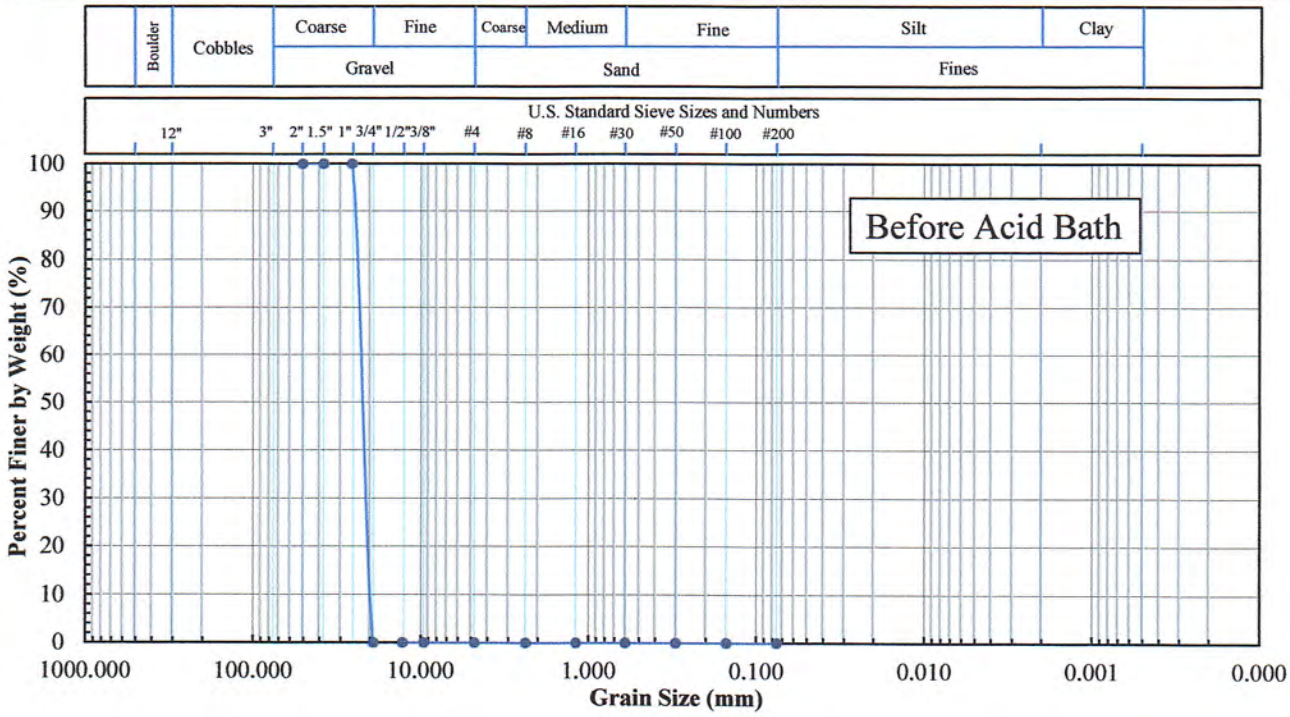
Project Name:	JED Cell 10 Construction
Project No:	636
Client Sample ID	#4 Stone
Lab Sample No:	14C119

ASTM D 3042

INSOLUBLE RESIDUE IN CARBONATE AGGREGATES

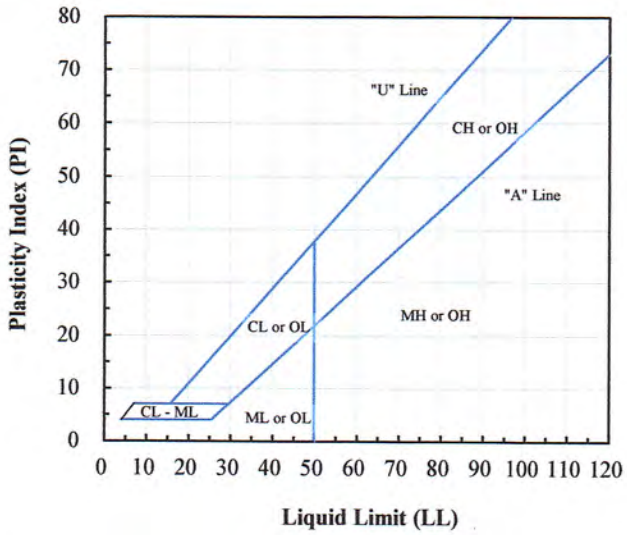


Sieve No.	Size (mm)	% Finer
2"	50.0	100.0
1.5"	37.5	100.0
1"	25.0	100.0
3/4"	19.0	
1/2"	12.7	
3/8"	9.50	
#4	4.75	
#8	2.00	
#16	0.850	
#30	0.425	
#50	0.250	
#100	0.150	
#200	0.075	

Hydrometer Particle Diameter (mm)	% Finer
0.050	
0.020	
0.005	
0.002	
0.001	

Gravel (%):	100.0
Sand (%):	
Fines (%):	
Silt (%):	
Clay (%):	

Coeff. Unif. (Cu):	
Coeff. Curv. (Cc):	



Client Sample ID.	Lab Sample No:	Moisture Content (%)	Fines Content < No. 200 (%)	Atterberg Limits LL (-)	PL (-)	PI (-)	Engineering Classification
#4 Stone	14C119						

Note(s): Only particles passed through 1.0 in. Sieve and washed over 3/4 in. Sieve were used.

