

# WASHED SIEVE ANALYSIS

CLIENT: McClure Construction  
 DATE: 1/22/2016  
 SAMPLE: Septic Sand split 2 of 2

ANGUS McDONALD  
 GARY SHARPE  
 & ASSOCIATES, INC.  
 SINCE 1966

MOIST WEIGHT = 0.768 Kg  
 TOTAL DRY WEIGHT = 0.744 Kg  
 DRY WEIGHT AFTER WASH = 0.738 Kg

Water Content 3.23%  
 Unified Soil Classification System

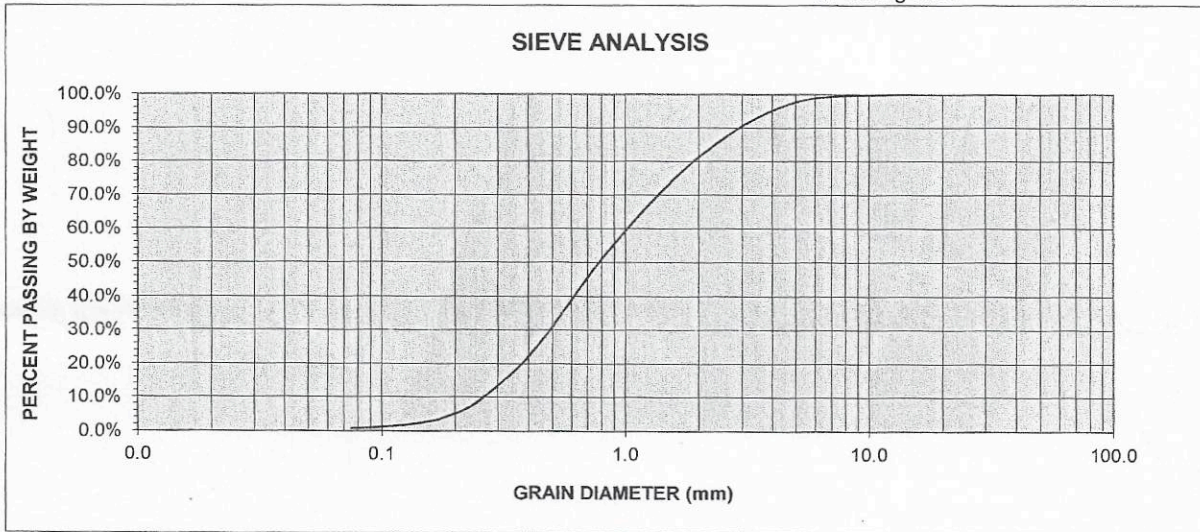
Grain Size Comparison  
 Cobbles 0.0%  
 Coarse Gravel 0.0%  
 Fine Gravel 2.7%  
 Coarse Sand 15.9%  
 Medium Sand 57.0%  
 Fine Sand 23.7%  
 Silt & Clay 0.8%

Uniformity Coeff. 4.25  
 Permeability Range \*\*  
 Dense 78 ft/day  
 Loose 235 ft/day

Sieve Size (mm)	Weight Retained	% Retained	% Passing
3"	75.0	0.000	0.0%
1 1/2"	37.5	0.000	0.0%
1"	25.0	0.000	0.0%
3/4"	19.0	0.000	0.0%
1/2"	12.5	0.000	0.0%
#4	4.75	0.020	2.7%
#10	2.00	0.118	15.9%
#20	0.850	0.208	28.0%
#40	0.425	0.216	29.0%
#60	0.250	0.116	15.6%
#80	0.180	0.036	4.8%
#100	0.150	0.010	1.3%
#140	0.106	0.010	1.3%
#200	0.075	0.004	0.5%
Passing #200	0.006	0.006	0.8%

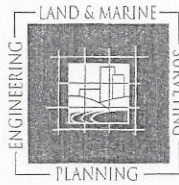
2000 CT. Health Code Septic Fill Specs  
 %Retained on #4 2.7%  
 % Passing #4-#200 (Fill less Gravel) Permitted  
 %Passing #4 100.0% 100%  
 %Passing #10 83.7% 70%-100%  
 %Passing #40 25.1% \*10%-50%  
 %Passing #100 2.8% 0%-20%  
 %Passing #200 0.8% 0%-5%

Weight of Material Passing #200 Sieve = Total Dry Weight - Dry Weight After Wash



\* Percent Passing the #40 sieve can be increased to no greater than 75% if the percent passing the #100 sieve does not exceed 10% and the #200 does not exceed 5%.

