

Modot

Geotechnical in House Method

Insoluble Residue Test

Sample #	<u>09MSDO558</u>	Station	<u>208+89.5</u>	Offset	<u>77.3' LT</u>
Project	<u>TMTIPROJ</u>	County	<u>JOHNSON</u>	Route	<u>13</u>
Depth	<u>23.9</u>	Tech	<u>KLL/BJB</u>	Date	<u>3-31-10</u>

Interpretation

1. If 50% or more of the original weight is lost in solution by treatment with acid, the material will be classified as limestone or dolomite, both which are Class C material.
2. If less than 50% dissolves, the material will be classed as sand or shale, pending the results of the sieve test.
3. If 50% or more of the insoluble material is retained on the #270 sieve it will be classed as sand.
4. If more the 50% of the insoluble residue passes the #270 the material will be classed as shale.

Sample Original Wt.	<u>100.0</u> g	Beaker #	<u>7</u>
Insoluble Residue Wt. after Acid Treatment	<u>97.5</u> g		
Acid Soluble %	2.5 %	<input type="checkbox"/>	Dolomite or Limestone if 50% or greater Acid Soluble
Insoluble Residue %	97.5 %	<input checked="" type="checkbox"/>	Sand or Shale, if 50% or greater Insoluble Residue

Insoluble Residue Total Wt.	<u>97.5</u> g	Percent	
Insol Res Retained on #270	<u>7.69</u> g	Passing	
Retained #10 Sieve	<u>0</u> g	100.0 %	
#40 Sieve	<u>3.37</u> g	96.5 %	
#100 Sieve	<u>3.03</u> g	93.4 %	
#200 Sieve	<u>.98</u> g	92.4 %	
#270 Sieve	<u>.31</u> g	92.1 %	



Insoluble Res Passing #270	<u>89.81</u> g		
% Insol Res Retained #270	7.9 %	<input type="checkbox"/>	SAND if 50% or greater RETAINED on #270
% Insol Res Passing #270	92.1 %	<input checked="" type="checkbox"/>	SHALE if 50% or greater PASSES #270