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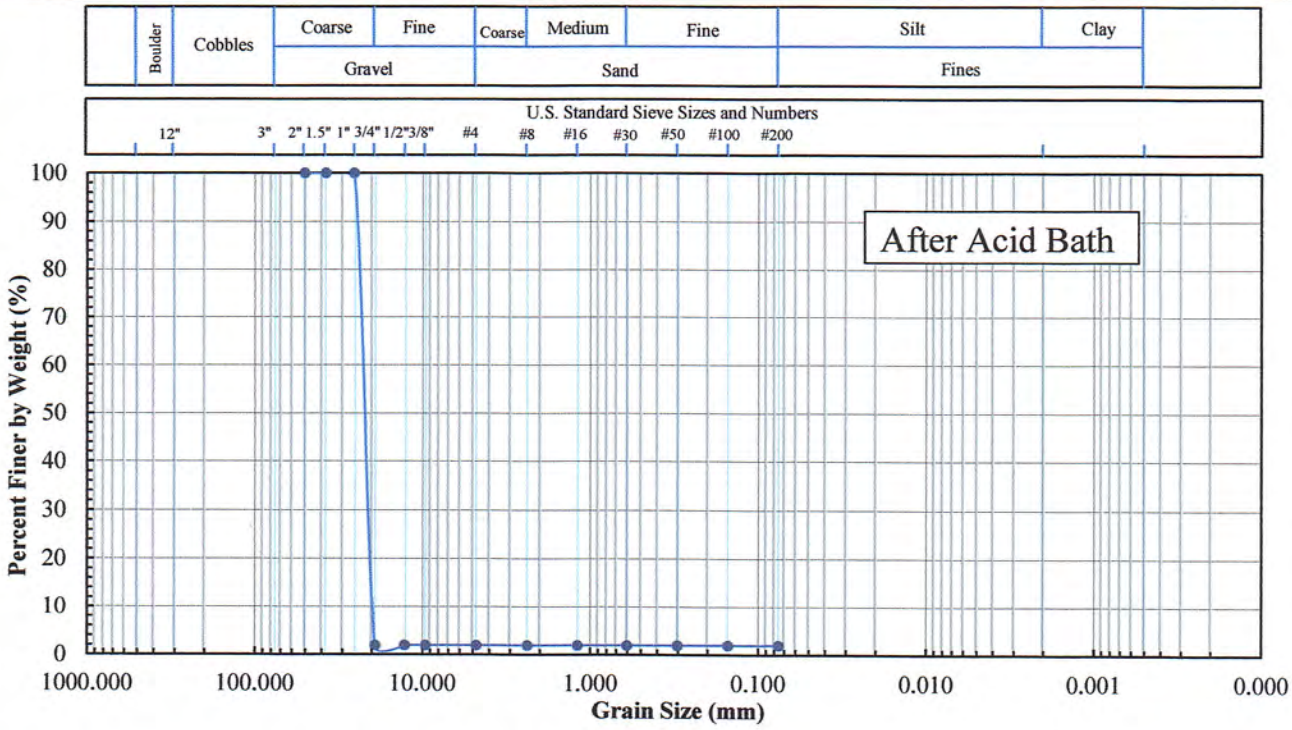
ASTM D 3042

INSOLUBLE RESIDUE IN CARBONATE AGGREGATES

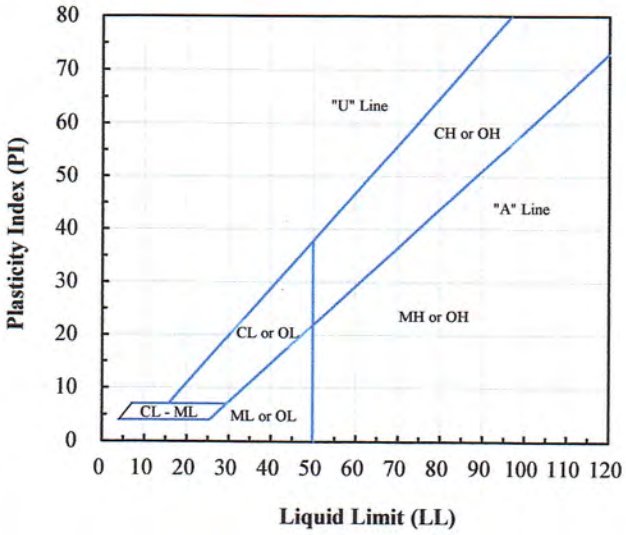


Sieve No.	Size (mm)	% Finer
2"	50.0	100.0
1.5"	37.5	100.0
1"	25.0	100.0
3/4"	19.0	2.0
1/2"	12.7	2.0
3/8"	9.50	2.0
#4	4.75	2.0
#8	2.00	2.0
#16	0.850	2.0
#30	0.425	2.0
#50	0.250	2.0
#100	0.150	2.0
#200	0.075	2.0

Hydrometer Particle Diameter (mm)	% Finer
0.050	
0.020	
0.005	
0.002	
0.001	

Gravel (%):	98.0
Sand (%):	
Fines (%):	2.0
Silt (%):	
Clay (%):	

Coeff. Unif. (Cu):	
Coeff. Curv. (Cc):	



Client Sample ID.	Lab Sample No:	Moisture Content (%)	Fines Content < No. 200 (%)	Atterberg Limits LL (-)	PL (-)	PI (-)	Total Insoluble Residue (%)
#4 Stone	14C119		2.0				98.0

Note(s): Only particles passed through 1.0 in. Sieve and washed over 3/4 in. Sieve were used.

5-01-14
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