\*\* Based on empirical relationship by Hazen (1911) relating permeability to the D<sub>10</sub> grain size. Accuracy diminishes with >5% passing the #200 Sieve or permeability values <.3 ft/day. Relationship invalid when D<sub>10</sub> < .1mm or D<sub>10</sub> > 3mm



# WASHED SIEVE ANALYSIS

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 SAMPLE: Septic Sand split 1 of 2

ANGUS McDONALD  
 GARY SHARPE  
 & ASSOCIATES, INC.  
 SINCE 1966

MOIST WEIGHT = 0.938 Kg  
 TOTAL DRY WEIGHT = 0.91 Kg  
 DRY WEIGHT AFTER WASH = 0.904 Kg

Water Content 3.08%  
 Unified Soil Classification System

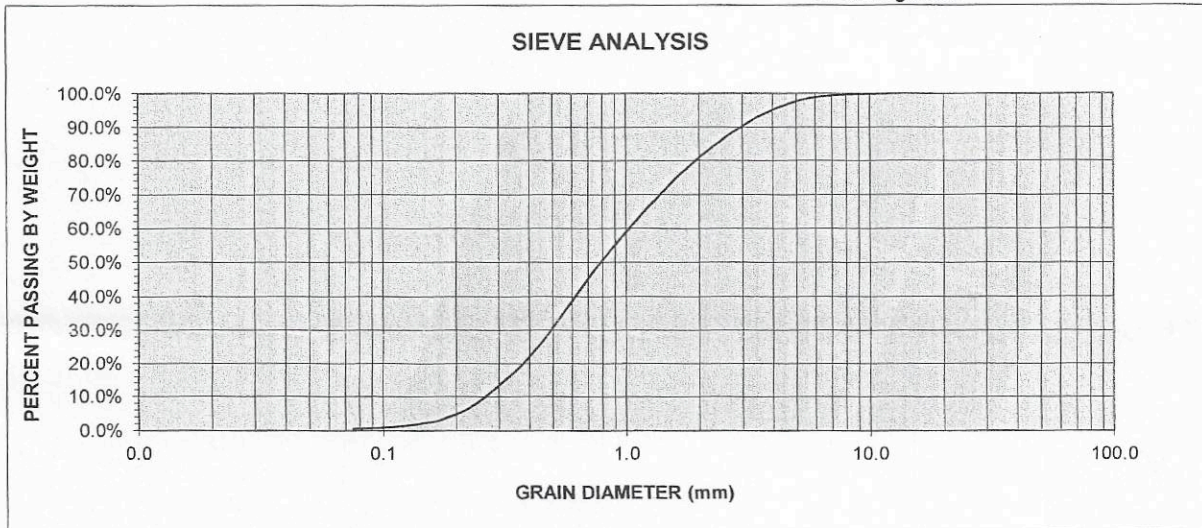
Grain Size Comparison  
 Cobbles 0.0%  
 Coarse Gravel 0.0%  
 Fine Gravel 2.9%  
 Coarse Sand 16.0%  
 Medium Sand 56.7%  
 Fine Sand 23.7%  
 Silt & Clay 0.7%

Uniformity Coeff. 4.29  
 Permeability Range \*\*  
 Dense 79 ft/day  
 Loose 236 ft/day

Sieve Size (mm)	Weight Retained	% Retained	% Passing
3"	75.0	0.000	0.0%
1 1/2"	37.5	0.000	0.0%
1"	25.0	0.000	0.0%
3/4"	19.0	0.000	0.0%
1/2"	12.5	0.000	0.0%
#4	4.75	0.026	2.9%
#10	2.00	0.146	16.0%
#20	0.850	0.254	27.9%
#40	0.425	0.262	28.8%
#60	0.250	0.142	15.6%
#80	0.180	0.046	5.1%
#100	0.150	0.012	1.3%
#140	0.106	0.012	1.3%
#200	0.075	0.004	0.4%
Passing #200	0.006	0.006	0.7%

2000 CT. Health Code Septic Fill Specs  
 %Retained on #4 2.9%  
 % Passing #4-#200 (Fill less Gravel) Permitted  
 %Passing #4 100.0% 100%  
 %Passing #10 83.5% 70%-100%  
 %Passing #40 25.1% \*10%-50%  
 %Passing #100 2.5% 0%-20%  
 %Passing #200 0.7% 0%-5%

Weight of Material Passing #200 Sieve = Total Dry Weight - Dry Weight After Wash



\* Percent Passing the #40 sieve can be increased to no greater than 75% if the percent passing the #100 sieve does not exceed 10% and the #200 does not exceed 5%.

\*\* Based on empirical relationship by Hazen (1911) relating permeability to the D<sub>10</sub> grain size. Accuracy diminishes with >5% passing the #200 Sieve or permeability values <.3 ft/day. Relationship invalid when D<sub>10</sub> < .1mm or D<sub>10</sub> > 3mm